

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
**District III**  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

## State of New Mexico

Form C-101  
Revised July 18, 2013

## Energy Minerals and Natural Resources

## Oil Conservation Division

☐ AMENDED REPORT

1220 South St. Francis Dr.

Santa Fe, NM 87505

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

|                                                                                                      |                                      |                                                |
|------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------|
| <sup>1</sup> Operator Name and Address<br>Hilcorp Energy Company<br>382 Road 3100<br>Aztec, NM 87410 |                                      | <sup>2</sup> OGRID Number<br>372171            |
|                                                                                                      |                                      | <sup>3</sup> API Number<br><b>30-045-38408</b> |
| <sup>4</sup> Property Code<br>321941                                                                 | <sup>5</sup> Property Name<br>Haynie | <sup>6</sup> Well No.<br>2N                    |
|                                                                                                      |                                      |                                                |

<sup>7</sup> Surface Location

| UL - Lot | Section | Township | Range | Lot Idn | Feet from | N/S Line | Feet From | E/W Line | County   |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|----------|
| B        | 4       | 030N     | 011W  | 2       | 762'      | North    | 1680'     | East     | San Juan |

<sup>8</sup> Proposed Bottom Hole Location

| UL - Lot | Section | Township | Range | Lot Idn | Feet from | N/S Line | Feet From | E/W Line | County   |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|----------|
| B        | 4       | 030N     | 011W  |         | 1697'     | North    | 1196'     | East     | San Juan |

<sup>9</sup> Pool Information

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

## Additional Well Information

|                              |                                        |                                                          |                               |                                                  |
|------------------------------|----------------------------------------|----------------------------------------------------------|-------------------------------|--------------------------------------------------|
| <sup>11</sup> Work Type<br>N | <sup>12</sup> Well Type<br>G           | <sup>13</sup> Cable/Rotary                               | <sup>14</sup> Lease Type<br>P | <sup>15</sup> Ground Level Elevation<br>5784' GR |
| <sup>16</sup> Multiple<br>Y  | <sup>17</sup> Proposed Depth<br>6,884' | <sup>18</sup> Formation<br>Blanco Mesaverde/Basin Dakota | <sup>19</sup> Contractor      | <sup>20</sup> Spud Date<br>2025                  |
| Depth to Ground water        |                                        | Distance from nearest fresh water well                   |                               | Distance to nearest surface water                |

☒ We will be using a closed-loop system in lieu of lined pits<sup>21</sup> Proposed Casing and Cement Program

| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement   | Estimated TOC |
|------|-----------|-------------|------------------|---------------|-------------------|---------------|
|      | 12 1/4"   | 9 5/8"      | 32.3#/H40 LTC    | 200'          | 91 sx             | Surf          |
|      | 8 3/4"    | 7"          | 23# / J55 LTC    | 3,091'        | 112 sx/46 sx tail | Surf          |
|      | 6 1/4"    | 4 1/2"      | 11.6#/J55 LTC    | 6,84'         | 149 sx/50 sx tail | Surf          |

## Casing/Cement Program: Additional Comments

|  |
|--|
|  |
|--|

<sup>22</sup> Proposed Blowout Prevention Program

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

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.

Signature: **Cherylene Weston**

Printed name: Cherylene Weston

Title: Operations Regulatory Tech Sr.

E-mail Address: cweston@hilcorp.com

Date: 12/10/2024

Phone: 713-289-2615

## OIL CONSERVATION DIVISION

Approved By:

Title:

Approved Date:

Expiration Date:

Conditions of Approval Attached



# Hilcorp Energy - San Juan Basin

San Juan, NM NAD27

Calloway Pad

Haynie 2N

OH

Plan #1

## Anticollision Report

03 October, 2024





# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

| Reference                    | Plan #1                                                             |                |                     |
|------------------------------|---------------------------------------------------------------------|----------------|---------------------|
| Filter type:                 | NO GLOBAL FILTER: Using user defined selection & filtering criteria |                |                     |
| Interpolation Method:        | Stations                                                            | Error Model:   | ISCWSA              |
| Depth Range:                 | Unlimited                                                           | Scan Method:   | Closest Approach 3D |
| Results Limited by:          | Maximum centre distance of 10,000.00ft                              | Error Surface: | Pedal Curve         |
| Warning Levels Evaluated at: | 2.00 Sigma                                                          | Casing Method: | Not applied         |

| Survey Tool Program |          | Date              | 10/1/2024 |                 |  |
|---------------------|----------|-------------------|-----------|-----------------|--|
| From (ft)           | To (ft)  | Survey (Wellbore) | Tool Name | Description     |  |
| 0.00                | 6,883.52 | Plan #1 (OH)      | MWD+HDGM  | OWSG MWD + HDGM |  |

| Summary                         |                               |                            |                               |                                |                   |              |
|---------------------------------|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|--------------|
| Site Name                       | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning      |
| Offset Well - Wellbore - Design |                               |                            |                               |                                |                   |              |
| Calloway                        |                               |                            |                               |                                |                   |              |
| Calloway #1M - OH - OH          |                               |                            |                               |                                |                   | Out of range |
| Calloway #1M - OH - Plan #4     |                               |                            |                               |                                |                   | Out of range |
| Calloway Pad                    |                               |                            |                               |                                |                   |              |
| Alston 001 (P/A) - OH - OH      | 5,101.18                      | 4,959.73                   | 8,514.03                      | 8,340.31                       | 49.013            | CC           |
| Alston 001 (P/A) - OH - OH      | 5,200.00                      | 5,028.00                   | 8,514.08                      | 8,338.05                       | 48.367            | ES           |
| Alston 001 (P/A) - OH - OH      | 5,700.00                      | 5,028.00                   | 8,530.61                      | 8,353.57                       | 48.185            | SF           |
| Barbara K 001 - OH - OH         | 2,711.80                      | 2,800.00                   | 3,523.57                      | 3,496.63                       | 130.767           | CC, ES       |
| Barbara K 001 - OH - OH         | 3,500.00                      | 2,800.00                   | 3,611.66                      | 3,581.23                       | 118.680           | SF           |
| Calloway 001 (P/A) - OH - OH    | 3,325.67                      | 2,369.00                   | 5,669.82                      | 5,559.02                       | 51.171            | CC, ES       |
| Calloway 001 (P/A) - OH - OH    | 3,500.00                      | 2,369.00                   | 5,675.89                      | 5,564.58                       | 50.994            | SF           |
| Calloway 001A - OH - OH         | 918.00                        | 893.06                     | 9,014.97                      | 8,984.62                       | 297.028           | CC           |
| Calloway 001A - OH - OH         | 1,100.00                      | 1,087.09                   | 9,018.95                      | 8,982.09                       | 244.720           | ES           |
| Calloway 001A - OH - OH         | 5,315.00                      | 5,191.15                   | 9,465.02                      | 9,284.72                       | 52.495            | SF           |
| Calloway 100S - OH - OH         | 700.00                        | 713.06                     | 9,621.43                      | 9,597.33                       | 399.189           | CC           |
| Calloway 100S - OH - OH         | 1,100.00                      | 1,112.80                   | 9,625.40                      | 9,587.76                       | 255.758           | ES           |
| Calloway 100S - OH - OH         | 3,000.00                      | 2,567.00                   | 9,982.63                      | 9,890.35                       | 108.181           | SF           |
| Calloway 2M - OH - Plan #1      | 6,800.00                      | 6,826.67                   | 5,856.46                      | 5,804.85                       | 113.484           | CC           |
| Calloway 2M - OH - Plan #1      | 6,883.52                      | 6,910.19                   | 5,856.46                      | 5,804.33                       | 112.351           | ES, SF       |
| Calloway Area 4 - OH - Plan #1  | 918.00                        | 923.00                     | 6,920.12                      | 6,913.64                       | 1,068.318         | CC           |
| Calloway Area 4 - OH - Plan #1  | 1,000.00                      | 1,004.97                   | 6,920.18                      | 6,913.13                       | 981.385           | ES           |
| Calloway Area 4 - OH - Plan #1  | 6,883.52                      | 7,345.40                   | 7,889.61                      | 7,827.17                       | 126.358           | SF           |
| Calloway LS 002 - OH - OH       | 918.00                        | 868.00                     | 7,359.52                      | 7,321.57                       | 193.928           | CC           |
| Calloway LS 002 - OH - OH       | 5,900.00                      | 5,651.48                   | 7,522.01                      | 7,270.80                       | 29.943            | ES           |
| Calloway LS 002 - OH - OH       | 6,200.00                      | 5,659.00                   | 7,527.70                      | 7,275.56                       | 29.855            | SF           |
| Calloway LS 003 (P/A) - OH - OH | 2,821.78                      | 2,421.00                   | 5,614.68                      | 5,527.12                       | 64.126            | CC           |
| Calloway LS 003 (P/A) - OH - OH | 2,900.00                      | 2,421.00                   | 5,615.22                      | 5,527.12                       | 63.734            | ES           |
| Calloway LS 003 (P/A) - OH - OH | 3,500.00                      | 2,421.00                   | 5,659.03                      | 5,567.68                       | 61.951            | SF           |
| Ella Rose 1 012 - OH - OH       | 4,384.72                      | 4,285.00                   | 6,736.55                      | 6,697.61                       | 173.005           | CC           |
| Ella Rose 1 012 - OH - OH       | 4,400.00                      | 4,285.00                   | 6,736.57                      | 6,697.60                       | 172.856           | ES           |
| Ella Rose 1 012 - OH - OH       | 6,000.00                      | 4,285.00                   | 6,927.50                      | 6,885.64                       | 165.482           | SF           |
| Federal 001 - OH - OH           | 918.00                        | 1,021.24                   | 7,657.60                      | 7,623.36                       | 223.640           | CC           |
| Federal 001 - OH - OH           | 1,000.00                      | 1,103.21                   | 7,658.62                      | 7,621.61                       | 206.932           | ES           |
| Federal 001 - OH - OH           | 3,600.00                      | 2,670.00                   | 8,282.59                      | 8,185.21                       | 85.053            | SF           |
| Federal 100A - OH - OH          | 918.00                        | 1,010.01                   | 7,531.12                      | 7,497.22                       | 222.141           | CC           |
| Federal 100A - OH - OH          | 1,000.00                      | 1,095.51                   | 7,532.52                      | 7,495.74                       | 204.801           | ES           |
| Federal 100A - OH - OH          | 5,800.00                      | 5,200.00                   | 8,225.88                      | 8,045.71                       | 45.656            | SF           |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

| Summary                         |                               |                            |                               |                                |                   |              |
|---------------------------------|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|--------------|
| Site Name                       | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning      |
| Offset Well - Wellbore - Design |                               |                            |                               |                                |                   |              |
| Calloway Pad                    |                               |                            |                               |                                |                   |              |
| FJ Titt 002 - OH - OH           | 5,544.61                      | 5,440.91                   | 7,785.45                      | 7,595.89                       | 41.072            | CC           |
| FJ Titt 002 - OH - OH           | 6,883.52                      | 6,748.83                   | 7,785.50                      | 7,552.50                       | 33.414            | ES, SF       |
| FJ Titt Com (P/A) - OH - OH     | 3,484.21                      | 2,350.00                   | 7,517.44                      | 7,406.66                       | 67.859            | CC           |
| FJ Titt Com (P/A) - OH - OH     | 3,500.00                      | 2,350.00                   | 7,517.49                      | 7,406.66                       | 67.824            | ES           |
| FJ Titt Com (P/A) - OH - OH     | 3,700.00                      | 2,350.00                   | 7,526.64                      | 7,415.29                       | 67.595            | SF           |
| Flood LS 001 (P/A) - OH - OH    | 918.00                        | 342.00                     | 6,117.09                      | 6,100.18                       | 361.747           | CC           |
| Flood LS 001 (P/A) - OH - OH    | 1,100.00                      | 523.72                     | 6,121.35                      | 6,096.56                       | 246.924           | ES           |
| Flood LS 001 (P/A) - OH - OH    | 3,600.00                      | 2,474.00                   | 6,640.72                      | 6,524.61                       | 57.194            | SF           |
| Heaton 101 - OH - OH            | 918.00                        | 1,044.08                   | 4,993.70                      | 4,958.77                       | 142.934           | CC           |
| Heaton 101 - OH - OH            | 1,000.00                      | 1,126.06                   | 4,995.22                      | 4,957.51                       | 132.474           | ES           |
| Heaton 101 - OH - OH            | 2,600.00                      | 2,590.00                   | 5,478.11                      | 5,389.40                       | 61.755            | SF           |
| Lester 001 - OH - OH            | 4,658.06                      | 4,499.81                   | 5,411.45                      | 5,253.79                       | 34.322            | CC           |
| Lester 001 - OH - OH            | 5,900.00                      | 5,741.77                   | 5,411.46                      | 5,212.78                       | 27.237            | ES           |
| Lester 001 - OH - OH            | 6,100.00                      | 5,749.00                   | 5,414.89                      | 5,215.50                       | 27.157            | SF           |
| Lester 001A - OH - OH           | 4,910.00                      | 4,641.48                   | 2,286.41                      | 2,078.04                       | 10.973            | CC           |
| Lester 001A - OH - OH           | 5,000.00                      | 4,690.00                   | 2,286.79                      | 2,076.28                       | 10.863            | ES, SF       |
| Lester 001B - OH - OH           | 3,491.89                      | 3,208.00                   | 3,032.47                      | 2,993.42                       | 77.670            | CC           |
| Lester 001B - OH - OH           | 3,500.00                      | 3,208.00                   | 3,032.48                      | 2,993.39                       | 77.584            | ES           |
| Lester 001B - OH - OH           | 4,700.00                      | 4,395.00                   | 3,096.52                      | 3,048.41                       | 64.366            | SF           |
| Lester 100S - OH - OH           | 3,355.47                      | 2,525.00                   | 5,896.78                      | 5,877.00                       | 298.148           | CC, ES       |
| Lester 100S - OH - OH           | 5,000.00                      | 2,525.00                   | 6,272.21                      | 6,248.46                       | 264.177           | SF           |
| Rhoda Abrams 002N - OH - OH     | 299.99                        | 357.00                     | 4,450.87                      | 4,449.42                       | 3,076.775         | CC           |
| Rhoda Abrams 002N - OH - OH     | 300.00                        | 357.00                     | 4,450.87                      | 4,449.42                       | 3,076.675         | ES           |
| Rhoda Abrams 002N - OH - OH     | 6,883.52                      | 6,606.09                   | 6,068.24                      | 6,026.09                       | 143.951           | SF           |
| Sexton 001 (P/A) - OH - OH      | 2,700.00                      | 2,195.00                   | 2,434.89                      | 2,334.88                       | 24.348            | CC, ES       |
| Sexton 001 (P/A) - OH - OH      | 2,800.00                      | 2,195.00                   | 2,436.54                      | 2,336.31                       | 24.309            | SF           |
| Sloane Com 001F - OH - OH       | 883.94                        | 814.00                     | 3,084.74                      | 3,080.34                       | 700.633           | CC           |
| Sloane Com 001F - OH - OH       | 900.00                        | 814.00                     | 3,084.78                      | 3,080.32                       | 691.611           | ES           |
| Sloane Com 001F - OH - OH       | 5,100.00                      | 4,211.00                   | 4,006.15                      | 3,972.57                       | 119.288           | SF           |
| Titt 002B - OH - OH             | 5,700.00                      | 5,596.95                   | 9,667.10                      | 9,472.37                       | 49.642            | CC           |
| Titt 002B - OH - OH             | 6,883.52                      | 6,806.62                   | 9,667.82                      | 9,433.05                       | 41.179            | ES, SF       |
| Titt 100 - OH - OH              | 3,300.00                      | 2,575.00                   | 8,496.94                      | 8,401.42                       | 88.950            | CC, ES       |
| Titt 100 - OH - OH              | 3,900.00                      | 2,575.00                   | 8,536.01                      | 8,438.38                       | 87.430            | SF           |
| Turner A 001 - OH - OH          | 918.00                        | 866.00                     | 4,209.72                      | 4,171.85                       | 111.163           | CC           |
| Turner A 001 - OH - OH          | 1,400.00                      | 1,342.90                   | 4,220.79                      | 4,162.15                       | 71.988            | ES           |
| Turner A 001 - OH - OH          | 6,883.52                      | 6,633.00                   | 4,488.13                      | 4,195.24                       | 15.323            | SF           |
| Turner A 001A - OH - OH         | 918.00                        | 925.00                     | 5,858.94                      | 5,827.62                       | 187.061           | CC           |
| Turner A 001A - OH - OH         | 1,000.00                      | 1,006.97                   | 5,859.80                      | 5,825.71                       | 171.888           | ES           |
| Turner A 001A - OH - OH         | 5,500.00                      | 5,020.00                   | 6,404.50                      | 6,229.69                       | 36.636            | SF           |
| Turner A 100 - OH - OH          | 700.00                        | 730.04                     | 6,171.63                      | 6,147.01                       | 250.690           | CC           |
| Turner A 100 - OH - OH          | 1,000.00                      | 1,030.03                   | 6,172.51                      | 6,137.72                       | 177.417           | ES           |
| Turner A 100 - OH - OH          | 3,300.00                      | 2,546.00                   | 6,668.49                      | 6,575.75                       | 71.902            | SF           |
| Wallace Gas Com 001A - OH - OH  | 918.00                        | 904.00                     | 9,885.25                      | 9,854.57                       | 322.170           | CC           |
| Wallace Gas Com 001A - OH - OH  | 5,300.00                      | 5,087.95                   | 9,963.00                      | 9,784.79                       | 55.903            | ES           |
| Wallace Gas Com 001A - OH - OH  | 6,100.00                      | 5,090.00                   | 9,994.91                      | 9,815.07                       | 55.576            | SF           |
| Wilmuth 001 (P/A) - OH - OH     |                               |                            |                               |                                |                   | Out of range |
| Wilmuth 001 (PA) - OH - OH      |                               |                            |                               |                                |                   | Out of range |
| Wilmuth 002 (P/A) - OH - OH     |                               |                            |                               |                                |                   | Out of range |
| Zella Calloway 001 - OH - OH    | 6,883.52                      | 6,734.00                   | 5,655.16                      | 5,358.18                       | 19.042            | CC, ES, SF   |
| Zella Calloway 001M - OH - OH   | 4,126.60                      | 4,180.00                   | 4,583.57                      | 4,551.48                       | 142.828           | CC, ES       |
| Zella Calloway 001M - OH - OH   | 4,800.00                      | 4,180.00                   | 4,632.77                      | 4,599.72                       | 140.194           | SF           |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                 |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                          |                           |         |
|-----------------------------------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------|--------------------|------------------------------|-------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - Alston 001 (P/A) - OH - OH |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                          | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 4380-INCLINOMETER                        |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                          | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                                | <b>Offset</b>              | <b>Semi Major Axis</b>     |                            | <b>Rule Assigned:</b> |                    | <b>Distance</b>              |                   | <b>Warning</b>    |                             |                              |                                |                          |                           |         |
| <b>Measured Depth (ft)</b>                                      | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b> | <b>Offset (ft)</b> | <b>Highside Toolface (°)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> |                           |         |
| 0.00                                                            | 0.00                       | 56.00                      | 56.00                      | 0.00                  | 1.70               | 78.13                        | 1,799.59          | 8,563.63          | 8,750.67                    |                              |                                |                          |                           |         |
| 100.00                                                          | 100.00                     | 156.00                     | 156.00                     | 0.30                  | 4.74               | 78.13                        | 1,799.59          | 8,563.63          | 8,750.67                    | 8,745.64                     | 5.04                           | 1,737.883                |                           |         |
| 200.00                                                          | 200.00                     | 256.00                     | 256.00                     | 0.66                  | 7.77               | 78.13                        | 1,799.59          | 8,563.63          | 8,750.67                    | 8,742.24                     | 8.43                           | 1,037.967                |                           |         |
| 300.00                                                          | 300.00                     | 356.00                     | 356.00                     | 1.01                  | 10.81              | 78.13                        | 1,799.59          | 8,563.63          | 8,750.67                    | 8,738.85                     | 11.83                          | 739.957                  |                           |         |
| 400.00                                                          | 400.00                     | 456.00                     | 456.00                     | 1.37                  | 13.85              | 78.13                        | 1,799.59          | 8,563.63          | 8,750.67                    | 8,735.45                     | 15.22                          | 574.898                  |                           |         |
| 500.00                                                          | 500.00                     | 556.00                     | 556.00                     | 1.73                  | 16.89              | 78.13                        | 1,799.59          | 8,563.63          | 8,750.67                    | 8,732.06                     | 18.62                          | 470.047                  |                           |         |
| 600.00                                                          | 600.00                     | 656.00                     | 656.00                     | 2.09                  | 19.92              | 78.13                        | 1,799.59          | 8,563.63          | 8,750.67                    | 8,728.66                     | 22.01                          | 397.542                  |                           |         |
| 700.00                                                          | 700.00                     | 756.00                     | 756.00                     | 2.45                  | 22.96              | 78.13                        | 1,799.59          | 8,563.63          | 8,750.67                    | 8,725.26                     | 25.41                          | 344.416                  |                           |         |
| 800.00                                                          | 800.00                     | 856.00                     | 856.00                     | 2.81                  | 26.00              | 78.13                        | 1,799.59          | 8,563.63          | 8,750.67                    | 8,721.87                     | 28.80                          | 303.815                  |                           |         |
| 900.00                                                          | 900.00                     | 956.00                     | 956.00                     | 3.17                  | 29.03              | 78.13                        | 1,799.59          | 8,563.63          | 8,750.67                    | 8,718.47                     | 32.20                          | 271.777                  |                           |         |
| 918.00                                                          | 918.00                     | 974.00                     | 974.00                     | 3.23                  | 29.58              | 78.13                        | 1,799.59          | 8,563.63          | 8,750.67                    | 8,717.86                     | 32.81                          | 266.715                  |                           |         |
| 1,000.00                                                        | 999.97                     | 1,055.97                   | 1,055.97                   | 3.51                  | 32.07              | -72.95                       | 1,799.59          | 8,563.63          | 8,750.16                    | 8,714.58                     | 35.58                          | 245.939                  |                           |         |
| 1,100.00                                                        | 1,099.72                   | 1,155.72                   | 1,155.72                   | 3.84                  | 35.10              | -73.05                       | 1,799.59          | 8,563.63          | 8,748.13                    | 8,709.19                     | 38.94                          | 224.673                  |                           |         |
| 1,200.00                                                        | 1,198.98                   | 1,254.98                   | 1,254.98                   | 4.18                  | 38.11              | -73.22                       | 1,799.59          | 8,563.63          | 8,744.59                    | 8,702.30                     | 42.29                          | 206.774                  |                           |         |
| 1,300.00                                                        | 1,297.46                   | 1,353.46                   | 1,353.46                   | 4.54                  | 41.10              | -73.48                       | 1,799.59          | 8,563.63          | 8,739.56                    | 8,693.93                     | 45.64                          | 191.507                  |                           |         |
| 1,400.00                                                        | 1,394.90                   | 1,450.90                   | 1,450.90                   | 4.92                  | 44.06              | -73.80                       | 1,799.59          | 8,563.63          | 8,733.09                    | 8,684.12                     | 48.97                          | 178.329                  |                           |         |
| 1,500.00                                                        | 1,491.03                   | 1,547.03                   | 1,547.03                   | 5.33                  | 46.98              | -74.19                       | 1,799.59          | 8,563.63          | 8,725.23                    | 8,672.93                     | 52.30                          | 166.833                  |                           |         |
| 1,600.00                                                        | 1,585.60                   | 1,641.60                   | 1,641.60                   | 5.79                  | 49.85              | -74.66                       | 1,799.59          | 8,563.63          | 8,716.05                    | 8,660.43                     | 55.62                          | 156.708                  |                           |         |
| 1,700.00                                                        | 1,678.33                   | 1,734.33                   | 1,734.33                   | 6.30                  | 52.67              | -75.18                       | 1,799.59          | 8,563.63          | 8,705.61                    | 8,646.68                     | 58.94                          | 147.715                  |                           |         |
| 1,797.05                                                        | 1,766.34                   | 1,822.34                   | 1,822.34                   | 6.85                  | 55.34              | -75.75                       | 1,799.59          | 8,563.63          | 8,694.37                    | 8,632.22                     | 62.15                          | 139.893                  |                           |         |
| 1,800.00                                                        | 1,768.98                   | 1,824.98                   | 1,824.98                   | 6.87                  | 55.42              | -75.76                       | 1,799.59          | 8,563.63          | 8,694.02                    | 8,631.77                     | 62.25                          | 139.667                  |                           |         |
| 1,900.00                                                        | 1,858.58                   | 1,914.58                   | 1,914.58                   | 7.49                  | 58.14              | -76.01                       | 1,799.59          | 8,563.63          | 8,682.01                    | 8,616.43                     | 65.58                          | 132.391                  |                           |         |
| 2,000.00                                                        | 1,948.17                   | 2,004.17                   | 2,004.17                   | 8.15                  | 60.86              | -76.27                       | 1,799.59          | 8,563.63          | 8,670.22                    | 8,601.28                     | 68.94                          | 125.764                  |                           |         |
| 2,100.00                                                        | 2,037.76                   | 2,093.76                   | 2,093.76                   | 8.83                  | 63.59              | -76.53                       | 1,799.59          | 8,563.63          | 8,658.64                    | 8,586.31                     | 72.33                          | 119.715                  |                           |         |
| 2,200.00                                                        | 2,127.36                   | 2,183.36                   | 2,183.36                   | 9.53                  | 66.31              | -76.78                       | 1,799.59          | 8,563.63          | 8,647.27                    | 8,571.54                     | 75.73                          | 114.180                  |                           |         |
| 2,300.00                                                        | 2,216.95                   | 2,272.95                   | 2,272.95                   | 10.25                 | 69.03              | -77.04                       | 1,799.59          | 8,563.63          | 8,636.11                    | 8,556.96                     | 79.16                          | 109.102                  |                           |         |
| 2,400.00                                                        | 2,306.54                   | 2,362.54                   | 2,362.54                   | 10.97                 | 71.75              | -77.30                       | 1,799.59          | 8,563.63          | 8,625.17                    | 8,542.58                     | 82.59                          | 104.431                  |                           |         |
| 2,500.00                                                        | 2,396.14                   | 2,452.14                   | 2,452.14                   | 11.71                 | 74.47              | -77.56                       | 1,799.59          | 8,563.63          | 8,614.45                    | 8,528.41                     | 86.04                          | 100.122                  |                           |         |
| 2,600.00                                                        | 2,485.73                   | 2,541.73                   | 2,541.73                   | 12.45                 | 77.19              | -77.82                       | 1,799.59          | 8,563.63          | 8,603.94                    | 8,514.44                     | 89.50                          | 96.138                   |                           |         |
| 2,700.00                                                        | 2,575.32                   | 2,631.32                   | 2,631.32                   | 13.21                 | 79.91              | -78.08                       | 1,799.59          | 8,563.63          | 8,593.65                    | 8,500.69                     | 92.96                          | 92.445                   |                           |         |
| 2,800.00                                                        | 2,664.92                   | 2,720.92                   | 2,720.92                   | 13.96                 | 82.63              | -78.34                       | 1,799.59          | 8,563.63          | 8,583.57                    | 8,487.14                     | 96.43                          | 89.012                   |                           |         |
| 2,900.00                                                        | 2,754.51                   | 2,810.51                   | 2,810.51                   | 14.72                 | 85.35              | -78.61                       | 1,799.59          | 8,563.63          | 8,573.71                    | 8,473.81                     | 99.91                          | 85.816                   |                           |         |
| 3,000.00                                                        | 2,844.10                   | 2,900.10                   | 2,900.10                   | 15.49                 | 88.07              | -78.87                       | 1,799.59          | 8,563.63          | 8,564.08                    | 8,460.69                     | 103.39                         | 82.833                   |                           |         |
| 3,100.00                                                        | 2,933.70                   | 2,989.70                   | 2,989.70                   | 16.26                 | 90.79              | -79.13                       | 1,799.59          | 8,563.63          | 8,554.66                    | 8,447.78                     | 106.88                         | 80.042                   |                           |         |
| 3,114.47                                                        | 2,946.66                   | 3,002.66                   | 3,002.66                   | 16.37                 | 91.19              | -79.17                       | 1,799.59          | 8,563.63          | 8,553.31                    | 8,445.93                     | 107.38                         | 79.653                   |                           |         |
| 3,200.00                                                        | 3,024.12                   | 3,080.12                   | 3,080.12                   | 17.01                 | 93.54              | -79.16                       | 1,799.59          | 8,563.63          | 8,545.81                    | 8,435.45                     | 110.37                         | 77.430                   |                           |         |
| 3,300.00                                                        | 3,116.62                   | 3,172.62                   | 3,172.62                   | 17.69                 | 96.35              | -79.17                       | 1,799.59          | 8,563.63          | 8,538.12                    | 8,424.26                     | 113.86                         | 74.988                   |                           |         |
| 3,400.00                                                        | 3,210.99                   | 3,266.99                   | 3,266.99                   | 18.31                 | 99.21              | -79.18                       | 1,799.59          | 8,563.63          | 8,531.56                    | 8,414.21                     | 117.34                         | 72.705                   |                           |         |
| 3,500.00                                                        | 3,306.96                   | 3,362.96                   | 3,362.96                   | 18.86                 | 102.13             | -79.20                       | 1,799.59          | 8,563.63          | 8,526.08                    | 8,405.26                     | 120.81                         | 70.573                   |                           |         |
| 3,600.00                                                        | 3,404.26                   | 3,460.26                   | 3,460.26                   | 19.35                 | 105.08             | -79.21                       | 1,799.59          | 8,563.63          | 8,521.65                    | 8,397.39                     | 124.26                         | 68.582                   |                           |         |
| 3,700.00                                                        | 3,502.64                   | 3,558.64                   | 3,558.64                   | 19.77                 | 108.07             | -79.23                       | 1,799.59          | 8,563.63          | 8,518.25                    | 8,390.58                     | 127.67                         | 66.721                   |                           |         |
| 3,800.00                                                        | 3,601.81                   | 3,657.81                   | 3,657.81                   | 20.14                 | 111.08             | -79.24                       | 1,799.59          | 8,563.63          | 8,515.86                    | 8,384.81                     | 131.05                         | 64.982                   |                           |         |
| 3,900.00                                                        | 3,701.52                   | 3,757.52                   | 3,757.52                   | 20.45                 | 114.11             | -79.25                       | 1,799.59          | 8,563.63          | 8,514.45                    | 8,380.06                     | 134.39                         | 63.357                   |                           |         |
| 3,993.52                                                        | 3,795.00                   | 3,851.00                   | 3,851.00                   | 20.68                 | 116.95             | 71.80                        | 1,799.59          | 8,563.63          | 8,514.03                    | 8,376.56                     | 137.46                         | 61.938                   |                           |         |
| 4,000.00                                                        | 3,801.48                   | 3,857.48                   | 3,857.48                   | 20.69                 | 117.15             | 71.80                        | 1,799.59          | 8,563.63          | 8,514.03                    | 8,376.35                     | 137.67                         | 61.843                   |                           |         |
| 4,100.00                                                        | 3,901.48                   | 3,957.48                   | 3,957.48                   | 20.91                 | 120.18             | 71.80                        | 1,799.59          | 8,563.63          | 8,514.03                    | 8,373.10                     | 140.93                         | 60.414                   |                           |         |
| 4,200.00                                                        | 4,001.48                   | 4,057.48                   | 4,057.48                   | 21.13                 | 123.22             | 71.80                        | 1,799.59          | 8,563.63          | 8,514.03                    | 8,369.84                     | 144.19                         | 59.049                   |                           |         |
| 4,300.00                                                        | 4,101.48                   | 4,157.48                   | 4,157.48                   | 21.36                 | 126.26             | 71.80                        | 1,799.59          | 8,563.63          | 8,514.03                    | 8,366.58                     | 147.45                         | 57.743                   |                           |         |
| 4,400.00                                                        | 4,201.48                   | 4,257.48                   | 4,257.48                   | 21.59                 | 129.29             | 71.80                        | 1,799.59          | 8,563.63          | 8,514.03                    | 8,363.31                     | 150.71                         | 56.491                   |                           |         |
| 4,500.00                                                        | 4,301.48                   | 4,357.48                   | 4,357.48                   | 21.82                 | 132.33             | 71.80                        | 1,799.59          | 8,563.63          | 8,514.03                    | 8,360.04                     | 153.98                         | 55.292                   |                           |         |
| 4,600.00                                                        | 4,401.48                   | 4,457.72                   | 4,457.48                   | 22.05                 | 135.38             | 71.80                        | 1,799.59          | 8,563.63          | 8,514.03                    | 8,356.76                     | 157.26                         | 54.139                   |                           |         |
| 4,700.00                                                        | 4,501.48                   | 4,557.84                   | 4,557.48                   | 22.29                 | 138.41             | 71.80                        | 1,799.59          | 8,563.63          | 8,514.03                    | 8,353.48                     | 160.54                         | 53.033                   |                           |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                          |                     |                     |                     |                |             |                       |            |                        |                      |                         |                         |                   |                            |  |
|----------------------------------------------------------|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|------------|------------------------|----------------------|-------------------------|-------------------------|-------------------|----------------------------|--|
| Offset Design: Calloway Pad - Alston 001 (P/A) - OH - OH |                     |                     |                     |                |             |                       |            |                        |                      |                         |                         |                   | Offset Site Error: 0.00 ft |  |
| Survey Program: 4380-INCLINOMETER                        |                     | Reference           |                     | Offset         |             | Semi Major Axis       |            | Offset Wellbore Centre |                      | Rule Assigned: Distance |                         |                   | Offset Well Error: 0.00 ft |  |
| Measured Depth (ft)                                      | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | +N/-S (ft) | +E/-W (ft)             | Between Centres (ft) | Between Ellipses (ft)   | Minimum Separation (ft) | Separation Factor | Warning                    |  |
| 4,800.00                                                 | 4,601.48            | 4,658.06            | 4,657.48            | 22.53          | 141.45      | 71.80                 | 1,799.59   | 8,563.63               | 8,514.03             | 8,350.20                | 163.82                  | 51.971            |                            |  |
| 4,900.00                                                 | 4,701.48            | 4,758.33            | 4,757.48            | 22.78          | 144.49      | 71.80                 | 1,799.59   | 8,563.63               | 8,514.03             | 8,346.92                | 167.11                  | 50.949            |                            |  |
| 5,000.00                                                 | 4,801.48            | 4,858.55            | 4,857.48            | 23.03          | 147.53      | 71.80                 | 1,799.59   | 8,563.63               | 8,514.03             | 8,343.63                | 170.39                  | 49.967            |                            |  |
| 5,100.00                                                 | 4,901.48            | 4,958.55            | 4,957.48            | 23.28          | 150.56      | 71.80                 | 1,799.59   | 8,563.63               | 8,514.03             | 8,340.35                | 173.67                  | 49.024            |                            |  |
| 5,101.18                                                 | 4,902.66            | 4,959.73            | 4,958.66            | 23.28          | 150.59      | 71.80                 | 1,799.59   | 8,563.63               | 8,514.03             | 8,340.31                | 173.71                  | 49.013            | CC                         |  |
| 5,200.00                                                 | 5,001.48            | 5,028.00            | 5,025.76            | 23.53          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,514.08             | 8,338.05                | 176.03                  | 48.367            | ES                         |  |
| 5,300.00                                                 | 5,101.48            | 5,028.00            | 5,025.76            | 23.79          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,515.04             | 8,338.77                | 176.28                  | 48.305            |                            |  |
| 5,400.00                                                 | 5,201.48            | 5,028.00            | 5,025.76            | 24.05          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,517.18             | 8,340.68                | 176.50                  | 48.256            |                            |  |
| 5,500.00                                                 | 5,301.48            | 5,028.00            | 5,025.76            | 24.31          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,520.49             | 8,343.79                | 176.70                  | 48.220            |                            |  |
| 5,600.00                                                 | 5,401.48            | 5,028.00            | 5,025.76            | 24.57          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,524.96             | 8,348.08                | 176.88                  | 48.196            |                            |  |
| 5,700.00                                                 | 5,501.48            | 5,028.00            | 5,025.76            | 24.84          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,530.61             | 8,353.57                | 177.04                  | 48.185            | SF                         |  |
| 5,800.00                                                 | 5,601.48            | 5,028.00            | 5,025.76            | 25.11          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,537.43             | 8,360.25                | 177.18                  | 48.186            |                            |  |
| 5,900.00                                                 | 5,701.48            | 5,028.00            | 5,025.76            | 25.38          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,545.41             | 8,368.12                | 177.29                  | 48.199            |                            |  |
| 6,000.00                                                 | 5,801.48            | 5,028.00            | 5,025.76            | 25.65          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,554.55             | 8,377.17                | 177.39                  | 48.225            |                            |  |
| 6,100.00                                                 | 5,901.48            | 5,028.00            | 5,025.76            | 25.93          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,564.85             | 8,387.39                | 177.46                  | 48.263            |                            |  |
| 6,200.00                                                 | 6,001.48            | 5,028.00            | 5,025.76            | 26.20          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,576.31             | 8,398.80                | 177.51                  | 48.314            |                            |  |
| 6,300.00                                                 | 6,101.48            | 5,028.00            | 5,025.76            | 26.48          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,588.91             | 8,411.37                | 177.54                  | 48.376            |                            |  |
| 6,400.00                                                 | 6,201.48            | 5,028.00            | 5,025.76            | 26.76          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,602.66             | 8,425.11                | 177.55                  | 48.451            |                            |  |
| 6,500.00                                                 | 6,301.48            | 5,028.00            | 5,025.76            | 27.05          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,617.55             | 8,440.00                | 177.54                  | 48.538            |                            |  |
| 6,600.00                                                 | 6,401.48            | 5,028.00            | 5,025.76            | 27.33          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,633.57             | 8,456.05                | 177.51                  | 48.637            |                            |  |
| 6,700.00                                                 | 6,501.48            | 5,028.00            | 5,025.76            | 27.62          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,650.71             | 8,473.25                | 177.46                  | 48.747            |                            |  |
| 6,800.00                                                 | 6,601.48            | 5,028.00            | 5,025.76            | 27.90          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,668.98             | 8,491.59                | 177.39                  | 48.870            |                            |  |
| 6,883.52                                                 | 6,685.00            | 5,028.00            | 5,025.76            | 28.15          | 152.66      | 71.80                 | 1,799.59   | 8,563.63               | 8,685.08             | 8,507.77                | 177.31                  | 48.982            |                            |  |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                              |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                        |                   |                                   |
|--------------------------------------------------------------|----------------------------|----------------------------|----------------------------|------------------------|--------------------|------------------------------|-------------------------------|-------------------|-----------------------------|------------------------------|------------------------|-------------------|-----------------------------------|
| <b>Offset Design:</b> Calloway Pad - Barbara K 001 - OH - OH |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                        |                   | <b>Offset Site Error:</b> 0.00 ft |
| <b>Survey Program:</b> 206-MWD                               |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                        |                   | <b>Offset Well Error:</b> 0.00 ft |
| <b>Reference</b>                                             |                            | <b>Offset</b>              |                            | <b>Semi Major Axis</b> |                    |                              | <b>Offset Wellbore Centre</b> |                   | <b>Distance</b>             |                              | <b>Minimum</b>         | <b>Separation</b> | <b>Warning</b>                    |
| <b>Measured Depth (ft)</b>                                   | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b>  | <b>Offset (ft)</b> | <b>Highside Toolface (°)</b> | <b>+N/-S (ft)</b>             | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Separation (ft)</b> | <b>Factor</b>     |                                   |
| 0.00                                                         | 0.00                       | 1,726.00                   | 1,587.50                   | 0.00                   | 12.46              | -126.49                      | -2,282.64                     | -3,085.48         | 4,130.11                    |                              |                        |                   |                                   |
| 100.00                                                       | 100.00                     | 1,772.47                   | 1,628.93                   | 0.30                   | 12.88              | -126.70                      | -2,283.98                     | -3,064.46         | 4,093.82                    | 4,083.61                     | 10.22                  | 400.700           |                                   |
| 200.00                                                       | 200.00                     | 1,821.00                   | 1,672.23                   | 0.66                   | 13.32              | -126.92                      | -2,285.73                     | -3,042.64         | 4,058.44                    | 4,047.72                     | 10.72                  | 378.700           |                                   |
| 300.00                                                       | 300.00                     | 1,859.51                   | 1,706.61                   | 1.01                   | 13.67              | -127.10                      | -2,287.77                     | -3,025.39         | 4,024.29                    | 4,013.03                     | 11.26                  | 357.535           |                                   |
| 400.00                                                       | 400.00                     | 1,916.00                   | 1,756.95                   | 1.37                   | 14.19              | -127.39                      | -2,292.64                     | -3,000.24         | 3,991.81                    | 3,979.83                     | 11.98                  | 333.304           |                                   |
| 500.00                                                       | 500.00                     | 1,939.54                   | 1,777.90                   | 1.73                   | 14.41              | -127.51                      | -2,295.14                     | -2,989.79         | 3,960.42                    | 3,947.92                     | 12.51                  | 316.695           |                                   |
| 600.00                                                       | 600.00                     | 2,024.22                   | 1,853.22                   | 2.09                   | 15.20              | -127.97                      | -2,304.31                     | -2,952.21         | 3,929.93                    | 3,916.41                     | 13.52                  | 290.673           |                                   |
| 700.00                                                       | 700.00                     | 2,144.30                   | 1,961.29                   | 2.45                   | 16.26              | -128.58                      | -2,313.94                     | -2,900.80         | 3,899.65                    | 3,884.91                     | 14.75                  | 264.469           |                                   |
| 800.00                                                       | 800.00                     | 2,202.00                   | 2,013.97                   | 2.81                   | 16.73              | -128.84                      | -2,316.49                     | -2,877.40         | 3,869.44                    | 3,853.95                     | 15.49                  | 249.815           |                                   |
| 900.00                                                       | 900.00                     | 2,234.95                   | 2,044.30                   | 3.17                   | 16.98              | -128.98                      | -2,317.72                     | -2,864.59         | 3,840.46                    | 3,824.38                     | 16.07                  | 238.913           |                                   |
| 918.00                                                       | 918.00                     | 2,240.86                   | 2,049.77                   | 3.23                   | 17.02              | -129.00                      | -2,317.95                     | -2,862.36         | 3,835.41                    | 3,819.23                     | 16.18                  | 237.038           |                                   |
| 1,000.00                                                     | 999.97                     | 2,297.00                   | 2,102.04                   | 3.51                   | 17.43              | 80.44                        | -2,320.20                     | -2,842.00         | 3,813.10                    | 3,796.29                     | 16.81                  | 226.858           |                                   |
| 1,100.00                                                     | 1,099.72                   | 2,297.00                   | 2,102.04                   | 3.84                   | 17.43              | 81.28                        | -2,320.20                     | -2,842.00         | 3,785.92                    | 3,768.74                     | 17.18                  | 220.379           |                                   |
| 1,200.00                                                     | 1,198.98                   | 2,380.03                   | 2,180.20                   | 4.18                   | 17.98              | 81.95                        | -2,322.72                     | -2,814.11         | 3,759.23                    | 3,741.28                     | 17.95                  | 209.446           |                                   |
| 1,300.00                                                     | 1,297.46                   | 2,393.00                   | 2,192.48                   | 4.54                   | 18.06              | 82.74                        | -2,322.95                     | -2,809.94         | 3,733.09                    | 3,714.72                     | 18.38                  | 203.121           |                                   |
| 1,400.00                                                     | 1,394.90                   | 2,393.00                   | 2,192.48                   | 4.92                   | 18.06              | 83.49                        | -2,322.95                     | -2,809.94         | 3,708.80                    | 3,690.05                     | 18.75                  | 197.803           |                                   |
| 1,500.00                                                     | 1,491.03                   | 2,437.25                   | 2,234.80                   | 5.33                   | 18.28              | 84.24                        | -2,324.09                     | -2,797.11         | 3,684.85                    | 3,665.54                     | 19.31                  | 190.830           |                                   |
| 1,600.00                                                     | 1,585.60                   | 2,489.00                   | 2,285.16                   | 5.79                   | 18.54              | 85.05                        | -2,326.56                     | -2,785.48         | 3,664.30                    | 3,644.38                     | 19.92                  | 183.939           |                                   |
| 1,700.00                                                     | 1,678.33                   | 2,489.00                   | 2,285.16                   | 6.30                   | 18.54              | 85.68                        | -2,326.56                     | -2,785.48         | 3,643.68                    | 3,623.32                     | 20.36                  | 178.945           |                                   |
| 1,797.05                                                     | 1,766.34                   | 2,528.85                   | 2,324.17                   | 6.85                   | 18.69              | 86.42                        | -2,328.17                     | -2,777.54         | 3,625.61                    | 3,604.65                     | 20.96                  | 172.956           |                                   |
| 1,800.00                                                     | 1,768.98                   | 2,531.61                   | 2,326.88                   | 6.87                   | 18.70              | 86.43                        | -2,328.28                     | -2,776.99         | 3,625.07                    | 3,604.08                     | 20.99                  | 172.729           |                                   |
| 1,900.00                                                     | 1,858.58                   | 2,624.64                   | 2,418.02                   | 7.49                   | 19.05              | 86.91                        | -2,331.16                     | -2,758.61         | 3,606.50                    | 3,584.70                     | 21.80                  | 165.447           |                                   |
| 2,000.00                                                     | 1,948.17                   | 2,679.00                   | 2,471.64                   | 8.15                   | 19.24              | 87.22                        | -2,331.80                     | -2,749.76         | 3,589.55                    | 3,567.05                     | 22.50                  | 159.544           |                                   |
| 2,100.00                                                     | 2,037.76                   | 2,698.62                   | 2,491.06                   | 8.83                   | 19.29              | 87.33                        | -2,331.97                     | -2,746.97         | 3,574.09                    | 3,550.98                     | 23.12                  | 154.619           |                                   |
| 2,200.00                                                     | 2,127.36                   | 2,756.53                   | 2,548.43                   | 9.53                   | 19.45              | 87.68                        | -2,332.71                     | -2,739.16         | 3,560.29                    | 3,536.45                     | 23.83                  | 149.395           |                                   |
| 2,300.00                                                     | 2,216.95                   | 2,800.00                   | 2,591.52                   | 10.25                  | 19.57              | 87.94                        | -2,333.33                     | -2,733.44         | 3,547.56                    | 3,523.03                     | 24.53                  | 144.639           |                                   |
| 2,400.00                                                     | 2,306.54                   | 2,800.00                   | 2,591.52                   | 10.97                  | 19.57              | 87.94                        | -2,333.33                     | -2,733.44         | 3,537.34                    | 3,512.22                     | 25.13                  | 140.786           |                                   |
| 2,500.00                                                     | 2,396.14                   | 2,800.00                   | 2,591.52                   | 11.71                  | 19.57              | 87.94                        | -2,333.33                     | -2,733.44         | 3,529.93                    | 3,504.22                     | 25.72                  | 137.249           |                                   |
| 2,600.00                                                     | 2,485.73                   | 2,800.00                   | 2,591.52                   | 12.45                  | 19.57              | 87.94                        | -2,333.33                     | -2,733.44         | 3,525.35                    | 3,499.04                     | 26.30                  | 134.021           |                                   |
| 2,700.00                                                     | 2,575.32                   | 2,800.00                   | 2,591.52                   | 13.21                  | 19.57              | 87.94                        | -2,333.33                     | -2,733.44         | 3,523.59                    | 3,496.72                     | 26.88                  | 131.094           |                                   |
| 2,711.80                                                     | 2,585.90                   | 2,800.00                   | 2,591.52                   | 13.30                  | 19.57              | 87.94                        | -2,333.33                     | -2,733.44         | 3,523.57                    | 3,496.63                     | 26.95                  | 130.767 CC, ES    |                                   |
| 2,800.00                                                     | 2,664.92                   | 2,800.00                   | 2,591.52                   | 13.96                  | 19.57              | 87.94                        | -2,333.33                     | -2,733.44         | 3,524.68                    | 3,497.24                     | 27.44                  | 128.458           |                                   |
| 2,900.00                                                     | 2,754.51                   | 2,800.00                   | 2,591.52                   | 14.72                  | 19.57              | 87.94                        | -2,333.33                     | -2,733.44         | 3,528.60                    | 3,500.61                     | 27.98                  | 126.101           |                                   |
| 3,000.00                                                     | 2,844.10                   | 2,800.00                   | 2,591.52                   | 15.49                  | 19.57              | 87.94                        | -2,333.33                     | -2,733.44         | 3,535.34                    | 3,506.83                     | 28.51                  | 124.011           |                                   |
| 3,100.00                                                     | 2,933.70                   | 2,800.00                   | 2,591.52                   | 16.26                  | 19.57              | 87.94                        | -2,333.33                     | -2,733.44         | 3,544.89                    | 3,515.88                     | 29.01                  | 122.175           |                                   |
| 3,114.47                                                     | 2,946.66                   | 2,800.00                   | 2,591.52                   | 16.37                  | 19.57              | 87.94                        | -2,333.33                     | -2,733.44         | 3,546.51                    | 3,517.42                     | 29.09                  | 121.930           |                                   |
| 3,200.00                                                     | 3,024.12                   | 2,800.00                   | 2,591.52                   | 17.01                  | 19.57              | 88.26                        | -2,333.33                     | -2,733.44         | 3,557.30                    | 3,527.82                     | 29.48                  | 120.664           |                                   |
| 3,300.00                                                     | 3,116.62                   | 2,800.00                   | 2,591.52                   | 17.69                  | 19.57              | 88.73                        | -2,333.33                     | -2,733.44         | 3,572.62                    | 3,542.74                     | 29.87                  | 119.595           |                                   |
| 3,400.00                                                     | 3,210.99                   | 2,800.00                   | 2,591.52                   | 18.31                  | 19.57              | 89.28                        | -2,333.33                     | -2,733.44         | 3,590.77                    | 3,560.58                     | 30.19                  | 118.944           |                                   |
| 3,500.00                                                     | 3,306.96                   | 2,800.00                   | 2,591.52                   | 18.86                  | 19.57              | 89.92                        | -2,333.33                     | -2,733.44         | 3,611.66                    | 3,581.23                     | 30.43                  | 118.680 SF        |                                   |
| 3,600.00                                                     | 3,404.26                   | 2,800.00                   | 2,591.52                   | 19.35                  | 19.57              | 90.65                        | -2,333.33                     | -2,733.44         | 3,635.19                    | 3,604.58                     | 30.60                  | 118.778           |                                   |
| 3,700.00                                                     | 3,502.64                   | 2,800.00                   | 2,591.52                   | 19.77                  | 19.57              | 91.46                        | -2,333.33                     | -2,733.44         | 3,661.24                    | 3,630.53                     | 30.71                  | 119.210           |                                   |
| 3,800.00                                                     | 3,601.81                   | 2,800.00                   | 2,591.52                   | 20.14                  | 19.57              | 92.35                        | -2,333.33                     | -2,733.44         | 3,689.69                    | 3,658.93                     | 30.76                  | 119.951           |                                   |
| 3,900.00                                                     | 3,701.52                   | 2,800.00                   | 2,591.52                   | 20.45                  | 19.57              | 93.31                        | -2,333.33                     | -2,733.44         | 3,720.41                    | 3,689.66                     | 30.75                  | 120.976           |                                   |
| 3,993.52                                                     | 3,795.00                   | 2,800.00                   | 2,591.52                   | 20.68                  | 19.57              | -114.66                      | -2,333.33                     | -2,733.44         | 3,751.07                    | 3,720.38                     | 30.70                  | 122.203           |                                   |
| 4,000.00                                                     | 3,801.48                   | 2,800.00                   | 2,591.52                   | 20.69                  | 19.57              | -114.66                      | -2,333.33                     | -2,733.44         | 3,753.26                    | 3,722.57                     | 30.69                  | 122.298           |                                   |
| 4,100.00                                                     | 3,901.48                   | 2,800.00                   | 2,591.52                   | 20.91                  | 19.57              | -114.66                      | -2,333.33                     | -2,733.44         | 3,788.32                    | 3,757.73                     | 30.59                  | 123.830           |                                   |
| 4,200.00                                                     | 4,001.48                   | 2,800.00                   | 2,591.52                   | 21.13                  | 19.57              | -114.66                      | -2,333.33                     | -2,733.44         | 3,825.67                    | 3,795.19                     | 30.49                  | 125.484           |                                   |
| 4,300.00                                                     | 4,101.48                   | 2,800.00                   | 2,591.52                   | 21.36                  | 19.57              | -114.66                      | -2,333.33                     | -2,733.44         | 3,865.25                    | 3,834.88                     | 30.37                  | 127.256           |                                   |
| 4,400.00                                                     | 4,201.48                   | 2,800.00                   | 2,591.52                   | 21.59                  | 19.57              | -114.66                      | -2,333.33                     | -2,733.44         | 3,906.99                    | 3,876.74                     | 30.25                  | 129.143           |                                   |
| 4,500.00                                                     | 4,301.48                   | 2,800.00                   | 2,591.52                   | 21.82                  | 19.57              | -114.66                      | -2,333.33                     | -2,733.44         | 3,950.82                    | 3,920.69                     | 30.13                  | 131.140           |                                   |
| 4,600.00                                                     | 4,401.48                   | 2,800.00                   | 2,591.52                   | 22.05                  | 19.57              | -114.66                      | -2,333.33                     | -2,733.44         | 3,996.67                    | 3,966.67                     | 30.00                  | 133.243           |                                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                              |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                              |                           |         |
|--------------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|---------------------------|------------------------|--------------------------------------|-------------------------------|-----------------------|-------------------------------------|--------------------------------------|------------------------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - Barbara K 001 - OH - OH |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                              | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 206-MWD                               |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                              | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                             |                                    | <b>Offset</b>                      |                                    | <b>Semi Major Axis</b>    |                        | <b>Highside<br/>Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                     |                                      | <b>Separation<br/>Factor</b> | <b>Warning</b>            |         |
| <b>Measured<br/>Depth<br/>(ft)</b>                           | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Measured<br/>Depth<br/>(ft)</b> | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                      | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between<br/>Centres<br/>(ft)</b> | <b>Between<br/>Ellipses<br/>(ft)</b> |                              |                           |         |
| 4,700.00                                                     | 4,501.48                           | 2,800.00                           | 2,591.52                           | 22.29                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 4,044.47                            | 4,014.61                             | 29.86                        | 135.448                   |         |
| 4,800.00                                                     | 4,601.48                           | 2,800.00                           | 2,591.52                           | 22.53                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 4,094.16                            | 4,064.44                             | 29.72                        | 137.751                   |         |
| 4,900.00                                                     | 4,701.48                           | 2,800.00                           | 2,591.52                           | 22.78                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 4,145.66                            | 4,116.08                             | 29.58                        | 140.147                   |         |
| 5,000.00                                                     | 4,801.48                           | 2,800.00                           | 2,591.52                           | 23.03                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 4,198.92                            | 4,169.48                             | 29.44                        | 142.631                   |         |
| 5,100.00                                                     | 4,901.48                           | 2,800.00                           | 2,591.52                           | 23.28                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 4,253.86                            | 4,224.56                             | 29.30                        | 145.199                   |         |
| 5,200.00                                                     | 5,001.48                           | 2,800.00                           | 2,591.52                           | 23.53                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 4,310.42                            | 4,281.26                             | 29.15                        | 147.846                   |         |
| 5,300.00                                                     | 5,101.48                           | 2,800.00                           | 2,591.52                           | 23.79                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 4,368.53                            | 4,339.52                             | 29.01                        | 150.567                   |         |
| 5,400.00                                                     | 5,201.48                           | 2,800.00                           | 2,591.52                           | 24.05                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 4,428.15                            | 4,399.27                             | 28.87                        | 153.358                   |         |
| 5,500.00                                                     | 5,301.48                           | 2,800.00                           | 2,591.52                           | 24.31                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 4,489.20                            | 4,460.46                             | 28.74                        | 156.213                   |         |
| 5,600.00                                                     | 5,401.48                           | 2,800.00                           | 2,591.52                           | 24.57                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 4,551.62                            | 4,523.02                             | 28.60                        | 159.128                   |         |
| 5,700.00                                                     | 5,501.48                           | 2,800.00                           | 2,591.52                           | 24.84                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 4,615.37                            | 4,586.90                             | 28.47                        | 162.097                   |         |
| 5,800.00                                                     | 5,601.48                           | 2,800.00                           | 2,591.52                           | 25.11                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 4,680.39                            | 4,652.04                             | 28.35                        | 165.116                   |         |
| 5,900.00                                                     | 5,701.48                           | 2,800.00                           | 2,591.52                           | 25.38                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 4,746.62                            | 4,718.40                             | 28.22                        | 168.180                   |         |
| 6,000.00                                                     | 5,801.48                           | 2,800.00                           | 2,591.52                           | 25.65                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 4,814.02                            | 4,785.92                             | 28.11                        | 171.282                   |         |
| 6,100.00                                                     | 5,901.48                           | 2,800.00                           | 2,591.52                           | 25.93                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 4,882.54                            | 4,854.55                             | 27.99                        | 174.420                   |         |
| 6,200.00                                                     | 6,001.48                           | 2,800.00                           | 2,591.52                           | 26.20                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 4,952.13                            | 4,924.25                             | 27.89                        | 177.587                   |         |
| 6,300.00                                                     | 6,101.48                           | 2,800.00                           | 2,591.52                           | 26.48                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 5,022.75                            | 4,994.96                             | 27.78                        | 180.779                   |         |
| 6,400.00                                                     | 6,201.48                           | 2,800.00                           | 2,591.52                           | 26.76                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 5,094.35                            | 5,066.66                             | 27.69                        | 183.990                   |         |
| 6,500.00                                                     | 6,301.48                           | 2,800.00                           | 2,591.52                           | 27.05                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 5,166.89                            | 5,139.30                             | 27.60                        | 187.216                   |         |
| 6,600.00                                                     | 6,401.48                           | 2,800.00                           | 2,591.52                           | 27.33                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 5,240.34                            | 5,212.83                             | 27.52                        | 190.451                   |         |
| 6,700.00                                                     | 6,501.48                           | 2,800.00                           | 2,591.52                           | 27.62                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 5,314.66                            | 5,287.22                             | 27.44                        | 193.692                   |         |
| 6,800.00                                                     | 6,601.48                           | 2,800.00                           | 2,591.52                           | 27.90                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 5,389.80                            | 5,362.43                             | 27.37                        | 196.933                   |         |
| 6,883.52                                                     | 6,685.00                           | 2,800.00                           | 2,591.52                           | 28.15                     | 19.57                  | -114.66                              | -2,333.33                     | -2,733.44             | 5,453.17                            | 5,425.86                             | 27.32                        | 199.637                   |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



## Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                   |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |                           |         |
|-------------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|------------------------------------|--------------------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - Calloway 001 (P/A) - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 100-UNKNOWN                                |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                                  |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Minimum Separation<br/>(ft)</b> | <b>Separation Factor</b> | <b>Warning</b>            |         |
| <b>Measured Depth<br/>(ft)</b>                                    | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> |                                    |                          |                           |         |
| 0.00                                                              | 0.00                           | 57.00                          | 57.00                          | 0.00                      | 2.28                   | 92.53                            | -265.25                       | 6,006.87              | 6,012.73                        |                                  |                                    |                          |                           |         |
| 100.00                                                            | 100.00                         | 157.00                         | 157.00                         | 0.30                      | 6.28                   | 92.53                            | -265.25                       | 6,006.87              | 6,012.73                        | 6,006.15                         | 6.58                               | 914.131                  |                           |         |
| 200.00                                                            | 200.00                         | 257.00                         | 257.00                         | 0.66                      | 10.28                  | 92.53                            | -265.25                       | 6,006.87              | 6,012.73                        | 6,001.79                         | 10.94                              | 549.810                  |                           |         |
| 300.00                                                            | 300.00                         | 357.00                         | 357.00                         | 1.01                      | 14.28                  | 92.53                            | -265.25                       | 6,006.87              | 6,012.73                        | 5,997.43                         | 15.29                              | 393.131                  |                           |         |
| 400.00                                                            | 400.00                         | 457.00                         | 457.00                         | 1.37                      | 18.28                  | 92.53                            | -265.25                       | 6,006.87              | 6,012.73                        | 5,993.07                         | 19.65                              | 305.945                  |                           |         |
| 500.00                                                            | 500.00                         | 557.00                         | 557.00                         | 1.73                      | 22.28                  | 92.53                            | -265.25                       | 6,006.87              | 6,012.73                        | 5,988.71                         | 24.01                              | 250.411                  |                           |         |
| 600.00                                                            | 600.00                         | 657.00                         | 657.00                         | 2.09                      | 26.28                  | 92.53                            | -265.25                       | 6,006.87              | 6,012.73                        | 5,984.36                         | 28.37                              | 211.940                  |                           |         |
| 700.00                                                            | 700.00                         | 757.00                         | 757.00                         | 2.45                      | 30.28                  | 92.53                            | -265.25                       | 6,006.87              | 6,012.73                        | 5,980.00                         | 32.73                              | 183.716                  |                           |         |
| 800.00                                                            | 800.00                         | 857.00                         | 857.00                         | 2.81                      | 34.28                  | 92.53                            | -265.25                       | 6,006.87              | 6,012.73                        | 5,975.64                         | 37.09                              | 162.126                  |                           |         |
| 900.00                                                            | 900.00                         | 957.00                         | 957.00                         | 3.17                      | 38.28                  | 92.53                            | -265.25                       | 6,006.87              | 6,012.73                        | 5,971.28                         | 41.45                              | 145.076                  |                           |         |
| 918.00                                                            | 918.00                         | 975.00                         | 975.00                         | 3.23                      | 39.00                  | 92.53                            | -265.25                       | 6,006.87              | 6,012.73                        | 5,970.50                         | 42.23                              | 142.381                  |                           |         |
| 1,000.00                                                          | 999.97                         | 1,056.97                       | 1,056.97                       | 3.51                      | 42.28                  | -58.56                           | -265.25                       | 6,006.87              | 6,011.81                        | 5,966.02                         | 45.79                              | 131.294                  |                           |         |
| 1,100.00                                                          | 1,099.72                       | 1,156.72                       | 1,156.72                       | 3.84                      | 46.27                  | -58.71                           | -265.25                       | 6,006.87              | 6,008.21                        | 5,958.10                         | 50.11                              | 119.904                  |                           |         |
| 1,200.00                                                          | 1,198.98                       | 1,255.98                       | 1,255.98                       | 4.18                      | 50.24                  | -58.97                           | -265.25                       | 6,006.87              | 6,001.90                        | 5,947.48                         | 54.42                              | 110.294                  |                           |         |
| 1,300.00                                                          | 1,297.46                       | 1,354.46                       | 1,354.46                       | 4.54                      | 54.18                  | -59.34                           | -265.25                       | 6,006.87              | 5,992.93                        | 5,934.22                         | 58.71                              | 102.080                  |                           |         |
| 1,400.00                                                          | 1,394.90                       | 1,451.90                       | 1,451.90                       | 4.92                      | 58.08                  | -59.83                           | -265.25                       | 6,006.87              | 5,981.36                        | 5,918.38                         | 62.98                              | 94.978                   |                           |         |
| 1,500.00                                                          | 1,491.03                       | 1,548.03                       | 1,548.03                       | 5.33                      | 61.92                  | -60.42                           | -265.25                       | 6,006.87              | 5,967.25                        | 5,900.03                         | 67.22                              | 88.774                   |                           |         |
| 1,600.00                                                          | 1,585.60                       | 1,642.60                       | 1,642.60                       | 5.79                      | 65.70                  | -61.12                           | -265.25                       | 6,006.87              | 5,950.70                        | 5,879.27                         | 71.43                              | 83.306                   |                           |         |
| 1,700.00                                                          | 1,678.33                       | 1,735.33                       | 1,735.33                       | 6.30                      | 69.41                  | -61.93                           | -265.25                       | 6,006.87              | 5,931.82                        | 5,856.21                         | 75.61                              | 78.448                   |                           |         |
| 1,797.05                                                          | 1,766.34                       | 1,823.34                       | 1,823.34                       | 6.85                      | 72.93                  | -62.81                           | -265.25                       | 6,006.87              | 5,911.38                        | 5,831.74                         | 79.64                              | 74.222                   |                           |         |
| 1,800.00                                                          | 1,768.98                       | 1,825.98                       | 1,825.98                       | 6.87                      | 73.04                  | -62.82                           | -265.25                       | 6,006.87              | 5,910.73                        | 5,830.96                         | 79.77                              | 74.099                   |                           |         |
| 1,900.00                                                          | 1,858.58                       | 1,915.58                       | 1,915.58                       | 7.49                      | 76.62                  | -63.17                           | -265.25                       | 6,006.87              | 5,888.76                        | 5,804.84                         | 83.92                              | 70.171                   |                           |         |
| 2,000.00                                                          | 1,948.17                       | 2,005.17                       | 2,005.17                       | 8.15                      | 80.21                  | -63.52                           | -265.25                       | 6,006.87              | 5,867.05                        | 5,778.95                         | 88.10                              | 66.594                   |                           |         |
| 2,100.00                                                          | 2,037.76                       | 2,094.76                       | 2,094.76                       | 8.83                      | 83.79                  | -63.88                           | -265.25                       | 6,006.87              | 5,845.60                        | 5,753.29                         | 92.31                              | 63.327                   |                           |         |
| 2,200.00                                                          | 2,127.36                       | 2,184.36                       | 2,184.36                       | 9.53                      | 87.37                  | -64.24                           | -265.25                       | 6,006.87              | 5,824.41                        | 5,727.87                         | 96.54                              | 60.334                   |                           |         |
| 2,300.00                                                          | 2,216.95                       | 2,273.95                       | 2,273.95                       | 10.25                     | 90.96                  | -64.60                           | -265.25                       | 6,006.87              | 5,803.48                        | 5,702.70                         | 100.78                             | 57.585                   |                           |         |
| 2,400.00                                                          | 2,306.54                       | 2,363.54                       | 2,363.54                       | 10.97                     | 94.54                  | -64.97                           | -265.25                       | 6,006.87              | 5,782.81                        | 5,677.77                         | 105.04                             | 55.052                   |                           |         |
| 2,500.00                                                          | 2,396.14                       | 2,369.00                       | 2,369.00                       | 11.71                     | 94.76                  | -64.99                           | -265.25                       | 6,006.87              | 5,763.03                        | 5,657.08                         | 105.95                             | 54.395                   |                           |         |
| 2,600.00                                                          | 2,485.73                       | 2,369.00                       | 2,369.00                       | 12.45                     | 94.76                  | -64.99                           | -265.25                       | 6,006.87              | 5,744.92                        | 5,638.29                         | 106.62                             | 53.880                   |                           |         |
| 2,700.00                                                          | 2,575.32                       | 2,369.00                       | 2,369.00                       | 13.21                     | 94.76                  | -64.99                           | -265.25                       | 6,006.87              | 5,728.49                        | 5,621.21                         | 107.28                             | 53.396                   |                           |         |
| 2,800.00                                                          | 2,664.92                       | 2,369.00                       | 2,369.00                       | 13.96                     | 94.76                  | -64.99                           | -265.25                       | 6,006.87              | 5,713.77                        | 5,605.85                         | 107.93                             | 52.941                   |                           |         |
| 2,900.00                                                          | 2,754.51                       | 2,369.00                       | 2,369.00                       | 14.72                     | 94.76                  | -64.99                           | -265.25                       | 6,006.87              | 5,700.77                        | 5,592.22                         | 108.55                             | 52.517                   |                           |         |
| 3,000.00                                                          | 2,844.10                       | 2,369.00                       | 2,369.00                       | 15.49                     | 94.76                  | -64.99                           | -265.25                       | 6,006.87              | 5,689.49                        | 5,580.34                         | 109.15                             | 52.123                   |                           |         |
| 3,100.00                                                          | 2,933.70                       | 2,369.00                       | 2,369.00                       | 16.26                     | 94.76                  | -64.99                           | -265.25                       | 6,006.87              | 5,679.96                        | 5,570.22                         | 109.74                             | 51.761                   |                           |         |
| 3,114.47                                                          | 2,946.66                       | 2,369.00                       | 2,369.00                       | 16.37                     | 94.76                  | -64.99                           | -265.25                       | 6,006.87              | 5,678.72                        | 5,568.90                         | 109.82                             | 51.711                   |                           |         |
| 3,200.00                                                          | 3,024.12                       | 2,369.00                       | 2,369.00                       | 17.01                     | 94.76                  | -64.83                           | -265.25                       | 6,006.87              | 5,672.98                        | 5,562.71                         | 110.27                             | 51.447                   |                           |         |
| 3,300.00                                                          | 3,116.62                       | 2,369.00                       | 2,369.00                       | 17.69                     | 94.76                  | -64.75                           | -265.25                       | 6,006.87              | 5,669.95                        | 5,559.24                         | 110.71                             | 51.215                   |                           |         |
| 3,325.67                                                          | 3,140.68                       | 2,369.00                       | 2,369.00                       | 17.85                     | 94.76                  | -64.75                           | -265.25                       | 6,006.87              | 5,669.82                        | 5,559.02                         | 110.80                             | 51.171 CC, ES            |                           |         |
| 3,400.00                                                          | 3,210.99                       | 2,369.00                       | 2,369.00                       | 18.31                     | 94.76                  | -64.78                           | -265.25                       | 6,006.87              | 5,670.93                        | 5,559.87                         | 111.06                             | 51.064                   |                           |         |
| 3,500.00                                                          | 3,306.96                       | 2,369.00                       | 2,369.00                       | 18.86                     | 94.76                  | -64.91                           | -265.25                       | 6,006.87              | 5,675.89                        | 5,564.58                         | 111.30                             | 50.994 SF                |                           |         |
| 3,600.00                                                          | 3,404.26                       | 2,369.00                       | 2,369.00                       | 19.35                     | 94.76                  | -65.16                           | -265.25                       | 6,006.87              | 5,684.82                        | 5,573.36                         | 111.46                             | 51.004                   |                           |         |
| 3,700.00                                                          | 3,502.64                       | 2,369.00                       | 2,369.00                       | 19.77                     | 94.76                  | -65.51                           | -265.25                       | 6,006.87              | 5,697.67                        | 5,586.16                         | 111.52                             | 51.093                   |                           |         |
| 3,800.00                                                          | 3,601.81                       | 2,369.00                       | 2,369.00                       | 20.14                     | 94.76                  | -65.97                           | -265.25                       | 6,006.87              | 5,714.39                        | 5,602.90                         | 111.48                             | 51.257                   |                           |         |
| 3,900.00                                                          | 3,701.52                       | 2,369.00                       | 2,369.00                       | 20.45                     | 94.76                  | -66.55                           | -265.25                       | 6,006.87              | 5,734.88                        | 5,623.52                         | 111.37                             | 51.495                   |                           |         |
| 3,993.52                                                          | 3,795.00                       | 2,369.00                       | 2,369.00                       | 20.68                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 5,757.39                        | 5,646.21                         | 111.18                             | 51.786                   |                           |         |
| 4,000.00                                                          | 3,801.48                       | 2,369.00                       | 2,369.00                       | 20.69                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 5,759.06                        | 5,647.90                         | 111.16                             | 51.809                   |                           |         |
| 4,100.00                                                          | 3,901.48                       | 2,369.00                       | 2,369.00                       | 20.91                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 5,785.73                        | 5,674.84                         | 110.90                             | 52.173                   |                           |         |
| 4,200.00                                                          | 4,001.48                       | 2,369.00                       | 2,369.00                       | 21.13                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 5,814.00                        | 5,703.39                         | 110.61                             | 52.564                   |                           |         |
| 4,300.00                                                          | 4,101.48                       | 2,369.00                       | 2,369.00                       | 21.36                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 5,843.84                        | 5,733.54                         | 110.30                             | 52.982                   |                           |         |
| 4,400.00                                                          | 4,201.48                       | 2,369.00                       | 2,369.00                       | 21.59                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 5,875.23                        | 5,765.27                         | 109.97                             | 53.427                   |                           |         |
| 4,500.00                                                          | 4,301.48                       | 2,369.00                       | 2,369.00                       | 21.82                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 5,908.15                        | 5,798.54                         | 109.62                             | 53.898                   |                           |         |
| 4,600.00                                                          | 4,401.48                       | 2,369.00                       | 2,369.00                       | 22.05                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 5,942.57                        | 5,833.33                         | 109.25                             | 54.396                   |                           |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                   |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |
|-------------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|------------------------------------|--------------------------|
| <b>Offset Design:</b> Calloway Pad - Calloway 001 (P/A) - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  | <b>Offset Site Error:</b>          | 0.00 ft                  |
| <b>Survey Program:</b> 100-UNKNOWN                                |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  | <b>Offset Well Error:</b>          | 0.00 ft                  |
| <b>Reference</b>                                                  |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Rule Assigned:</b>              |                          |
| <b>Measured Depth<br/>(ft)</b>                                    | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> | <b>Minimum Separation<br/>(ft)</b> | <b>Separation Factor</b> |
| 4,700.00                                                          | 4,501.48                       | 2,369.00                       | 2,369.00                       | 22.29                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 5,978.47                        | 5,869.61                         | 108.86                             | 54.919                   |
| 4,800.00                                                          | 4,601.48                       | 2,369.00                       | 2,369.00                       | 22.53                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,015.81                        | 5,907.35                         | 108.46                             | 55.468                   |
| 4,900.00                                                          | 4,701.48                       | 2,369.00                       | 2,369.00                       | 22.78                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,054.57                        | 5,946.54                         | 108.03                             | 56.043                   |
| 5,000.00                                                          | 4,801.48                       | 2,369.00                       | 2,369.00                       | 23.03                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,094.73                        | 5,987.13                         | 107.60                             | 56.643                   |
| 5,100.00                                                          | 4,901.48                       | 2,369.00                       | 2,369.00                       | 23.28                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,136.26                        | 6,029.11                         | 107.15                             | 57.268                   |
| 5,200.00                                                          | 5,001.48                       | 2,369.00                       | 2,369.00                       | 23.53                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,179.12                        | 6,072.43                         | 106.69                             | 57.917                   |
| 5,300.00                                                          | 5,101.48                       | 2,369.00                       | 2,369.00                       | 23.79                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,223.30                        | 6,117.08                         | 106.22                             | 58.591                   |
| 5,400.00                                                          | 5,201.48                       | 2,369.00                       | 2,369.00                       | 24.05                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,268.76                        | 6,163.03                         | 105.73                             | 59.289                   |
| 5,500.00                                                          | 5,301.48                       | 2,369.00                       | 2,369.00                       | 24.31                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,315.48                        | 6,210.24                         | 105.24                             | 60.011                   |
| 5,600.00                                                          | 5,401.48                       | 2,369.00                       | 2,369.00                       | 24.57                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,363.42                        | 6,258.68                         | 104.74                             | 60.756                   |
| 5,700.00                                                          | 5,501.48                       | 2,369.00                       | 2,369.00                       | 24.84                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,412.57                        | 6,308.34                         | 104.23                             | 61.525                   |
| 5,800.00                                                          | 5,601.48                       | 2,369.00                       | 2,369.00                       | 25.11                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,462.89                        | 6,359.18                         | 103.71                             | 62.316                   |
| 5,900.00                                                          | 5,701.48                       | 2,369.00                       | 2,369.00                       | 25.38                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,514.35                        | 6,411.17                         | 103.19                             | 63.130                   |
| 6,000.00                                                          | 5,801.48                       | 2,369.00                       | 2,369.00                       | 25.65                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,566.94                        | 6,464.28                         | 102.66                             | 63.966                   |
| 6,100.00                                                          | 5,901.48                       | 2,369.00                       | 2,369.00                       | 25.93                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,620.62                        | 6,518.49                         | 102.13                             | 64.824                   |
| 6,200.00                                                          | 6,001.48                       | 2,369.00                       | 2,369.00                       | 26.20                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,675.37                        | 6,573.77                         | 101.60                             | 65.703                   |
| 6,300.00                                                          | 6,101.48                       | 2,369.00                       | 2,369.00                       | 26.48                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,731.15                        | 6,630.09                         | 101.06                             | 66.604                   |
| 6,400.00                                                          | 6,201.48                       | 2,369.00                       | 2,369.00                       | 26.76                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,787.95                        | 6,687.43                         | 100.52                             | 67.525                   |
| 6,500.00                                                          | 6,301.48                       | 2,369.00                       | 2,369.00                       | 27.05                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,845.74                        | 6,745.76                         | 99.99                              | 68.467                   |
| 6,600.00                                                          | 6,401.48                       | 2,369.00                       | 2,369.00                       | 27.33                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,904.50                        | 6,805.05                         | 99.45                              | 69.429                   |
| 6,700.00                                                          | 6,501.48                       | 2,369.00                       | 2,369.00                       | 27.62                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 6,964.19                        | 6,865.28                         | 98.91                              | 70.410                   |
| 6,800.00                                                          | 6,601.48                       | 2,369.00                       | 2,369.00                       | 27.90                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 7,024.81                        | 6,926.43                         | 98.37                              | 71.410                   |
| 6,883.52                                                          | 6,685.00                       | 2,369.00                       | 2,369.00                       | 28.15                     | 94.76                  | 83.86                            | -265.25                       | 6,006.87              | 7,076.11                        | 6,978.19                         | 97.92                              | 72.261                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                              |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          |                                   |
|--------------------------------------------------------------|----------------------------|----------------------------|----------------------------|------------------------|--------------------|------------------------------|-------------------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|-----------------------------------|
| <b>Offset Design:</b> Calloway Pad - Calloway 001A - OH - OH |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          | <b>Offset Site Error:</b> 0.00 ft |
| <b>Survey Program:</b> 60-INCLINOMETER                       |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          | <b>Offset Well Error:</b> 0.00 ft |
| <b>Reference</b>                                             |                            | <b>Offset</b>              |                            | <b>Semi Major Axis</b> |                    | <b>Highside Toolface (°)</b> | <b>Offset Wellbore Centre</b> |                   | <b>Distance</b>             |                              | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> | <b>Warning</b>                    |
| <b>Measured Depth (ft)</b>                                   | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b>  | <b>Offset (ft)</b> |                              | <b>+N/-S (ft)</b>             | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> |                                |                          |                                   |
| 0.00                                                         | 0.00                       | 0.00                       | 0.00                       | 0.00                   | 0.00               | 36.52                        | 7,245.03                      | 5,364.62          | 9,015.00                    |                              |                                |                          |                                   |
| 100.00                                                       | 100.00                     | 75.00                      | 75.00                      | 0.30                   | 2.28               | 36.52                        | 7,245.03                      | 5,364.62          | 9,014.97                    | 9,012.39                     | 2.58                           | 3,500.699                |                                   |
| 200.00                                                       | 200.00                     | 183.00                     | 182.99                     | 0.66                   | 5.56               | 36.52                        | 7,245.03                      | 5,364.62          | 9,014.97                    | 9,008.76                     | 6.21                           | 1,450.879                |                                   |
| 236.23                                                       | 236.23                     | 211.24                     | 211.23                     | 0.79                   | 6.41               | 36.52                        | 7,245.03                      | 5,364.62          | 9,014.97                    | 9,007.77                     | 7.20                           | 1,251.941                |                                   |
| 300.00                                                       | 300.00                     | 275.01                     | 275.00                     | 1.01                   | 8.35               | 36.52                        | 7,245.03                      | 5,364.62          | 9,014.97                    | 9,005.60                     | 9.37                           | 962.507                  |                                   |
| 400.00                                                       | 400.00                     | 375.01                     | 375.00                     | 1.37                   | 11.39              | 36.52                        | 7,245.03                      | 5,364.62          | 9,014.97                    | 9,002.21                     | 12.76                          | 706.422                  |                                   |
| 500.00                                                       | 500.00                     | 475.01                     | 475.00                     | 1.73                   | 14.43              | 36.52                        | 7,245.03                      | 5,364.62          | 9,014.97                    | 8,998.81                     | 16.16                          | 557.969                  |                                   |
| 600.00                                                       | 600.00                     | 603.88                     | 603.85                     | 2.09                   | 18.34              | 36.51                        | 7,245.91                      | 5,364.62          | 9,015.72                    | 8,995.29                     | 20.43                          | 441.327                  |                                   |
| 700.00                                                       | 700.00                     | 737.06                     | 737.02                     | 2.45                   | 22.38              | 36.52                        | 7,245.07                      | 5,364.62          | 9,015.21                    | 8,990.38                     | 24.83                          | 363.061                  |                                   |
| 800.00                                                       | 800.00                     | 775.06                     | 775.00                     | 2.81                   | 23.54              | 36.52                        | 7,245.03                      | 5,364.62          | 9,014.97                    | 8,988.62                     | 26.34                          | 342.201                  |                                   |
| 900.00                                                       | 900.00                     | 875.06                     | 875.00                     | 3.17                   | 26.57              | 36.52                        | 7,245.03                      | 5,364.62          | 9,014.97                    | 8,985.23                     | 29.74                          | 303.132                  |                                   |
| 918.00                                                       | 918.00                     | 893.06                     | 893.00                     | 3.23                   | 27.12              | 36.52                        | 7,245.03                      | 5,364.62          | 9,014.97                    | 8,984.62                     | 30.35                          | 297.028 CC               |                                   |
| 1,000.00                                                     | 999.97                     | 975.03                     | 974.97                     | 3.51                   | 29.61              | -114.52                      | 7,245.03                      | 5,364.62          | 9,015.70                    | 8,982.58                     | 33.12                          | 272.211                  |                                   |
| 1,100.00                                                     | 1,099.72                   | 1,087.09                   | 1,087.03                   | 3.84                   | 33.01              | -114.49                      | 7,245.49                      | 5,364.62          | 9,018.95                    | 8,982.09                     | 36.85                          | 244.720 ES               |                                   |
| 1,200.00                                                     | 1,198.98                   | 1,200.88                   | 1,200.81                   | 4.18                   | 36.47              | -114.44                      | 7,245.18                      | 5,364.62          | 9,023.78                    | 8,983.13                     | 40.65                          | 221.986                  |                                   |
| 1,300.00                                                     | 1,297.46                   | 1,272.56                   | 1,272.46                   | 4.54                   | 38.65              | -114.32                      | 7,245.03                      | 5,364.62          | 9,030.84                    | 8,987.66                     | 43.18                          | 209.133                  |                                   |
| 1,400.00                                                     | 1,394.90                   | 1,370.00                   | 1,369.90                   | 4.92                   | 41.60              | -114.19                      | 7,245.03                      | 5,364.62          | 9,040.26                    | 8,993.74                     | 46.52                          | 194.344                  |                                   |
| 1,500.00                                                     | 1,491.03                   | 1,466.13                   | 1,466.03                   | 5.33                   | 44.52              | -114.02                      | 7,245.03                      | 5,364.62          | 9,051.86                    | 9,002.02                     | 49.84                          | 181.621                  |                                   |
| 1,600.00                                                     | 1,585.60                   | 1,584.06                   | 1,583.95                   | 5.79                   | 48.11              | -113.87                      | 7,245.99                      | 5,364.62          | 9,066.46                    | 9,012.60                     | 53.86                          | 168.337                  |                                   |
| 1,700.00                                                     | 1,678.33                   | 1,708.66                   | 1,708.53                   | 6.30                   | 51.89              | -113.70                      | 7,245.32                      | 5,364.62          | 9,082.06                    | 9,023.94                     | 58.12                          | 156.251                  |                                   |
| 1,797.05                                                     | 1,766.34                   | 1,827.33                   | 1,827.19                   | 6.85                   | 55.49              | -113.52                      | 7,244.19                      | 5,364.62          | 9,099.01                    | 9,036.77                     | 62.25                          | 146.180                  |                                   |
| 1,800.00                                                     | 1,768.98                   | 1,830.90                   | 1,830.77                   | 6.87                   | 55.60              | -113.53                      | 7,244.15                      | 5,364.62          | 9,099.56                    | 9,037.19                     | 62.37                          | 145.892                  |                                   |
| 1,900.00                                                     | 1,858.58                   | 1,833.74                   | 1,833.58                   | 7.49                   | 55.69              | -113.54                      | 7,245.03                      | 5,364.62          | 9,119.20                    | 9,056.16                     | 63.03                          | 144.672                  |                                   |
| 2,000.00                                                     | 1,948.17                   | 1,923.33                   | 1,923.17                   | 8.15                   | 58.41              | -113.77                      | 7,245.03                      | 5,364.62          | 9,138.71                    | 9,072.35                     | 66.35                          | 137.726                  |                                   |
| 2,100.00                                                     | 2,037.76                   | 2,018.85                   | 2,018.69                   | 8.83                   | 61.31              | -114.02                      | 7,245.82                      | 5,364.62          | 9,159.04                    | 9,089.17                     | 69.88                          | 131.077                  |                                   |
| 2,200.00                                                     | 2,127.36                   | 2,131.29                   | 2,131.12                   | 9.53                   | 64.72              | -114.31                      | 7,245.56                      | 5,364.62          | 9,178.73                    | 9,104.81                     | 73.93                          | 124.162                  |                                   |
| 2,300.00                                                     | 2,216.95                   | 2,244.03                   | 2,243.85                   | 10.25                  | 68.15              | -114.60                      | 7,244.96                      | 5,364.62          | 9,198.37                    | 9,120.37                     | 78.00                          | 117.932                  |                                   |
| 2,400.00                                                     | 2,306.54                   | 2,281.76                   | 2,281.54                   | 10.97                  | 69.29              | -114.70                      | 7,245.03                      | 5,364.62          | 9,218.48                    | 9,138.68                     | 79.80                          | 115.523                  |                                   |
| 2,500.00                                                     | 2,396.14                   | 2,371.35                   | 2,371.14                   | 11.71                  | 72.01              | -114.93                      | 7,245.03                      | 5,364.62          | 9,238.85                    | 9,155.67                     | 83.18                          | 111.067                  |                                   |
| 2,600.00                                                     | 2,485.73                   | 2,475.93                   | 2,475.70                   | 12.45                  | 75.19              | -115.20                      | 7,245.85                      | 5,364.62          | 9,260.09                    | 9,173.06                     | 87.03                          | 106.403                  |                                   |
| 2,700.00                                                     | 2,575.32                   | 2,612.33                   | 2,612.10                   | 13.21                  | 79.33              | -115.54                      | 7,245.18                      | 5,364.62          | 9,280.42                    | 9,188.58                     | 91.85                          | 101.043                  |                                   |
| 2,800.00                                                     | 2,664.92                   | 2,640.17                   | 2,639.92                   | 13.96                  | 80.18              | -115.61                      | 7,245.03                      | 5,364.62          | 9,300.96                    | 9,207.60                     | 93.37                          | 99.619                   |                                   |
| 2,900.00                                                     | 2,754.51                   | 2,729.76                   | 2,729.51                   | 14.72                  | 82.90              | -115.84                      | 7,245.03                      | 5,364.62          | 9,322.00                    | 9,225.23                     | 96.76                          | 96.337                   |                                   |
| 3,000.00                                                     | 2,844.10                   | 2,819.36                   | 2,819.10                   | 15.49                  | 85.62              | -116.06                      | 7,245.03                      | 5,364.62          | 9,343.20                    | 9,243.03                     | 100.17                         | 93.277                   |                                   |
| 3,100.00                                                     | 2,933.70                   | 2,908.95                   | 2,908.70                   | 16.26                  | 88.34              | -116.28                      | 7,245.03                      | 5,364.62          | 9,364.56                    | 9,260.99                     | 103.57                         | 90.418                   |                                   |
| 3,114.47                                                     | 2,946.66                   | 2,921.92                   | 2,921.66                   | 16.37                  | 88.73              | -116.32                      | 7,245.03                      | 5,364.62          | 9,367.67                    | 9,263.61                     | 104.06                         | 90.020                   |                                   |
| 3,200.00                                                     | 3,024.12                   | 3,002.53                   | 3,002.27                   | 17.01                  | 91.18              | -116.99                      | 7,245.77                      | 5,364.62          | 9,385.87                    | 9,278.80                     | 107.07                         | 87.658                   |                                   |
| 3,300.00                                                     | 3,116.62                   | 3,105.58                   | 3,105.32                   | 17.69                  | 94.31              | -117.71                      | 7,245.66                      | 5,364.62          | 9,404.30                    | 9,293.49                     | 110.81                         | 84.866                   |                                   |
| 3,400.00                                                     | 3,210.99                   | 3,210.79                   | 3,210.53                   | 18.31                  | 97.51              | -118.32                      | 7,245.41                      | 5,364.62          | 9,420.33                    | 9,305.77                     | 114.57                         | 82.227                   |                                   |
| 3,500.00                                                     | 3,306.96                   | 3,317.85                   | 3,317.58                   | 18.86                  | 100.76             | -118.84                      | 7,245.01                      | 5,364.62          | 9,433.87                    | 9,315.55                     | 118.32                         | 79.732                   |                                   |
| 3,600.00                                                     | 3,404.26                   | 3,379.53                   | 3,379.26                   | 19.35                  | 102.63             | -119.22                      | 7,245.03                      | 5,364.62          | 9,445.21                    | 9,324.57                     | 120.64                         | 78.293                   |                                   |
| 3,700.00                                                     | 3,502.64                   | 3,477.90                   | 3,477.64                   | 19.77                  | 105.62             | -119.54                      | 7,245.03                      | 5,364.62          | 9,454.10                    | 9,330.07                     | 124.03                         | 76.226                   |                                   |
| 3,800.00                                                     | 3,601.81                   | 3,585.66                   | 3,585.39                   | 20.14                  | 108.89             | -119.78                      | 7,245.18                      | 5,364.62          | 9,460.57                    | 9,332.92                     | 127.65                         | 74.112                   |                                   |
| 3,900.00                                                     | 3,701.52                   | 3,696.01                   | 3,695.74                   | 20.45                  | 112.24             | -119.92                      | 7,244.99                      | 5,364.62          | 9,464.17                    | 9,332.86                     | 131.31                         | 72.075                   |                                   |
| 3,993.52                                                     | 3,795.00                   | 3,770.28                   | 3,770.00                   | 20.68                  | 114.50             | 31.10                        | 7,245.03                      | 5,364.62          | 9,465.32                    | 9,331.52                     | 133.80                         | 70.741                   |                                   |
| 4,000.00                                                     | 3,801.48                   | 3,776.76                   | 3,776.48                   | 20.69                  | 114.69             | 31.10                        | 7,245.03                      | 5,364.62          | 9,465.32                    | 9,331.31                     | 134.01                         | 70.629                   |                                   |
| 4,100.00                                                     | 3,901.48                   | 3,876.76                   | 3,876.48                   | 20.91                  | 117.73             | 31.10                        | 7,245.03                      | 5,364.62          | 9,465.32                    | 9,328.04                     | 137.28                         | 68.947                   |                                   |
| 4,200.00                                                     | 4,001.48                   | 3,984.77                   | 3,984.49                   | 21.13                  | 121.01             | 31.10                        | 7,245.54                      | 5,364.62          | 9,465.76                    | 9,324.96                     | 140.80                         | 67.227                   |                                   |
| 4,300.00                                                     | 4,101.48                   | 4,101.37                   | 4,101.09                   | 21.36                  | 124.55             | 31.10                        | 7,245.31                      | 5,364.62          | 9,465.59                    | 9,321.00                     | 144.59                         | 65.466                   |                                   |
| 4,400.00                                                     | 4,201.48                   | 4,217.97                   | 4,217.68                   | 21.59                  | 128.09             | 31.10                        | 7,244.84                      | 5,364.62          | 9,465.24                    | 9,316.87                     | 148.37                         | 63.793                   |                                   |
| 4,424.70                                                     | 4,226.19                   | 4,201.48                   | 4,201.19                   | 21.64                  | 127.59             | 31.10                        | 7,245.03                      | 5,364.62          | 9,465.32                    | 9,317.39                     | 147.93                         | 63.985                   |                                   |
| 4,500.00                                                     | 4,301.48                   | 4,276.78                   | 4,276.48                   | 21.82                  | 129.88             | 31.10                        | 7,245.03                      | 5,364.62          | 9,465.32                    | 9,314.92                     | 150.40                         | 62.933                   |                                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                              |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          |
|--------------------------------------------------------------|----------------------------|----------------------------|----------------------------|------------------------|--------------------|------------------------------|-------------------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|
| <b>Offset Design:</b> Calloway Pad - Calloway 001A - OH - OH |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              | <b>Offset Site Error:</b>      | 0.00 ft                  |
| <b>Survey Program:</b> 60-INCLINOMETER                       |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              | <b>Offset Well Error:</b>      | 0.00 ft                  |
| <b>Reference</b>                                             |                            | <b>Offset</b>              |                            | <b>Semi Major Axis</b> |                    | <b>Highside Toolface (°)</b> | <b>Offset Wellbore Centre</b> |                   | <b>Distance</b>             |                              | <b>Rule Assigned:</b>          |                          |
| <b>Measured Depth (ft)</b>                                   | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b>  | <b>Offset (ft)</b> |                              | <b>+N/-S (ft)</b>             | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> |
| 4,600.00                                                     | 4,401.48                   | 4,376.78                   | 4,376.48                   | 22.05                  | 132.92             | 31.10                        | 7,245.03                      | 5,364.62          | 9,465.32                    | 9,311.63                     | 153.69                         | 61.587                   |
| 4,700.00                                                     | 4,501.48                   | 4,488.14                   | 4,487.84                   | 22.29                  | 136.30             | 31.10                        | 7,245.49                      | 5,364.62          | 9,465.72                    | 9,308.39                     | 157.33                         | 60.166                   |
| 4,800.00                                                     | 4,601.48                   | 4,605.82                   | 4,605.52                   | 22.53                  | 139.87             | 31.10                        | 7,245.20                      | 5,364.62          | 9,465.51                    | 9,304.35                     | 161.16                         | 58.733                   |
| 4,900.00                                                     | 4,701.48                   | 4,676.82                   | 4,676.48                   | 22.78                  | 142.03             | 31.10                        | 7,245.03                      | 5,364.62          | 9,465.32                    | 9,301.75                     | 163.57                         | 57.866                   |
| 5,000.00                                                     | 4,801.48                   | 4,776.82                   | 4,776.48                   | 23.03                  | 145.06             | 31.10                        | 7,245.03                      | 5,364.62          | 9,465.32                    | 9,298.45                     | 166.87                         | 56.722                   |
| 5,100.00                                                     | 4,901.48                   | 4,878.11                   | 4,877.77                   | 23.28                  | 148.14             | 31.10                        | 7,246.01                      | 5,364.62          | 9,466.16                    | 9,295.95                     | 170.21                         | 55.613                   |
| 5,200.00                                                     | 5,001.48                   | 5,023.70                   | 5,023.35                   | 23.53                  | 152.56             | 31.10                        | 7,245.58                      | 5,364.62          | 9,465.91                    | 9,291.00                     | 174.91                         | 54.119                   |
| 5,300.00                                                     | 5,101.48                   | 5,169.31                   | 5,168.94                   | 23.79                  | 156.98             | 31.10                        | 7,244.33                      | 5,364.62          | 9,465.17                    | 9,285.57                     | 179.60                         | 52.701                   |
| 5,315.00                                                     | 5,116.48                   | 5,191.15                   | 5,190.78                   | 23.83                  | 157.65             | 31.10                        | 7,244.07                      | 5,364.62          | 9,465.02                    | 9,284.72                     | 180.30                         | 52.495 SF                |
| 5,400.00                                                     | 5,201.48                   | 5,109.00                   | 5,108.61                   | 24.05                  | 155.15             | 31.10                        | 7,245.03                      | 5,364.62          | 9,465.56                    | 9,287.54                     | 178.02                         | 53.171                   |
| 5,500.00                                                     | 5,301.48                   | 5,109.00                   | 5,108.61                   | 24.31                  | 155.15             | 31.10                        | 7,245.03                      | 5,364.62          | 9,466.81                    | 9,288.55                     | 178.26                         | 53.107                   |
| 5,600.00                                                     | 5,401.48                   | 5,109.00                   | 5,108.61                   | 24.57                  | 155.15             | 31.10                        | 7,245.03                      | 5,364.62          | 9,469.11                    | 9,290.63                     | 178.48                         | 53.054                   |
| 5,700.00                                                     | 5,501.48                   | 5,109.00                   | 5,108.61                   | 24.84                  | 155.15             | 31.10                        | 7,245.03                      | 5,364.62          | 9,472.47                    | 9,293.78                     | 178.68                         | 53.013                   |
| 5,800.00                                                     | 5,601.48                   | 5,109.00                   | 5,108.61                   | 25.11                  | 155.15             | 31.10                        | 7,245.03                      | 5,364.62          | 9,476.88                    | 9,298.01                     | 178.87                         | 52.983                   |
| 5,900.00                                                     | 5,701.48                   | 5,109.00                   | 5,108.61                   | 25.38                  | 155.15             | 31.10                        | 7,245.03                      | 5,364.62          | 9,482.34                    | 9,303.30                     | 179.04                         | 52.964                   |
| 6,000.00                                                     | 5,801.48                   | 5,109.00                   | 5,108.61                   | 25.65                  | 155.15             | 31.10                        | 7,245.03                      | 5,364.62          | 9,488.85                    | 9,309.67                     | 179.19                         | 52.955                   |
| 6,100.00                                                     | 5,901.48                   | 5,109.00                   | 5,108.61                   | 25.93                  | 155.15             | 31.10                        | 7,245.03                      | 5,364.62          | 9,496.42                    | 9,317.10                     | 179.32                         | 52.958                   |
| 6,200.00                                                     | 6,001.48                   | 5,109.00                   | 5,108.61                   | 26.20                  | 155.15             | 31.10                        | 7,245.03                      | 5,364.62          | 9,505.02                    | 9,325.59                     | 179.43                         | 52.972                   |
| 6,300.00                                                     | 6,101.48                   | 5,109.00                   | 5,108.61                   | 26.48                  | 155.15             | 31.10                        | 7,245.03                      | 5,364.62          | 9,514.68                    | 9,335.14                     | 179.53                         | 52.997                   |
| 6,400.00                                                     | 6,201.48                   | 5,109.00                   | 5,108.61                   | 26.76                  | 155.15             | 31.10                        | 7,245.03                      | 5,364.62          | 9,525.37                    | 9,345.76                     | 179.61                         | 53.033                   |
| 6,500.00                                                     | 6,301.48                   | 5,109.00                   | 5,108.61                   | 27.05                  | 155.15             | 31.10                        | 7,245.03                      | 5,364.62          | 9,537.10                    | 9,357.42                     | 179.68                         | 53.079                   |
| 6,600.00                                                     | 6,401.48                   | 5,109.00                   | 5,108.61                   | 27.33                  | 155.15             | 31.10                        | 7,245.03                      | 5,364.62          | 9,549.86                    | 9,370.14                     | 179.72                         | 53.137                   |
| 6,700.00                                                     | 6,501.48                   | 5,109.00                   | 5,108.61                   | 27.62                  | 155.15             | 31.10                        | 7,245.03                      | 5,364.62          | 9,563.65                    | 9,383.90                     | 179.75                         | 53.205                   |
| 6,800.00                                                     | 6,601.48                   | 5,109.00                   | 5,108.61                   | 27.90                  | 155.15             | 31.10                        | 7,245.03                      | 5,364.62          | 9,578.46                    | 9,398.70                     | 179.76                         | 53.284                   |
| 6,883.52                                                     | 6,685.00                   | 5,109.00                   | 5,108.61                   | 28.15                  | 155.15             | 31.10                        | 7,245.03                      | 5,364.62          | 9,591.62                    | 9,411.86                     | 179.76                         | 53.358                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                              |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |                           |         |
|--------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|------------------------------------|--------------------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - Calloway 100S - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 97-INCLINOMETER                       |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                             |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Minimum Separation<br/>(ft)</b> | <b>Separation Factor</b> | <b>Warning</b>            |         |
| <b>Measured Depth<br/>(ft)</b>                               | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> |                                    |                          |                           |         |
| 0.00                                                         | 0.00                           | 13.00                          | 13.00                          | 0.00                      | 0.39                   | 33.80                            | 7,994.98                      | 5,352.78              | 9,621.43                        |                                  |                                    |                          |                           |         |
| 100.00                                                       | 100.00                         | 113.02                         | 113.00                         | 0.30                      | 3.43                   | 33.80                            | 7,994.98                      | 5,352.78              | 9,621.43                        | 9,617.70                         | 3.73                               | 2,579.721                |                           |         |
| 200.00                                                       | 200.00                         | 213.03                         | 213.00                         | 0.66                      | 6.47                   | 33.80                            | 7,994.98                      | 5,352.78              | 9,621.43                        | 9,614.30                         | 7.13                               | 1,350.321                |                           |         |
| 300.00                                                       | 300.00                         | 313.03                         | 313.00                         | 1.01                      | 9.51                   | 33.80                            | 7,994.98                      | 5,352.78              | 9,621.43                        | 9,610.91                         | 10.52                              | 914.541                  |                           |         |
| 400.00                                                       | 400.00                         | 471.71                         | 471.66                         | 1.37                      | 14.32                  | 33.80                            | 7,995.20                      | 5,352.78              | 9,621.80                        | 9,606.10                         | 15.70                              | 612.955                  |                           |         |
| 500.00                                                       | 500.00                         | 513.06                         | 513.00                         | 1.73                      | 15.58                  | 33.80                            | 7,994.98                      | 5,352.78              | 9,621.43                        | 9,604.12                         | 17.31                              | 555.770                  |                           |         |
| 600.00                                                       | 600.00                         | 613.06                         | 613.00                         | 2.09                      | 18.62                  | 33.80                            | 7,994.98                      | 5,352.78              | 9,621.43                        | 9,600.72                         | 20.71                              | 464.642                  |                           |         |
| 700.00                                                       | 700.00                         | 713.06                         | 713.00                         | 2.45                      | 21.65                  | 33.80                            | 7,994.98                      | 5,352.78              | 9,621.43                        | 9,597.33                         | 24.10                              | 399.189 CC               |                           |         |
| 800.00                                                       | 800.00                         | 823.29                         | 823.23                         | 2.81                      | 25.00                  | 33.80                            | 7,995.48                      | 5,352.78              | 9,621.85                        | 9,594.04                         | 27.81                              | 346.005                  |                           |         |
| 900.00                                                       | 900.00                         | 939.51                         | 939.45                         | 3.17                      | 28.53                  | 33.80                            | 7,995.21                      | 5,352.78              | 9,621.66                        | 9,589.96                         | 31.70                              | 303.558                  |                           |         |
| 918.00                                                       | 918.00                         | 960.43                         | 960.37                         | 3.23                      | 29.17                  | 33.80                            | 7,995.14                      | 5,352.78              | 9,621.61                        | 9,589.21                         | 32.40                              | 296.999                  |                           |         |
| 931.69                                                       | 931.69                         | 976.35                         | 976.28                         | 3.28                      | 29.65                  | -117.25                          | 7,995.08                      | 5,352.78              | 9,621.58                        | 9,588.66                         | 32.93                              | 292.216                  |                           |         |
| 1,000.00                                                     | 999.97                         | 1,013.05                       | 1,012.97                       | 3.51                      | 30.76                  | -117.24                          | 7,994.98                      | 5,352.78              | 9,622.23                        | 9,587.96                         | 34.27                              | 280.740                  |                           |         |
| 1,100.00                                                     | 1,099.72                       | 1,112.80                       | 1,112.72                       | 3.84                      | 33.79                  | -117.19                          | 7,994.98                      | 5,352.78              | 9,625.40                        | 9,587.76                         | 37.63                              | 255.758 ES               |                           |         |
| 1,200.00                                                     | 1,198.98                       | 1,212.06                       | 1,211.98                       | 4.18                      | 36.81                  | -117.10                          | 7,994.98                      | 5,352.78              | 9,630.96                        | 9,589.97                         | 40.99                              | 234.962                  |                           |         |
| 1,300.00                                                     | 1,297.46                       | 1,320.41                       | 1,320.33                       | 4.54                      | 40.10                  | -116.99                          | 7,995.48                      | 5,352.78              | 9,639.34                        | 9,594.71                         | 44.63                              | 215.962                  |                           |         |
| 1,400.00                                                     | 1,394.90                       | 1,433.81                       | 1,433.73                       | 4.92                      | 43.54                  | -116.85                          | 7,995.23                      | 5,352.78              | 9,649.52                        | 9,601.07                         | 48.45                              | 199.155                  |                           |         |
| 1,500.00                                                     | 1,491.03                       | 1,504.20                       | 1,504.03                       | 5.33                      | 45.68                  | -116.62                          | 7,994.98                      | 5,352.78              | 9,662.03                        | 9,611.04                         | 50.99                              | 189.487                  |                           |         |
| 1,600.00                                                     | 1,585.60                       | 1,598.76                       | 1,598.60                       | 5.79                      | 48.55                  | -116.37                          | 7,994.98                      | 5,352.78              | 9,677.18                        | 9,622.89                         | 54.30                              | 178.227                  |                           |         |
| 1,700.00                                                     | 1,678.33                       | 1,710.00                       | 1,709.77                       | 6.30                      | 51.93                  | -116.12                          | 7,994.98                      | 5,352.78              | 9,694.75                        | 9,636.59                         | 58.15                              | 166.714                  |                           |         |
| 1,797.05                                                     | 1,766.34                       | 1,779.57                       | 1,779.34                       | 6.85                      | 54.04                  | -115.75                          | 7,994.98                      | 5,352.78              | 9,714.04                        | 9,653.26                         | 60.78                              | 159.836                  |                           |         |
| 1,800.00                                                     | 1,768.98                       | 1,782.22                       | 1,781.98                       | 6.87                      | 54.12                  | -115.75                          | 7,994.98                      | 5,352.78              | 9,714.66                        | 9,653.79                         | 60.87                              | 159.588                  |                           |         |
| 1,900.00                                                     | 1,858.58                       | 1,920.16                       | 1,919.91                       | 7.49                      | 58.31                  | -116.09                          | 7,995.73                      | 5,352.78              | 9,736.55                        | 9,670.93                         | 65.63                              | 148.362                  |                           |         |
| 2,000.00                                                     | 1,948.17                       | 1,961.43                       | 1,961.17                       | 8.15                      | 59.56                  | -116.18                          | 7,994.98                      | 5,352.78              | 9,757.09                        | 9,689.62                         | 67.47                              | 144.614                  |                           |         |
| 2,100.00                                                     | 2,037.76                       | 2,051.10                       | 2,050.76                       | 8.83                      | 62.29                  | -116.40                          | 7,994.98                      | 5,352.78              | 9,778.53                        | 9,707.73                         | 70.80                              | 138.112                  |                           |         |
| 2,200.00                                                     | 2,127.36                       | 2,226.00                       | 2,225.49                       | 9.53                      | 67.60                  | -116.81                          | 7,994.98                      | 5,352.78              | 9,800.51                        | 9,723.77                         | 76.74                              | 127.716                  |                           |         |
| 2,300.00                                                     | 2,216.95                       | 2,230.46                       | 2,229.95                       | 10.25                     | 67.73                  | -116.82                          | 7,994.98                      | 5,352.78              | 9,821.89                        | 9,744.38                         | 77.51                              | 126.722                  |                           |         |
| 2,400.00                                                     | 2,306.54                       | 2,320.06                       | 2,319.54                       | 10.97                     | 70.45                  | -117.03                          | 7,994.98                      | 5,352.78              | 9,843.80                        | 9,762.93                         | 80.87                              | 121.720                  |                           |         |
| 2,500.00                                                     | 2,396.14                       | 2,409.65                       | 2,409.14                       | 11.71                     | 73.17                  | -117.25                          | 7,994.98                      | 5,352.78              | 9,865.86                        | 9,781.61                         | 84.24                              | 117.109                  |                           |         |
| 2,600.00                                                     | 2,485.73                       | 2,499.24                       | 2,498.73                       | 12.45                     | 75.89                  | -117.46                          | 7,994.98                      | 5,352.78              | 9,888.07                        | 9,800.45                         | 87.62                              | 112.849                  |                           |         |
| 2,700.00                                                     | 2,575.32                       | 2,567.00                       | 2,566.06                       | 13.21                     | 77.95                  | -117.61                          | 7,994.98                      | 5,352.78              | 9,910.45                        | 9,820.11                         | 90.34                              | 109.702                  |                           |         |
| 2,800.00                                                     | 2,664.92                       | 2,567.00                       | 2,566.06                       | 13.96                     | 77.95                  | -117.61                          | 7,994.98                      | 5,352.78              | 9,933.56                        | 9,842.57                         | 90.99                              | 109.170                  |                           |         |
| 2,900.00                                                     | 2,754.51                       | 2,567.00                       | 2,566.06                       | 14.72                     | 77.95                  | -117.61                          | 7,994.98                      | 5,352.78              | 9,957.63                        | 9,865.99                         | 91.64                              | 108.663                  |                           |         |
| 3,000.00                                                     | 2,844.10                       | 2,567.00                       | 2,566.06                       | 15.49                     | 77.95                  | -117.61                          | 7,994.98                      | 5,352.78              | 9,982.63                        | 9,890.35                         | 92.28                              | 108.181 SF               |                           |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



## Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                 |                            |                            |                            |                       |                               |                              |                   |                   |                             |                              |                                |                          |                           |                |
|-----------------------------------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------|-------------------------------|------------------------------|-------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|---------------------------|----------------|
| <b>Offset Design:</b> Calloway Pad - Calloway 2M - OH - Plan #1 |                            |                            |                            |                       |                               |                              |                   |                   |                             |                              |                                |                          | <b>Offset Site Error:</b> | 0.00 ft        |
| <b>Survey Program:</b> 0-MWD+HDGM                               |                            |                            |                            |                       |                               |                              |                   |                   |                             |                              |                                |                          | <b>Offset Well Error:</b> | 0.00 ft        |
| <b>Reference</b>                                                | <b>Offset</b>              | <b>Semi Major Axis</b>     |                            |                       | <b>Offset Wellbore Centre</b> |                              |                   | <b>Distance</b>   |                             |                              | <b>Rule Assigned:</b>          |                          |                           | <b>Warning</b> |
| <b>Measured Depth (ft)</b>                                      | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b> | <b>Offset (ft)</b>            | <b>Highside Toolface (°)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> |                           |                |
| 0.00                                                            | 0.00                       | 3,300.00                   | 3,089.62                   | 0.00                  | 18.91                         | 59.09                        | 3,063.91          | 5,117.98          | 6,727.81                    |                              |                                |                          |                           |                |
| 100.00                                                          | 100.00                     | 3,300.00                   | 3,089.62                   | 0.30                  | 18.91                         | 59.09                        | 3,063.91          | 5,117.98          | 6,682.15                    | 6,668.54                     | 13.61                          | 490.959                  |                           |                |
| 200.00                                                          | 200.00                     | 3,351.65                   | 3,135.54                   | 0.66                  | 19.34                         | 59.10                        | 3,051.10          | 5,098.10          | 6,636.78                    | 6,622.81                     | 13.97                          | 474.989                  |                           |                |
| 300.00                                                          | 300.00                     | 3,400.00                   | 3,179.08                   | 1.01                  | 19.73                         | 59.11                        | 3,039.72          | 5,080.45          | 6,592.96                    | 6,578.57                     | 14.39                          | 458.179                  |                           |                |
| 400.00                                                          | 400.00                     | 3,400.00                   | 3,179.08                   | 1.37                  | 19.73                         | 59.11                        | 3,039.72          | 5,080.45          | 6,549.57                    | 6,534.94                     | 14.63                          | 447.588                  |                           |                |
| 500.00                                                          | 500.00                     | 3,400.00                   | 3,179.08                   | 1.73                  | 19.73                         | 59.11                        | 3,039.72          | 5,080.45          | 6,507.43                    | 6,492.52                     | 14.91                          | 436.431                  |                           |                |
| 600.00                                                          | 600.00                     | 3,400.00                   | 3,179.08                   | 2.09                  | 19.73                         | 59.11                        | 3,039.72          | 5,080.45          | 6,466.57                    | 6,451.36                     | 15.21                          | 425.137                  |                           |                |
| 700.00                                                          | 700.00                     | 3,454.28                   | 3,228.59                   | 2.45                  | 20.14                         | 59.11                        | 3,027.67          | 5,061.73          | 6,425.99                    | 6,410.23                     | 15.76                          | 407.678                  |                           |                |
| 800.00                                                          | 800.00                     | 3,500.00                   | 3,270.76                   | 2.81                  | 20.47                         | 59.12                        | 3,018.11          | 5,046.89          | 6,387.02                    | 6,370.73                     | 16.29                          | 392.184                  |                           |                |
| 900.00                                                          | 900.00                     | 3,500.00                   | 3,270.76                   | 3.17                  | 20.47                         | 59.12                        | 3,018.11          | 5,046.89          | 6,348.66                    | 6,332.04                     | 16.62                          | 382.030                  |                           |                |
| 918.00                                                          | 918.00                     | 3,500.00                   | 3,270.76                   | 3.23                  | 20.47                         | 59.12                        | 3,018.11          | 5,046.89          | 6,341.89                    | 6,325.21                     | 16.68                          | 380.239                  |                           |                |
| 1,000.00                                                        | 999.97                     | 3,500.00                   | 3,270.76                   | 3.51                  | 20.47                         | -92.91                       | 3,018.11          | 5,046.89          | 6,311.71                    | 6,294.77                     | 16.94                          | 372.519                  |                           |                |
| 1,100.00                                                        | 1,099.72                   | 3,539.99                   | 3,307.98                   | 3.84                  | 20.74                         | -94.07                       | 3,010.20          | 5,034.62          | 6,275.84                    | 6,258.42                     | 17.42                          | 360.164                  |                           |                |
| 1,200.00                                                        | 1,198.98                   | 3,600.00                   | 3,364.40                   | 4.18                  | 21.14                         | -95.24                       | 2,999.12          | 5,017.42          | 6,242.01                    | 6,224.01                     | 18.00                          | 346.757                  |                           |                |
| 1,300.00                                                        | 1,297.46                   | 3,600.00                   | 3,364.40                   | 4.54                  | 21.14                         | -96.29                       | 2,999.12          | 5,017.42          | 6,208.81                    | 6,190.46                     | 18.34                          | 338.462                  |                           |                |
| 1,400.00                                                        | 1,394.90                   | 3,600.00                   | 3,364.40                   | 4.92                  | 21.14                         | -97.27                       | 2,999.12          | 5,017.42          | 6,177.60                    | 6,158.89                     | 18.71                          | 330.154                  |                           |                |
| 1,500.00                                                        | 1,491.03                   | 3,600.00                   | 3,364.40                   | 5.33                  | 21.14                         | -98.18                       | 2,999.12          | 5,017.42          | 6,148.49                    | 6,129.38                     | 19.11                          | 321.722                  |                           |                |
| 1,600.00                                                        | 1,585.60                   | 3,648.69                   | 3,410.63                   | 5.79                  | 21.42                         | -99.17                       | 2,990.84          | 5,004.58          | 6,120.78                    | 6,101.03                     | 19.75                          | 309.922                  |                           |                |
| 1,700.00                                                        | 1,678.33                   | 3,700.00                   | 3,459.75                   | 6.30                  | 21.72                         | -100.15                      | 2,982.81          | 4,992.11          | 6,095.64                    | 6,075.19                     | 20.45                          | 298.061                  |                           |                |
| 1,797.05                                                        | 1,766.34                   | 3,700.00                   | 3,459.75                   | 6.85                  | 21.72                         | -100.85                      | 2,982.81          | 4,992.11          | 6,072.69                    | 6,051.70                     | 20.99                          | 289.278                  |                           |                |
| 1,800.00                                                        | 1,768.98                   | 3,700.00                   | 3,459.75                   | 6.87                  | 21.72                         | -100.85                      | 2,982.81          | 4,992.11          | 6,072.03                    | 6,051.02                     | 21.01                          | 289.016                  |                           |                |
| 1,900.00                                                        | 1,858.58                   | 3,700.00                   | 3,459.75                   | 7.49                  | 21.72                         | -100.85                      | 2,982.81          | 4,992.11          | 6,050.42                    | 6,028.80                     | 21.62                          | 279.820                  |                           |                |
| 2,000.00                                                        | 1,948.17                   | 3,700.00                   | 3,459.75                   | 8.15                  | 21.72                         | -100.85                      | 2,982.81          | 4,992.11          | 6,030.40                    | 6,008.13                     | 22.27                          | 270.815                  |                           |                |
| 2,100.00                                                        | 2,037.76                   | 3,753.74                   | 3,511.61                   | 8.83                  | 22.00                         | -101.08                      | 2,975.17          | 4,980.25          | 6,010.98                    | 5,987.83                     | 23.15                          | 259.706                  |                           |                |
| 2,200.00                                                        | 2,127.36                   | 3,800.00                   | 3,556.54                   | 9.53                  | 22.23                         | -101.29                      | 2,969.23          | 4,971.03          | 5,993.44                    | 5,969.42                     | 24.01                          | 249.581                  |                           |                |
| 2,300.00                                                        | 2,216.95                   | 3,800.00                   | 3,556.54                   | 10.25                 | 22.23                         | -101.29                      | 2,969.23          | 4,971.03          | 5,976.78                    | 5,952.06                     | 24.72                          | 241.778                  |                           |                |
| 2,400.00                                                        | 2,306.54                   | 3,800.00                   | 3,556.54                   | 10.97                 | 22.23                         | -101.29                      | 2,969.23          | 4,971.03          | 5,961.75                    | 5,936.32                     | 25.44                          | 234.366                  |                           |                |
| 2,500.00                                                        | 2,396.14                   | 3,838.94                   | 3,594.57                   | 11.71                 | 22.41                         | -101.46                      | 2,964.69          | 4,963.98          | 5,947.85                    | 5,921.54                     | 26.31                          | 226.064                  |                           |                |
| 2,600.00                                                        | 2,485.73                   | 3,860.47                   | 3,615.66                   | 12.45                 | 22.50                         | -101.56                      | 2,962.35          | 4,960.36          | 5,935.38                    | 5,908.25                     | 27.13                          | 218.808                  |                           |                |
| 2,700.00                                                        | 2,575.32                   | 3,900.00                   | 3,654.51                   | 13.21                 | 22.68                         | -101.73                      | 2,958.41          | 4,954.24          | 5,924.36                    | 5,896.34                     | 28.02                          | 211.466                  |                           |                |
| 2,800.00                                                        | 2,664.92                   | 3,900.00                   | 3,654.51                   | 13.96                 | 22.68                         | -101.73                      | 2,958.41          | 4,954.24          | 5,914.47                    | 5,885.71                     | 28.76                          | 205.645                  |                           |                |
| 2,900.00                                                        | 2,754.51                   | 3,900.00                   | 3,654.51                   | 14.72                 | 22.68                         | -101.73                      | 2,958.41          | 4,954.24          | 5,906.26                    | 5,876.75                     | 29.51                          | 200.164                  |                           |                |
| 3,000.00                                                        | 2,844.10                   | 3,947.31                   | 3,701.20                   | 15.49                 | 22.85                         | -101.94                      | 2,954.26          | 4,947.80          | 5,898.96                    | 5,868.53                     | 30.43                          | 193.857                  |                           |                |
| 3,100.00                                                        | 2,933.70                   | 4,000.00                   | 3,753.40                   | 16.26                 | 23.05                         | -102.17                      | 2,950.38          | 4,941.77          | 5,893.57                    | 5,862.19                     | 31.37                          | 187.848                  |                           |                |
| 3,114.47                                                        | 2,946.66                   | 4,000.00                   | 3,753.40                   | 16.37                 | 23.05                         | -102.17                      | 2,950.38          | 4,941.77          | 5,892.79                    | 5,861.31                     | 31.48                          | 187.175                  |                           |                |
| 3,200.00                                                        | 3,024.12                   | 4,000.00                   | 3,753.40                   | 17.01                 | 23.05                         | -102.04                      | 2,950.38          | 4,941.77          | 5,888.51                    | 5,856.41                     | 32.10                          | 183.444                  |                           |                |
| 3,300.00                                                        | 3,116.62                   | 4,000.00                   | 3,753.40                   | 17.69                 | 23.05                         | -101.91                      | 2,950.38          | 4,941.77          | 5,884.06                    | 5,851.31                     | 32.76                          | 179.632                  |                           |                |
| 3,400.00                                                        | 3,210.99                   | 4,000.00                   | 3,753.40                   | 18.31                 | 23.05                         | -101.80                      | 2,950.38          | 4,941.77          | 5,880.23                    | 5,846.89                     | 33.34                          | 176.367                  |                           |                |
| 3,500.00                                                        | 3,306.96                   | 4,060.75                   | 3,813.80                   | 18.86                 | 23.24                         | -101.86                      | 2,946.88          | 4,936.34          | 5,875.76                    | 5,841.68                     | 34.08                          | 172.402                  |                           |                |
| 3,600.00                                                        | 3,404.26                   | 4,100.00                   | 3,852.92                   | 19.35                 | 23.37                         | -101.84                      | 2,945.17          | 4,933.68          | 5,872.08                    | 5,837.40                     | 34.68                          | 169.340                  |                           |                |
| 3,700.00                                                        | 3,502.64                   | 4,100.00                   | 3,852.92                   | 19.77                 | 23.37                         | -101.73                      | 2,945.17          | 4,933.68          | 5,868.49                    | 5,833.43                     | 35.06                          | 167.405                  |                           |                |
| 3,800.00                                                        | 3,601.81                   | 4,100.00                   | 3,852.92                   | 20.14                 | 23.37                         | -101.65                      | 2,945.17          | 4,933.68          | 5,865.54                    | 5,830.17                     | 35.37                          | 165.845                  |                           |                |
| 3,900.00                                                        | 3,701.52                   | 4,158.10                   | 3,910.93                   | 20.45                 | 23.52                         | -101.61                      | 2,943.43          | 4,930.99          | 5,862.07                    | 5,826.23                     | 35.84                          | 163.579                  |                           |                |
| 3,993.52                                                        | 3,795.00                   | 4,200.00                   | 3,952.81                   | 20.68                 | 23.62                         | 49.51                        | 2,942.78          | 4,929.98          | 5,859.52                    | 5,823.35                     | 36.17                          | 161.999                  |                           |                |
| 4,000.00                                                        | 3,801.48                   | 4,200.00                   | 3,952.81                   | 20.69                 | 23.62                         | 49.51                        | 2,942.78          | 4,929.98          | 5,859.32                    | 5,823.14                     | 36.18                          | 161.950                  |                           |                |
| 4,100.00                                                        | 3,901.48                   | 4,200.00                   | 3,952.81                   | 20.91                 | 23.62                         | 49.51                        | 2,942.78          | 4,929.98          | 5,857.22                    | 5,820.89                     | 36.33                          | 161.226                  |                           |                |
| 4,200.00                                                        | 4,001.48                   | 4,234.19                   | 3,987.00                   | 21.13                 | 23.70                         | 49.51                        | 2,942.61          | 4,929.72          | 5,856.46                    | 5,819.86                     | 36.60                          | 159.996                  |                           |                |
| 4,236.04                                                        | 4,037.52                   | 4,262.71                   | 4,015.52                   | 21.21                 | 23.76                         | 49.51                        | 2,942.61          | 4,929.72          | 5,856.46                    | 5,819.69                     | 36.76                          | 159.303                  |                           |                |
| 4,300.00                                                        | 4,101.48                   | 4,326.67                   | 4,079.48                   | 21.36                 | 23.89                         | 49.51                        | 2,942.61          | 4,929.72          | 5,856.46                    | 5,819.36                     | 37.10                          | 157.872                  |                           |                |
| 4,400.00                                                        | 4,201.48                   | 4,426.67                   | 4,179.48                   | 21.59                 | 24.10                         | 49.51                        | 2,942.61          | 4,929.72          | 5,856.46                    | 5,818.83                     | 37.62                          | 155.663                  |                           |                |
| 4,500.00                                                        | 4,301.48                   | 4,526.67                   | 4,279.48                   | 21.82                 | 24.31                         | 49.51                        | 2,942.61          | 4,929.72          | 5,856.46                    | 5,818.30                     | 38.15                          | 153.491                  |                           |                |
| 4,600.00                                                        | 4,401.48                   | 4,626.67                   | 4,379.48                   | 22.05                 | 24.53                         | 49.51                        | 2,942.61          | 4,929.72          | 5,856.46                    | 5,817.76                     | 38.69                          | 151.357                  |                           |                |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

| Offset Design: Calloway Pad - Calloway 2M - OH - Plan #1 |                     |                     |                     |                |             |                       |            |            |                      |                       |                         |                   | Offset Site Error: | 0.00 ft |                    |         |
|----------------------------------------------------------|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|--------------------|---------|
| Survey Program:                                          |                     | 0-MWD+HDGM          |                     |                | Reference   |                       | Offset     |            | Semi Major Axis      |                       | Offset Wellbore Centre  |                   | Rule Assigned:     |         | Offset Well Error: | 0.00 ft |
| Measured Depth (ft)                                      | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | Warning            |         |                    |         |
| 4,700.00                                                 | 4,501.48            | 4,726.67            | 4,479.48            | 22.29          | 24.74       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,817.22              | 39.24                   | 149.260           |                    |         |                    |         |
| 4,800.00                                                 | 4,601.48            | 4,826.67            | 4,579.48            | 22.53          | 24.97       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,816.67              | 39.79                   | 147.201           |                    |         |                    |         |
| 4,900.00                                                 | 4,701.48            | 4,926.67            | 4,679.48            | 22.78          | 25.19       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,816.12              | 40.34                   | 145.179           |                    |         |                    |         |
| 5,000.00                                                 | 4,801.48            | 5,026.67            | 4,779.48            | 23.03          | 25.42       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,815.56              | 40.90                   | 143.196           |                    |         |                    |         |
| 5,100.00                                                 | 4,901.48            | 5,126.67            | 4,879.48            | 23.28          | 25.65       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,815.00              | 41.46                   | 141.250           |                    |         |                    |         |
| 5,200.00                                                 | 5,001.48            | 5,226.67            | 4,979.48            | 23.53          | 25.89       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,814.43              | 42.03                   | 139.341           |                    |         |                    |         |
| 5,300.00                                                 | 5,101.48            | 5,326.67            | 5,079.48            | 23.79          | 26.12       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,813.86              | 42.60                   | 137.469           |                    |         |                    |         |
| 5,400.00                                                 | 5,201.48            | 5,426.67            | 5,179.48            | 24.05          | 26.36       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,813.28              | 43.18                   | 135.634           |                    |         |                    |         |
| 5,500.00                                                 | 5,301.48            | 5,526.67            | 5,279.48            | 24.31          | 26.61       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,812.70              | 43.76                   | 133.835           |                    |         |                    |         |
| 5,600.00                                                 | 5,401.48            | 5,626.67            | 5,379.48            | 24.57          | 26.85       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,812.11              | 44.34                   | 132.072           |                    |         |                    |         |
| 5,700.00                                                 | 5,501.48            | 5,726.67            | 5,479.48            | 24.84          | 27.10       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,811.53              | 44.93                   | 130.344           |                    |         |                    |         |
| 5,800.00                                                 | 5,601.48            | 5,826.67            | 5,579.48            | 25.11          | 27.35       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,810.93              | 45.52                   | 128.650           |                    |         |                    |         |
| 5,900.00                                                 | 5,701.48            | 5,926.67            | 5,679.48            | 25.38          | 27.60       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,810.34              | 46.12                   | 126.990           |                    |         |                    |         |
| 6,000.00                                                 | 5,801.48            | 6,026.67            | 5,779.48            | 25.65          | 27.86       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,809.74              | 46.72                   | 125.364           |                    |         |                    |         |
| 6,100.00                                                 | 5,901.48            | 6,126.67            | 5,879.48            | 25.93          | 28.11       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,809.14              | 47.32                   | 123.771           |                    |         |                    |         |
| 6,200.00                                                 | 6,001.48            | 6,226.67            | 5,979.48            | 26.20          | 28.37       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,808.54              | 47.92                   | 122.210           |                    |         |                    |         |
| 6,300.00                                                 | 6,101.48            | 6,326.67            | 6,079.48            | 26.48          | 28.63       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,807.93              | 48.53                   | 120.680           |                    |         |                    |         |
| 6,400.00                                                 | 6,201.48            | 6,426.67            | 6,179.48            | 26.76          | 28.90       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,807.32              | 49.14                   | 119.182           |                    |         |                    |         |
| 6,500.00                                                 | 6,301.48            | 6,526.67            | 6,279.48            | 27.05          | 29.16       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,806.71              | 49.75                   | 117.713           |                    |         |                    |         |
| 6,600.00                                                 | 6,401.48            | 6,626.67            | 6,379.48            | 27.33          | 29.43       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,806.09              | 50.37                   | 116.275           |                    |         |                    |         |
| 6,700.00                                                 | 6,501.48            | 6,726.67            | 6,479.48            | 27.62          | 29.70       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,805.47              | 50.99                   | 114.865           |                    |         |                    |         |
| 6,800.00                                                 | 6,601.48            | 6,826.67            | 6,579.48            | 27.90          | 29.97       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,804.85              | 51.61                   | 113.484 CC        |                    |         |                    |         |
| 6,883.52                                                 | 6,685.00            | 6,910.19            | 6,663.00            | 28.15          | 30.20       | 49.51                 | 2,942.61   | 4,929.72   | 5,856.46             | 5,804.33              | 52.13                   | 112.351 ES, SF    |                    |         |                    |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



## Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

| Offset Design: Calloway Pad - Calloway Area 4 - OH - Plan #1 |                     |                     |                     |                |                        |                       |                |            |                      |                       |                         |                   | Offset Site Error: | 0.00 ft |
|--------------------------------------------------------------|---------------------|---------------------|---------------------|----------------|------------------------|-----------------------|----------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|
| Survey Program:                                              |                     | 0-MWD+HDGM          |                     |                |                        |                       | Rule Assigned: |            |                      | Offset Well Error:    |                         | 0.00 ft           |                    |         |
| Reference                                                    | Offset              | Semi Major Axis     |                     |                | Offset Wellbore Centre |                       |                | Distance   |                      |                       | Warning                 |                   |                    |         |
| Measured Depth (ft)                                          | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft)            | Highside Toolface (°) | +N/-S (ft)     | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor |                    |         |
| 0.00                                                         | 0.00                | 5.00                | 5.00                | 0.00           | 0.01                   | 58.95                 | 3,568.98       | 5,928.78   | 6,920.12             |                       |                         |                   |                    |         |
| 100.00                                                       | 100.00              | 105.00              | 105.00              | 0.30           | 0.32                   | 58.95                 | 3,568.98       | 5,928.78   | 6,920.12             | 6,919.51              | 0.61                    | N/A               |                    |         |
| 200.00                                                       | 200.00              | 205.00              | 205.00              | 0.66           | 0.67                   | 58.95                 | 3,568.98       | 5,928.78   | 6,920.12             | 6,918.79              | 1.33                    | 5,203.371         |                    |         |
| 300.00                                                       | 300.00              | 305.00              | 305.00              | 1.01           | 1.03                   | 58.95                 | 3,568.98       | 5,928.78   | 6,920.12             | 6,918.07              | 2.05                    | 3,380.825         |                    |         |
| 400.00                                                       | 400.00              | 405.00              | 405.00              | 1.37           | 1.39                   | 58.95                 | 3,568.98       | 5,928.78   | 6,920.12             | 6,917.36              | 2.76                    | 2,503.828         |                    |         |
| 500.00                                                       | 500.00              | 505.00              | 505.00              | 1.73           | 1.75                   | 58.95                 | 3,568.98       | 5,928.78   | 6,920.12             | 6,916.64              | 3.48                    | 1,988.106         |                    |         |
| 600.00                                                       | 600.00              | 605.00              | 605.00              | 2.09           | 2.11                   | 58.95                 | 3,568.98       | 5,928.78   | 6,920.12             | 6,915.92              | 4.20                    | 1,648.549         |                    |         |
| 700.00                                                       | 700.00              | 705.00              | 705.00              | 2.45           | 2.47                   | 58.95                 | 3,568.98       | 5,928.78   | 6,920.12             | 6,915.20              | 4.91                    | 1,408.061         |                    |         |
| 800.00                                                       | 800.00              | 805.00              | 805.00              | 2.81           | 2.82                   | 58.95                 | 3,568.98       | 5,928.78   | 6,920.12             | 6,914.49              | 5.63                    | 1,228.804         |                    |         |
| 900.00                                                       | 900.00              | 905.00              | 905.00              | 3.17           | 3.18                   | 58.95                 | 3,568.98       | 5,928.78   | 6,920.12             | 6,913.77              | 6.35                    | 1,090.035         |                    |         |
| 918.00                                                       | 918.00              | 923.00              | 923.00              | 3.23           | 3.25                   | 58.95                 | 3,568.98       | 5,928.78   | 6,920.12             | 6,913.64              | 6.48                    | 1,068.318 CC      |                    |         |
| 1,000.00                                                     | 999.97              | 1,004.97            | 1,004.97            | 3.51           | 3.54                   | -92.11                | 3,568.98       | 5,928.78   | 6,920.18             | 6,913.13              | 7.05                    | 981.385 ES        |                    |         |
| 1,100.00                                                     | 1,099.72            | 1,057.67            | 1,057.66            | 3.84           | 3.73                   | -92.13                | 3,569.63       | 5,928.57   | 6,920.76             | 6,913.19              | 7.57                    | 914.280           |                    |         |
| 1,200.00                                                     | 1,198.98            | 1,100.00            | 1,099.95            | 4.18           | 3.88                   | -92.14                | 3,571.39       | 5,928.00   | 6,922.27             | 6,914.21              | 8.06                    | 858.790           |                    |         |
| 1,300.00                                                     | 1,297.46            | 1,153.38            | 1,153.17            | 4.54           | 4.08                   | -92.17                | 3,575.20       | 5,926.76   | 6,924.74             | 6,916.14              | 8.61                    | 804.566           |                    |         |
| 1,400.00                                                     | 1,394.90            | 1,200.00            | 1,199.53            | 4.92           | 4.24                   | -92.19                | 3,579.97       | 5,925.22   | 6,928.22             | 6,919.06              | 9.15                    | 756.998           |                    |         |
| 1,500.00                                                     | 1,491.03            | 1,242.86            | 1,241.98            | 5.33           | 4.40                   | -92.20                | 3,585.54       | 5,923.41   | 6,932.73             | 6,923.01              | 9.72                    | 713.284           |                    |         |
| 1,600.00                                                     | 1,585.60            | 1,300.00            | 1,298.30            | 5.79           | 4.61                   | -92.26                | 3,594.72       | 5,920.43   | 6,938.37             | 6,927.98              | 10.38                   | 668.384           |                    |         |
| 1,700.00                                                     | 1,678.33            | 1,300.00            | 1,298.30            | 6.30           | 4.61                   | -92.06                | 3,594.72       | 5,920.43   | 6,945.15             | 6,934.26              | 10.88                   | 638.102           |                    |         |
| 1,797.05                                                     | 1,766.34            | 1,358.79            | 1,355.82            | 6.85           | 4.83                   | -92.11                | 3,606.25       | 5,916.69   | 6,952.73             | 6,941.07              | 11.66                   | 596.509           |                    |         |
| 1,800.00                                                     | 1,768.98            | 1,359.83            | 1,356.83            | 6.87           | 4.83                   | -92.12                | 3,606.47       | 5,916.61   | 6,952.98             | 6,941.30              | 11.68                   | 595.424           |                    |         |
| 1,900.00                                                     | 1,858.58            | 1,400.00            | 1,395.84            | 7.49           | 4.98                   | -92.33                | 3,615.59       | 5,913.66   | 6,962.03             | 6,949.58              | 12.45                   | 559.344           |                    |         |
| 2,000.00                                                     | 1,948.17            | 1,400.00            | 1,395.84            | 8.15           | 4.98                   | -92.33                | 3,615.59       | 5,913.66   | 6,972.24             | 6,959.15              | 13.09                   | 532.722           |                    |         |
| 2,100.00                                                     | 2,037.76            | 1,459.27            | 1,452.91            | 8.83           | 5.22                   | -92.65                | 3,630.81       | 5,908.72   | 6,983.28             | 6,969.29              | 13.99                   | 499.007           |                    |         |
| 2,200.00                                                     | 2,127.36            | 1,500.00            | 1,491.75            | 9.53           | 5.38                   | -92.88                | 3,642.48       | 5,904.93   | 6,995.55             | 6,980.71              | 14.84                   | 471.365           |                    |         |
| 2,300.00                                                     | 2,216.95            | 1,500.00            | 1,491.75            | 10.25          | 5.38                   | -92.88                | 3,642.48       | 5,904.93   | 7,008.95             | 6,993.42              | 15.53                   | 451.361           |                    |         |
| 2,400.00                                                     | 2,306.54            | 1,548.06            | 1,537.13            | 10.97          | 5.60                   | -93.16                | 3,657.51       | 5,900.05   | 7,023.33             | 7,006.89              | 16.44                   | 427.205           |                    |         |
| 2,500.00                                                     | 2,396.14            | 1,600.00            | 1,585.59            | 11.71          | 5.83                   | -93.47                | 3,675.28       | 5,894.29   | 7,039.01             | 7,021.63              | 17.38                   | 405.015           |                    |         |
| 2,600.00                                                     | 2,485.73            | 1,600.00            | 1,585.59            | 12.45          | 5.83                   | -93.47                | 3,675.28       | 5,894.29   | 7,055.60             | 7,037.52              | 18.08                   | 390.192           |                    |         |
| 2,700.00                                                     | 2,575.32            | 1,600.00            | 1,585.59            | 13.21          | 5.83                   | -93.47                | 3,675.28       | 5,894.29   | 7,073.56             | 7,054.78              | 18.79                   | 376.545           |                    |         |
| 2,800.00                                                     | 2,664.92            | 1,651.78            | 1,633.25            | 13.96          | 6.08                   | -93.79                | 3,694.54       | 5,888.04   | 7,092.38             | 7,072.63              | 19.75                   | 359.085           |                    |         |
| 2,900.00                                                     | 2,754.51            | 1,700.00            | 1,676.98            | 14.72          | 6.32                   | -94.10                | 3,713.84       | 5,881.77   | 7,112.60             | 7,091.90              | 20.70                   | 343.586           |                    |         |
| 3,000.00                                                     | 2,844.10            | 1,700.00            | 1,676.98            | 15.49          | 6.32                   | -94.10                | 3,713.84       | 5,881.77   | 7,133.72             | 7,112.32              | 21.40                   | 333.350           |                    |         |
| 3,100.00                                                     | 2,933.70            | 1,700.00            | 1,676.98            | 16.26          | 6.32                   | -94.10                | 3,713.84       | 5,881.77   | 7,156.19             | 7,134.09              | 22.10                   | 323.882           |                    |         |
| 3,114.47                                                     | 2,946.66            | 1,700.00            | 1,676.98            | 16.37          | 6.32                   | -94.10                | 3,713.84       | 5,881.77   | 7,159.55             | 7,137.35              | 22.20                   | 322.572           |                    |         |
| 3,200.00                                                     | 3,024.12            | 1,741.63            | 1,714.21            | 17.01          | 6.55                   | -94.98                | 3,731.56       | 5,876.02   | 7,179.48             | 7,156.48              | 23.00                   | 312.148           |                    |         |
| 3,300.00                                                     | 3,116.62            | 1,763.88            | 1,733.90            | 17.69          | 6.68                   | -95.85                | 3,741.42       | 5,872.82   | 7,203.54             | 7,179.81              | 23.73                   | 303.599           |                    |         |
| 3,400.00                                                     | 3,210.99            | 1,800.00            | 1,765.53            | 18.31          | 6.88                   | -96.82                | 3,758.01       | 5,867.44   | 7,228.22             | 7,203.75              | 24.47                   | 295.436           |                    |         |
| 3,500.00                                                     | 3,306.96            | 1,800.00            | 1,765.53            | 18.86          | 6.88                   | -97.60                | 3,758.01       | 5,867.44   | 7,253.33             | 7,228.40              | 24.93                   | 290.986           |                    |         |
| 3,600.00                                                     | 3,404.26            | 1,833.95            | 1,794.87            | 19.35          | 7.10                   | -98.56                | 3,774.25       | 5,862.17   | 7,278.81             | 7,253.28              | 25.54                   | 285.004           |                    |         |
| 3,700.00                                                     | 3,502.64            | 1,858.26            | 1,815.65            | 19.77          | 7.26                   | -99.48                | 3,786.25       | 5,858.28   | 7,304.61             | 7,278.58              | 26.03                   | 280.649           |                    |         |
| 3,800.00                                                     | 3,601.81            | 1,900.00            | 1,850.85            | 20.14          | 7.52                   | -100.48               | 3,807.60       | 5,851.35   | 7,330.65             | 7,304.08              | 26.57                   | 275.889           |                    |         |
| 3,900.00                                                     | 3,701.52            | 1,900.00            | 1,850.85            | 20.45          | 7.52                   | -101.27               | 3,807.60       | 5,851.35   | 7,356.68             | 7,329.89              | 26.79                   | 274.653           |                    |         |
| 3,993.52                                                     | 3,795.00            | 1,900.00            | 1,850.85            | 20.68          | 7.52                   | 49.03                 | 3,807.60       | 5,851.35   | 7,381.27             | 7,354.34              | 26.93                   | 274.084           |                    |         |
| 4,000.00                                                     | 3,801.48            | 1,900.00            | 1,850.85            | 20.69          | 7.52                   | 49.03                 | 3,807.60       | 5,851.35   | 7,382.99             | 7,356.05              | 26.94                   | 274.068           |                    |         |
| 4,100.00                                                     | 3,901.48            | 1,958.75            | 1,899.32            | 20.91          | 7.95                   | 48.79                 | 3,839.17       | 5,841.11   | 7,409.34             | 7,381.85              | 27.49                   | 269.526           |                    |         |
| 4,200.00                                                     | 4,001.48            | 2,000.00            | 1,932.57            | 21.13          | 8.25                   | 48.61                 | 3,862.38       | 5,833.57   | 7,436.98             | 7,409.06              | 27.92                   | 266.389           |                    |         |
| 4,300.00                                                     | 4,101.48            | 2,000.00            | 1,932.57            | 21.36          | 8.25                   | 48.61                 | 3,862.38       | 5,833.57   | 7,465.49             | 7,437.44              | 28.04                   | 266.214           |                    |         |
| 4,400.00                                                     | 4,201.48            | 2,000.00            | 1,932.57            | 21.59          | 8.25                   | 48.61                 | 3,862.38       | 5,833.57   | 7,495.22             | 7,467.05              | 28.17                   | 266.093           |                    |         |
| 4,500.00                                                     | 4,301.48            | 2,054.01            | 1,975.09            | 21.82          | 8.69                   | 48.36                 | 3,894.05       | 5,823.30   | 7,525.49             | 7,496.77              | 28.73                   | 261.962           |                    |         |
| 4,600.00                                                     | 4,401.48            | 2,100.00            | 2,010.35            | 22.05          | 9.07                   | 48.15                 | 3,922.13       | 5,814.18   | 7,557.08             | 7,527.86              | 29.22                   | 258.588           |                    |         |
| 4,700.00                                                     | 4,501.48            | 2,100.00            | 2,010.35            | 22.29          | 9.07                   | 48.15                 | 3,922.13       | 5,814.18   | 7,589.38             | 7,560.04              | 29.35                   | 258.606           |                    |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

| <b>Offset Design:</b> Calloway Pad - Calloway Area 4 - OH - Plan #1 |                        |                        |                        |           |        |                             |                                         |               |                                        |                                         |                               | <b>Offset Site Error:</b> | 0.00 ft |
|---------------------------------------------------------------------|------------------------|------------------------|------------------------|-----------|--------|-----------------------------|-----------------------------------------|---------------|----------------------------------------|-----------------------------------------|-------------------------------|---------------------------|---------|
| <b>Survey Program:</b> 0-MWD+HDGM                                   |                        |                        |                        |           |        |                             |                                         |               |                                        |                                         |                               | <b>Offset Well Error:</b> | 0.00 ft |
| Measured Depth<br>(ft)                                              | Vertical Depth<br>(ft) | Measured Depth<br>(ft) | Vertical Depth<br>(ft) | Reference | Offset | Highside<br>Toolface<br>(°) | Offset Wellbore Centre<br>+N/-S<br>(ft) | +E/-W<br>(ft) | Distance<br>Between<br>Centres<br>(ft) | Distance<br>Between<br>Ellipses<br>(ft) | Minimum<br>Separation<br>(ft) | Separation<br>Factor      | Warning |
| 4,800.00                                                            | 4,601.48               | 2,100.00               | 2,010.35               | 22.53     | 9.07   | 48.15                       | 3,922.13                                | 5,814.18      | 7,622.86                               | 7,593.39                                | 29.47                         | 258.674                   |         |
| 4,900.00                                                            | 4,701.48               | 2,140.52               | 2,040.67               | 22.78     | 9.44   | 47.95                       | 3,947.70                                | 5,805.89      | 7,657.11                               | 7,627.16                                | 29.95                         | 255.667                   |         |
| 5,000.00                                                            | 4,801.48               | 2,160.85               | 2,055.62               | 23.03     | 9.63   | 47.85                       | 3,960.82                                | 5,801.63      | 7,692.40                               | 7,662.15                                | 30.25                         | 254.291                   |         |
| 5,100.00                                                            | 4,901.48               | 2,200.00               | 2,083.86               | 23.28     | 9.99   | 47.65                       | 3,986.60                                | 5,793.27      | 7,728.72                               | 7,698.00                                | 30.72                         | 251.599                   |         |
| 5,200.00                                                            | 5,001.48               | 2,200.00               | 2,083.86               | 23.53     | 9.99   | 47.65                       | 3,986.60                                | 5,793.27      | 7,765.80                               | 7,734.96                                | 30.84                         | 251.843                   |         |
| 5,300.00                                                            | 5,101.48               | 2,200.00               | 2,083.86               | 23.79     | 9.99   | 47.65                       | 3,986.60                                | 5,793.27      | 7,803.98                               | 7,773.03                                | 30.95                         | 252.132                   |         |
| 5,400.00                                                            | 5,201.48               | 2,254.30               | 2,121.87               | 24.05     | 10.54  | 47.37                       | 4,023.48                                | 5,781.30      | 7,842.98                               | 7,811.40                                | 31.58                         | 248.326                   |         |
| 5,500.00                                                            | 5,301.48               | 2,258.37               | 2,124.67               | 24.31     | 10.58  | 47.35                       | 4,026.29                                | 5,780.39      | 7,882.85                               | 7,851.11                                | 31.74                         | 248.382                   |         |
| 5,600.00                                                            | 5,401.48               | 6,061.88               | 5,406.48               | 24.57     | 35.70  | 38.19                       | 5,340.83                                | 5,353.83      | 7,889.61                               | 7,833.72                                | 55.89                         | 141.153                   |         |
| 5,700.00                                                            | 5,501.48               | 6,161.88               | 5,506.48               | 24.84     | 35.89  | 38.19                       | 5,340.83                                | 5,353.83      | 7,889.61                               | 7,833.23                                | 56.38                         | 139.941                   |         |
| 5,800.00                                                            | 5,601.48               | 6,261.88               | 5,606.48               | 25.11     | 36.09  | 38.19                       | 5,340.83                                | 5,353.83      | 7,889.61                               | 7,832.75                                | 56.87                         | 138.738                   |         |
| 5,900.00                                                            | 5,701.48               | 6,361.88               | 5,706.48               | 25.38     | 36.28  | 38.19                       | 5,340.83                                | 5,353.83      | 7,889.61                               | 7,832.25                                | 57.36                         | 137.545                   |         |
| 6,000.00                                                            | 5,801.48               | 6,461.88               | 5,806.48               | 25.65     | 36.48  | 38.19                       | 5,340.83                                | 5,353.83      | 7,889.61                               | 7,831.75                                | 57.86                         | 136.361                   |         |
| 6,100.00                                                            | 5,901.48               | 6,561.88               | 5,906.48               | 25.93     | 36.68  | 38.19                       | 5,340.83                                | 5,353.83      | 7,889.61                               | 7,831.25                                | 58.36                         | 135.187                   |         |
| 6,200.00                                                            | 6,001.48               | 6,661.88               | 6,006.48               | 26.20     | 36.88  | 38.19                       | 5,340.83                                | 5,353.83      | 7,889.61                               | 7,830.74                                | 58.87                         | 134.023                   |         |
| 6,300.00                                                            | 6,101.48               | 6,761.88               | 6,106.48               | 26.48     | 37.09  | 38.19                       | 5,340.83                                | 5,353.83      | 7,889.61                               | 7,830.23                                | 59.38                         | 132.870                   |         |
| 6,400.00                                                            | 6,201.48               | 6,861.88               | 6,206.48               | 26.76     | 37.29  | 38.19                       | 5,340.83                                | 5,353.83      | 7,889.61                               | 7,829.72                                | 59.89                         | 131.727                   |         |
| 6,500.00                                                            | 6,301.48               | 6,961.88               | 6,306.48               | 27.05     | 37.50  | 38.19                       | 5,340.83                                | 5,353.83      | 7,889.61                               | 7,829.20                                | 60.41                         | 130.595                   |         |
| 6,600.00                                                            | 6,401.48               | 7,061.88               | 6,406.48               | 27.33     | 37.71  | 38.19                       | 5,340.83                                | 5,353.83      | 7,889.61                               | 7,828.68                                | 60.94                         | 129.475                   |         |
| 6,700.00                                                            | 6,501.48               | 7,161.88               | 6,506.48               | 27.62     | 37.93  | 38.19                       | 5,340.83                                | 5,353.83      | 7,889.61                               | 7,828.15                                | 61.46                         | 128.365                   |         |
| 6,800.00                                                            | 6,601.48               | 7,261.88               | 6,606.48               | 27.90     | 38.14  | 38.19                       | 5,340.83                                | 5,353.83      | 7,889.61                               | 7,827.62                                | 61.99                         | 127.267                   |         |
| 6,883.52                                                            | 6,685.00               | 7,345.40               | 6,690.00               | 28.15     | 38.33  | 38.19                       | 5,340.83                                | 5,353.83      | 7,889.61                               | 7,827.17                                | 62.44                         | 126.358 SF                |         |



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          |                                   |
|----------------------------------------------------------------|----------------------------|----------------------------|----------------------------|------------------------|--------------------|------------------------------|-------------------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|-----------------------------------|
| <b>Offset Design:</b> Calloway Pad - Calloway LS 002 - OH - OH |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          | <b>Offset Site Error:</b> 0.00 ft |
| <b>Survey Program:</b> 100-UNKNOWN                             |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          | <b>Offset Well Error:</b> 0.00 ft |
| <b>Reference</b>                                               |                            | <b>Offset</b>              |                            | <b>Semi Major Axis</b> |                    | <b>Highside Toolface (°)</b> | <b>Offset Wellbore Centre</b> |                   | <b>Distance</b>             |                              | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> | <b>Warning</b>                    |
| <b>Measured Depth (ft)</b>                                     | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b>  | <b>Offset (ft)</b> |                              | <b>+N/-S (ft)</b>             | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> |                                |                          |                                   |
| 0.00                                                           | 0.00                       | 0.00                       | 0.00                       | 0.00                   | 0.00               | 55.29                        | 4,190.76                      | 6,049.80          | 7,359.69                    |                              |                                |                          |                                   |
| 100.00                                                         | 100.00                     | 50.00                      | 50.00                      | 0.30                   | 2.00               | 55.29                        | 4,190.76                      | 6,049.80          | 7,359.52                    | 7,357.22                     | 2.30                           | 3,203.090                |                                   |
| 200.00                                                         | 200.00                     | 150.00                     | 150.00                     | 0.66                   | 6.00               | 55.29                        | 4,190.76                      | 6,049.80          | 7,359.52                    | 7,352.87                     | 6.66                           | 1,105.697                |                                   |
| 300.00                                                         | 300.00                     | 250.00                     | 250.00                     | 1.01                   | 10.00              | 55.29                        | 4,190.76                      | 6,049.80          | 7,359.52                    | 7,348.51                     | 11.01                          | 668.168                  |                                   |
| 400.00                                                         | 400.00                     | 350.00                     | 350.00                     | 1.37                   | 14.00              | 55.29                        | 4,190.76                      | 6,049.80          | 7,359.52                    | 7,344.15                     | 15.37                          | 478.732                  |                                   |
| 500.00                                                         | 500.00                     | 450.00                     | 450.00                     | 1.73                   | 18.00              | 55.29                        | 4,190.76                      | 6,049.80          | 7,359.52                    | 7,339.79                     | 19.73                          | 372.985                  |                                   |
| 600.00                                                         | 600.00                     | 550.00                     | 550.00                     | 2.09                   | 22.00              | 55.29                        | 4,190.76                      | 6,049.80          | 7,359.52                    | 7,335.43                     | 24.09                          | 305.503                  |                                   |
| 700.00                                                         | 700.00                     | 650.00                     | 650.00                     | 2.45                   | 26.00              | 55.29                        | 4,190.76                      | 6,049.80          | 7,359.52                    | 7,331.07                     | 28.45                          | 258.698                  |                                   |
| 800.00                                                         | 800.00                     | 750.00                     | 750.00                     | 2.81                   | 30.00              | 55.29                        | 4,190.76                      | 6,049.80          | 7,359.52                    | 7,326.72                     | 32.81                          | 224.329                  |                                   |
| 900.00                                                         | 900.00                     | 850.00                     | 850.00                     | 3.17                   | 34.00              | 55.29                        | 4,190.76                      | 6,049.80          | 7,359.52                    | 7,322.36                     | 37.17                          | 198.021                  |                                   |
| 918.00                                                         | 918.00                     | 868.00                     | 868.00                     | 3.23                   | 34.72              | 55.29                        | 4,190.76                      | 6,049.80          | 7,359.52                    | 7,321.57                     | 37.95                          | 193.928 CC               |                                   |
| 1,000.00                                                       | 999.97                     | 949.97                     | 949.97                     | 3.51                   | 38.00              | -95.77                       | 4,190.76                      | 6,049.80          | 7,359.70                    | 7,318.19                     | 41.51                          | 177.304                  |                                   |
| 1,100.00                                                       | 1,099.72                   | 1,049.72                   | 1,049.72                   | 3.84                   | 41.99              | -95.80                       | 4,190.76                      | 6,049.80          | 7,360.40                    | 7,314.57                     | 45.83                          | 160.606                  |                                   |
| 1,200.00                                                       | 1,198.98                   | 1,148.98                   | 1,148.98                   | 4.18                   | 45.96              | -95.86                       | 4,190.76                      | 6,049.80          | 7,361.64                    | 7,311.50                     | 50.14                          | 146.824                  |                                   |
| 1,300.00                                                       | 1,297.46                   | 1,247.46                   | 1,247.46                   | 4.54                   | 49.90              | -95.94                       | 4,190.76                      | 6,049.80          | 7,363.44                    | 7,309.01                     | 54.43                          | 135.271                  |                                   |
| 1,400.00                                                       | 1,394.90                   | 1,344.90                   | 1,344.90                   | 4.92                   | 53.80              | -96.04                       | 4,190.76                      | 6,049.80          | 7,365.84                    | 7,307.13                     | 58.71                          | 125.457                  |                                   |
| 1,500.00                                                       | 1,491.03                   | 1,441.03                   | 1,441.03                   | 5.33                   | 57.64              | -96.15                       | 4,190.76                      | 6,049.80          | 7,368.88                    | 7,305.91                     | 62.97                          | 117.021                  |                                   |
| 1,600.00                                                       | 1,585.60                   | 1,535.60                   | 1,535.60                   | 5.79                   | 61.42              | -96.28                       | 4,190.76                      | 6,049.80          | 7,372.59                    | 7,305.39                     | 67.21                          | 109.698                  |                                   |
| 1,700.00                                                       | 1,678.33                   | 1,628.33                   | 1,628.33                   | 6.30                   | 65.13              | -96.41                       | 4,190.76                      | 6,049.80          | 7,377.05                    | 7,305.62                     | 71.43                          | 103.283                  |                                   |
| 1,797.05                                                       | 1,766.34                   | 1,716.34                   | 1,716.34                   | 6.85                   | 68.65              | -96.55                       | 4,190.76                      | 6,049.80          | 7,382.13                    | 7,306.63                     | 75.50                          | 97.780                   |                                   |
| 1,800.00                                                       | 1,768.98                   | 1,718.98                   | 1,718.98                   | 6.87                   | 68.76              | -96.55                       | 4,190.76                      | 6,049.80          | 7,382.30                    | 7,306.67                     | 75.62                          | 97.622                   |                                   |
| 1,900.00                                                       | 1,858.58                   | 1,808.58                   | 1,808.58                   | 7.49                   | 72.34              | -96.86                       | 4,190.76                      | 6,049.80          | 7,388.08                    | 7,308.25                     | 79.83                          | 92.553                   |                                   |
| 2,000.00                                                       | 1,948.17                   | 1,898.17                   | 1,898.17                   | 8.15                   | 75.93              | -97.17                       | 4,190.76                      | 6,049.80          | 7,394.12                    | 7,310.06                     | 84.06                          | 87.964                   |                                   |
| 2,100.00                                                       | 2,037.76                   | 1,987.76                   | 1,987.76                   | 8.83                   | 79.51              | -97.47                       | 4,190.76                      | 6,049.80          | 7,400.43                    | 7,312.11                     | 88.32                          | 83.796                   |                                   |
| 2,200.00                                                       | 2,127.36                   | 2,077.36                   | 2,077.36                   | 9.53                   | 83.09              | -97.78                       | 4,190.76                      | 6,049.80          | 7,406.99                    | 7,314.40                     | 92.59                          | 79.998                   |                                   |
| 2,300.00                                                       | 2,216.95                   | 2,166.95                   | 2,166.95                   | 10.25                  | 86.68              | -98.09                       | 4,190.76                      | 6,049.80          | 7,413.82                    | 7,316.94                     | 96.88                          | 76.528                   |                                   |
| 2,400.00                                                       | 2,306.54                   | 2,256.54                   | 2,256.54                   | 10.97                  | 90.26              | -98.39                       | 4,190.76                      | 6,049.80          | 7,420.91                    | 7,319.73                     | 101.18                         | 73.347                   |                                   |
| 2,500.00                                                       | 2,396.14                   | 2,346.14                   | 2,346.14                   | 11.71                  | 93.85              | -98.70                       | 4,190.76                      | 6,049.80          | 7,428.25                    | 7,322.77                     | 105.48                         | 70.421                   |                                   |
| 2,600.00                                                       | 2,485.73                   | 2,435.73                   | 2,435.73                   | 12.45                  | 97.43              | -99.00                       | 4,190.76                      | 6,049.80          | 7,435.86                    | 7,326.06                     | 109.80                         | 67.724                   |                                   |
| 2,700.00                                                       | 2,575.32                   | 2,525.32                   | 2,525.32                   | 13.21                  | 101.01             | -99.30                       | 4,190.76                      | 6,049.80          | 7,443.72                    | 7,329.60                     | 114.12                         | 65.230                   |                                   |
| 2,800.00                                                       | 2,664.92                   | 2,614.92                   | 2,614.92                   | 13.96                  | 104.60             | -99.61                       | 4,190.76                      | 6,049.80          | 7,451.83                    | 7,333.39                     | 118.44                         | 62.917                   |                                   |
| 2,900.00                                                       | 2,754.51                   | 2,704.51                   | 2,704.51                   | 14.72                  | 108.18             | -99.91                       | 4,190.76                      | 6,049.80          | 7,460.21                    | 7,337.44                     | 122.77                         | 60.768                   |                                   |
| 3,000.00                                                       | 2,844.10                   | 2,794.10                   | 2,794.10                   | 15.49                  | 111.76             | -100.21                      | 4,190.76                      | 6,049.80          | 7,468.83                    | 7,341.74                     | 127.09                         | 58.766                   |                                   |
| 3,100.00                                                       | 2,933.70                   | 2,883.70                   | 2,883.70                   | 16.26                  | 115.35             | -100.51                      | 4,190.76                      | 6,049.80          | 7,477.72                    | 7,346.29                     | 131.43                         | 56.897                   |                                   |
| 3,114.47                                                       | 2,946.66                   | 2,896.66                   | 2,896.66                   | 16.37                  | 115.87             | -100.56                      | 4,190.76                      | 6,049.80          | 7,479.02                    | 7,346.97                     | 132.05                         | 56.637                   |                                   |
| 3,200.00                                                       | 3,024.12                   | 2,974.12                   | 2,974.12                   | 17.01                  | 118.96             | -101.02                      | 4,190.76                      | 6,049.80          | 7,486.49                    | 7,350.72                     | 135.77                         | 55.142                   |                                   |
| 3,300.00                                                       | 3,116.62                   | 3,066.62                   | 3,066.62                   | 17.69                  | 122.66             | -101.52                      | 4,190.76                      | 6,049.80          | 7,494.49                    | 7,354.36                     | 140.13                         | 53.482                   |                                   |
| 3,400.00                                                       | 3,210.99                   | 3,160.99                   | 3,160.99                   | 18.31                  | 126.44             | -101.97                      | 4,190.76                      | 6,049.80          | 7,501.60                    | 7,357.10                     | 144.50                         | 51.913                   |                                   |
| 3,500.00                                                       | 3,306.96                   | 3,256.96                   | 3,256.96                   | 18.86                  | 130.28             | -102.35                      | 4,190.76                      | 6,049.80          | 7,507.75                    | 7,358.87                     | 148.88                         | 50.429                   |                                   |
| 3,600.00                                                       | 3,404.26                   | 3,354.26                   | 3,354.26                   | 19.35                  | 134.17             | -102.67                      | 4,190.76                      | 6,049.80          | 7,512.87                    | 7,359.62                     | 153.24                         | 49.026                   |                                   |
| 3,700.00                                                       | 3,502.64                   | 3,452.64                   | 3,452.64                   | 19.77                  | 138.11             | -102.92                      | 4,190.76                      | 6,049.80          | 7,516.89                    | 7,359.30                     | 157.59                         | 47.698                   |                                   |
| 3,800.00                                                       | 3,601.81                   | 3,551.81                   | 3,551.81                   | 20.14                  | 142.07             | -103.09                      | 4,190.76                      | 6,049.80          | 7,519.77                    | 7,357.85                     | 161.92                         | 46.441                   |                                   |
| 3,900.00                                                       | 3,701.52                   | 3,651.52                   | 3,651.52                   | 20.45                  | 146.06             | -103.20                      | 4,190.76                      | 6,049.80          | 7,521.49                    | 7,355.27                     | 166.21                         | 45.252                   |                                   |
| 3,993.52                                                       | 3,795.00                   | 3,745.00                   | 3,745.00                   | 20.68                  | 149.80             | 47.82                        | 4,190.76                      | 6,049.80          | 7,522.01                    | 7,351.82                     | 170.19                         | 44.198                   |                                   |
| 4,000.00                                                       | 3,801.48                   | 3,751.48                   | 3,751.48                   | 20.69                  | 150.06             | 47.82                        | 4,190.76                      | 6,049.80          | 7,522.01                    | 7,351.55                     | 170.46                         | 44.128                   |                                   |
| 4,100.00                                                       | 3,901.48                   | 3,851.48                   | 3,851.48                   | 20.91                  | 154.06             | 47.82                        | 4,190.76                      | 6,049.80          | 7,522.01                    | 7,347.33                     | 174.68                         | 43.061                   |                                   |
| 4,200.00                                                       | 4,001.48                   | 3,951.48                   | 3,951.48                   | 21.13                  | 158.06             | 47.82                        | 4,190.76                      | 6,049.80          | 7,522.01                    | 7,343.10                     | 178.91                         | 42.044                   |                                   |
| 4,300.00                                                       | 4,101.48                   | 4,051.48                   | 4,051.48                   | 21.36                  | 162.06             | 47.82                        | 4,190.76                      | 6,049.80          | 7,522.01                    | 7,338.87                     | 183.14                         | 41.073                   |                                   |
| 4,400.00                                                       | 4,201.48                   | 4,151.48                   | 4,151.48                   | 21.59                  | 166.06             | 47.82                        | 4,190.76                      | 6,049.80          | 7,522.01                    | 7,334.64                     | 187.37                         | 40.145                   |                                   |
| 4,500.00                                                       | 4,301.48                   | 4,251.48                   | 4,251.48                   | 21.82                  | 170.06             | 47.82                        | 4,190.76                      | 6,049.80          | 7,522.01                    | 7,330.41                     | 191.60                         | 39.258                   |                                   |
| 4,600.00                                                       | 4,401.48                   | 4,351.48                   | 4,351.48                   | 22.05                  | 174.06             | 47.82                        | 4,190.76                      | 6,049.80          | 7,522.01                    | 7,326.17                     | 195.84                         | 38.408                   |                                   |
| 4,700.00                                                       | 4,501.48                   | 4,451.48                   | 4,451.48                   | 22.29                  | 178.06             | 47.82                        | 4,190.76                      | 6,049.80          | 7,522.01                    | 7,321.92                     | 200.09                         | 37.594                   |                                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |
|----------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|------------------------------------|--------------------------|
| <b>Offset Design:</b> Calloway Pad - Calloway LS 002 - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  | <b>Offset Site Error:</b>          | 0.00 ft                  |
| <b>Survey Program:</b> 100-UNKNOWN                             |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  | <b>Offset Well Error:</b>          | 0.00 ft                  |
| <b>Reference</b>                                               |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Rule Assigned:</b>              |                          |
| <b>Measured Depth<br/>(ft)</b>                                 | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> | <b>Minimum Separation<br/>(ft)</b> | <b>Separation Factor</b> |
| 4,800.00                                                       | 4,601.48                       | 4,551.48                       | 4,551.48                       | 22.53                     | 182.06                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,522.01                        | 7,317.68                         | 204.33                             | 36.813                   |
| 4,900.00                                                       | 4,701.48                       | 4,651.48                       | 4,651.48                       | 22.78                     | 186.06                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,522.01                        | 7,313.43                         | 208.58                             | 36.063                   |
| 5,000.00                                                       | 4,801.48                       | 4,751.48                       | 4,751.48                       | 23.03                     | 190.06                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,522.01                        | 7,309.18                         | 212.83                             | 35.342                   |
| 5,100.00                                                       | 4,901.48                       | 4,851.48                       | 4,851.48                       | 23.28                     | 194.06                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,522.01                        | 7,304.92                         | 217.09                             | 34.650                   |
| 5,200.00                                                       | 5,001.48                       | 4,951.48                       | 4,951.48                       | 23.53                     | 198.06                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,522.01                        | 7,300.67                         | 221.34                             | 33.983                   |
| 5,300.00                                                       | 5,101.48                       | 5,051.48                       | 5,051.48                       | 23.79                     | 202.06                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,522.01                        | 7,296.41                         | 225.60                             | 33.342                   |
| 5,400.00                                                       | 5,201.48                       | 5,151.48                       | 5,151.48                       | 24.05                     | 206.06                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,522.01                        | 7,292.14                         | 229.87                             | 32.723                   |
| 5,500.00                                                       | 5,301.48                       | 5,251.48                       | 5,251.48                       | 24.31                     | 210.06                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,522.01                        | 7,287.88                         | 234.13                             | 32.127                   |
| 5,600.00                                                       | 5,401.48                       | 5,351.48                       | 5,351.48                       | 24.57                     | 214.06                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,522.01                        | 7,283.61                         | 238.40                             | 31.552                   |
| 5,700.00                                                       | 5,501.48                       | 5,451.48                       | 5,451.48                       | 24.84                     | 218.06                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,522.01                        | 7,279.34                         | 242.67                             | 30.997                   |
| 5,800.00                                                       | 5,601.48                       | 5,551.48                       | 5,551.48                       | 25.11                     | 222.06                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,522.01                        | 7,275.07                         | 246.94                             | 30.461                   |
| 5,900.00                                                       | 5,701.48                       | 5,651.48                       | 5,651.48                       | 25.38                     | 226.06                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,522.01                        | 7,270.80                         | 251.21                             | 29.943 ES                |
| 6,000.00                                                       | 5,801.48                       | 5,659.00                       | 5,659.00                       | 25.65                     | 226.36                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,522.58                        | 7,270.81                         | 251.77                             | 29.879                   |
| 6,100.00                                                       | 5,901.48                       | 5,659.00                       | 5,659.00                       | 25.93                     | 226.36                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,524.47                        | 7,272.50                         | 251.97                             | 29.862                   |
| 6,200.00                                                       | 6,001.48                       | 5,659.00                       | 5,659.00                       | 26.20                     | 226.36                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,527.70                        | 7,275.56                         | 252.14                             | 29.855 SF                |
| 6,300.00                                                       | 6,101.48                       | 5,659.00                       | 5,659.00                       | 26.48                     | 226.36                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,532.24                        | 7,279.98                         | 252.26                             | 29.859                   |
| 6,400.00                                                       | 6,201.48                       | 5,659.00                       | 5,659.00                       | 26.76                     | 226.36                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,538.12                        | 7,285.77                         | 252.35                             | 29.872                   |
| 6,500.00                                                       | 6,301.48                       | 5,659.00                       | 5,659.00                       | 27.05                     | 226.36                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,545.31                        | 7,292.92                         | 252.39                             | 29.896                   |
| 6,600.00                                                       | 6,401.48                       | 5,659.00                       | 5,659.00                       | 27.33                     | 226.36                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,553.82                        | 7,301.43                         | 252.39                             | 29.930                   |
| 6,700.00                                                       | 6,501.48                       | 5,659.00                       | 5,659.00                       | 27.62                     | 226.36                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,563.64                        | 7,311.30                         | 252.34                             | 29.973                   |
| 6,800.00                                                       | 6,601.48                       | 5,659.00                       | 5,659.00                       | 27.90                     | 226.36                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,574.77                        | 7,322.51                         | 252.26                             | 30.027                   |
| 6,883.52                                                       | 6,685.00                       | 5,659.00                       | 5,659.00                       | 28.15                     | 226.36                 | 47.82                            | 4,190.76                      | 6,049.80              | 7,585.07                        | 7,332.90                         | 252.16                             | 30.080                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                      |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                          |                           |         |
|----------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------|--------------------|------------------------------|-------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - Calloway LS 003 (P/A) - OH - OH |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                          | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 133-INCLINOMETER                              |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                          | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                                     | <b>Offset</b>              | <b>Semi Major Axis</b>     |                            | <b>Distance</b>       |                    | <b>Rule Assigned:</b>        |                   | <b>Warning</b>    |                             |                              |                                |                          |                           |         |
| <b>Measured Depth (ft)</b>                                           | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b> | <b>Offset (ft)</b> | <b>Highside Toolface (°)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> |                           |         |
| 0.00                                                                 | 0.00                       | 0.00                       | 0.00                       | 0.00                  | 0.00               | 72.58                        | 1,707.80          | 5,441.76          | 5,703.49                    |                              |                                |                          |                           |         |
| 100.00                                                               | 100.00                     | 77.00                      | 77.00                      | 0.30                  | 2.34               | 72.58                        | 1,707.80          | 5,441.76          | 5,703.45                    | 5,700.81                     | 2.64                           | 2,163.667                |                           |         |
| 200.00                                                               | 200.00                     | 177.00                     | 177.00                     | 0.66                  | 5.38               | 72.58                        | 1,707.80          | 5,441.76          | 5,703.45                    | 5,697.41                     | 6.03                           | 945.640                  |                           |         |
| 300.00                                                               | 300.00                     | 277.00                     | 277.00                     | 1.01                  | 8.41               | 72.58                        | 1,707.80          | 5,441.76          | 5,703.45                    | 5,694.02                     | 9.43                           | 605.036                  |                           |         |
| 400.00                                                               | 400.00                     | 377.00                     | 377.00                     | 1.37                  | 11.45              | 72.58                        | 1,707.80          | 5,441.76          | 5,703.45                    | 5,690.62                     | 12.82                          | 444.820                  |                           |         |
| 500.00                                                               | 500.00                     | 477.00                     | 477.00                     | 1.73                  | 14.49              | 72.58                        | 1,707.80          | 5,441.76          | 5,703.45                    | 5,687.23                     | 16.22                          | 351.690                  |                           |         |
| 600.00                                                               | 600.00                     | 577.00                     | 577.00                     | 2.09                  | 17.52              | 72.58                        | 1,707.80          | 5,441.76          | 5,703.45                    | 5,683.83                     | 19.61                          | 290.806                  |                           |         |
| 700.00                                                               | 700.00                     | 677.65                     | 677.65                     | 2.45                  | 20.58              | 72.57                        | 1,708.88          | 5,441.76          | 5,703.77                    | 5,680.74                     | 23.03                          | 247.692                  |                           |         |
| 800.00                                                               | 800.00                     | 779.17                     | 779.16                     | 2.81                  | 23.66              | 72.57                        | 1,708.80          | 5,441.76          | 5,703.75                    | 5,677.28                     | 26.47                          | 215.488                  |                           |         |
| 900.00                                                               | 900.00                     | 880.68                     | 880.67                     | 3.17                  | 26.74              | 72.57                        | 1,708.63          | 5,441.76          | 5,703.69                    | 5,673.78                     | 29.91                          | 190.694                  |                           |         |
| 918.00                                                               | 918.00                     | 898.96                     | 898.95                     | 3.23                  | 27.30              | 72.57                        | 1,708.59          | 5,441.76          | 5,703.68                    | 5,673.15                     | 30.53                          | 186.824                  |                           |         |
| 1,000.00                                                             | 999.97                     | 982.18                     | 982.17                     | 3.51                  | 29.83              | -78.51                       | 1,708.36          | 5,441.76          | 5,703.27                    | 5,669.93                     | 33.34                          | 171.079                  |                           |         |
| 1,100.00                                                             | 1,099.72                   | 1,083.47                   | 1,083.45                   | 3.84                  | 32.90              | -78.62                       | 1,708.01          | 5,441.76          | 5,701.79                    | 5,665.05                     | 36.74                          | 155.183                  |                           |         |
| 1,200.00                                                             | 1,198.98                   | 1,176.07                   | 1,175.98                   | 4.18                  | 35.72              | -78.80                       | 1,707.80          | 5,441.76          | 5,699.33                    | 5,659.44                     | 39.89                          | 142.862                  |                           |         |
| 1,300.00                                                             | 1,297.46                   | 1,274.55                   | 1,274.46                   | 4.54                  | 38.71              | -79.07                       | 1,707.80          | 5,441.76          | 5,695.96                    | 5,652.72                     | 43.24                          | 131.729                  |                           |         |
| 1,400.00                                                             | 1,394.90                   | 1,374.31                   | 1,374.21                   | 4.92                  | 41.74              | -79.42                       | 1,708.69          | 5,441.76          | 5,691.94                    | 5,645.29                     | 46.65                          | 122.019                  |                           |         |
| 1,500.00                                                             | 1,491.03                   | 1,478.28                   | 1,478.18                   | 5.33                  | 44.89              | -79.86                       | 1,708.32          | 5,441.76          | 5,686.69                    | 5,636.48                     | 50.22                          | 113.243                  |                           |         |
| 1,600.00                                                             | 1,585.60                   | 1,562.75                   | 1,562.60                   | 5.79                  | 47.46              | -80.31                       | 1,707.80          | 5,441.76          | 5,680.60                    | 5,627.37                     | 53.24                          | 106.707                  |                           |         |
| 1,700.00                                                             | 1,678.33                   | 1,655.49                   | 1,655.33                   | 6.30                  | 50.27              | -80.85                       | 1,707.80          | 5,441.76          | 5,674.01                    | 5,617.46                     | 56.56                          | 100.323                  |                           |         |
| 1,797.05                                                             | 1,766.34                   | 1,747.43                   | 1,747.27                   | 6.85                  | 53.07              | -81.45                       | 1,708.45          | 5,441.76          | 5,667.30                    | 5,607.40                     | 59.90                          | 94.611                   |                           |         |
| 1,800.00                                                             | 1,768.98                   | 1,750.38                   | 1,750.22                   | 6.87                  | 53.16              | -81.46                       | 1,708.44          | 5,441.76          | 5,667.08                    | 5,607.07                     | 60.01                          | 94.438                   |                           |         |
| 1,900.00                                                             | 1,858.58                   | 1,850.70                   | 1,850.53                   | 7.49                  | 56.20              | -81.90                       | 1,707.94          | 5,441.76          | 5,659.74                    | 5,596.07                     | 63.68                          | 88.884                   |                           |         |
| 2,000.00                                                             | 1,948.17                   | 1,925.37                   | 1,925.17                   | 8.15                  | 58.47              | -82.24                       | 1,707.80          | 5,441.76          | 5,652.82                    | 5,586.22                     | 66.60                          | 84.881                   |                           |         |
| 2,100.00                                                             | 2,037.76                   | 2,014.97                   | 2,014.76                   | 8.83                  | 61.19              | -82.64                       | 1,707.80          | 5,441.76          | 5,646.31                    | 5,576.31                     | 70.00                          | 80.666                   |                           |         |
| 2,200.00                                                             | 2,127.36                   | 2,107.45                   | 2,107.24                   | 9.53                  | 64.00              | -83.06                       | 1,708.67          | 5,441.76          | 5,640.45                    | 5,566.95                     | 73.50                          | 76.738                   |                           |         |
| 2,300.00                                                             | 2,216.95                   | 2,205.77                   | 2,205.56                   | 10.25                 | 66.99              | -83.50                       | 1,708.33          | 5,441.76          | 5,634.52                    | 5,557.32                     | 77.20                          | 72.984                   |                           |         |
| 2,400.00                                                             | 2,306.54                   | 2,283.81                   | 2,283.54                   | 10.97                 | 69.36              | -83.84                       | 1,707.80          | 5,441.76          | 5,628.83                    | 5,548.53                     | 80.30                          | 70.099                   |                           |         |
| 2,500.00                                                             | 2,396.14                   | 2,383.41                   | 2,383.14                   | 11.71                 | 72.38              | -84.29                       | 1,708.01          | 5,441.76          | 5,623.78                    | 5,539.72                     | 84.06                          | 66.901                   |                           |         |
| 2,600.00                                                             | 2,485.73                   | 2,421.00                   | 2,420.71                   | 12.45                 | 73.52              | -84.46                       | 1,707.80          | 5,441.76          | 5,619.06                    | 5,533.11                     | 85.95                          | 65.378                   |                           |         |
| 2,700.00                                                             | 2,575.32                   | 2,421.00                   | 2,420.71                   | 13.21                 | 73.52              | -84.46                       | 1,707.80          | 5,441.76          | 5,616.00                    | 5,529.32                     | 86.68                          | 64.788                   |                           |         |
| 2,799.43                                                             | 2,664.41                   | 2,421.00                   | 2,420.71                   | 13.96                 | 73.52              | -84.46                       | 1,707.80          | 5,441.76          | 5,614.72                    | 5,527.33                     | 87.40                          | 64.243                   |                           |         |
| 2,800.00                                                             | 2,664.92                   | 2,421.00                   | 2,420.71                   | 13.96                 | 73.52              | -84.46                       | 1,707.80          | 5,441.76          | 5,614.72                    | 5,527.32                     | 87.40                          | 64.240                   |                           |         |
| 2,821.78                                                             | 2,684.43                   | 2,421.00                   | 2,420.71                   | 14.13                 | 73.52              | -84.46                       | 1,707.80          | 5,441.76          | 5,614.68                    | 5,527.12                     | 87.56                          | 64.126 CC                |                           |         |
| 2,900.00                                                             | 2,754.51                   | 2,421.00                   | 2,420.71                   | 14.72                 | 73.52              | -84.46                       | 1,707.80          | 5,441.76          | 5,615.22                    | 5,527.12                     | 88.10                          | 63.734 ES                |                           |         |
| 3,000.00                                                             | 2,844.10                   | 2,421.00                   | 2,420.71                   | 15.49                 | 73.52              | -84.46                       | 1,707.80          | 5,441.76          | 5,617.51                    | 5,528.72                     | 88.79                          | 63.269                   |                           |         |
| 3,100.00                                                             | 2,933.70                   | 2,421.00                   | 2,420.71                   | 16.26                 | 73.52              | -84.46                       | 1,707.80          | 5,441.76          | 5,621.57                    | 5,532.12                     | 89.45                          | 62.846                   |                           |         |
| 3,114.47                                                             | 2,946.66                   | 2,421.00                   | 2,420.71                   | 16.37                 | 73.52              | -84.46                       | 1,707.80          | 5,441.76          | 5,622.30                    | 5,532.76                     | 89.54                          | 62.788                   |                           |         |
| 3,200.00                                                             | 3,024.12                   | 2,421.00                   | 2,420.71                   | 17.01                 | 73.52              | -84.62                       | 1,707.80          | 5,441.76          | 5,627.59                    | 5,537.52                     | 90.07                          | 62.484                   |                           |         |
| 3,300.00                                                             | 3,116.62                   | 2,421.00                   | 2,420.71                   | 17.69                 | 73.52              | -84.87                       | 1,707.80          | 5,441.76          | 5,635.86                    | 5,545.27                     | 90.59                          | 62.214                   |                           |         |
| 3,400.00                                                             | 3,210.99                   | 2,421.00                   | 2,420.71                   | 18.31                 | 73.52              | -85.18                       | 1,707.80          | 5,441.76          | 5,646.35                    | 5,555.34                     | 91.01                          | 62.038                   |                           |         |
| 3,500.00                                                             | 3,306.96                   | 2,421.00                   | 2,420.71                   | 18.86                 | 73.52              | -85.56                       | 1,707.80          | 5,441.76          | 5,659.03                    | 5,567.68                     | 91.35                          | 61.951 SF                |                           |         |
| 3,600.00                                                             | 3,404.26                   | 2,421.00                   | 2,420.71                   | 19.35                 | 73.52              | -86.01                       | 1,707.80          | 5,441.76          | 5,673.84                    | 5,582.26                     | 91.58                          | 61.952                   |                           |         |
| 3,700.00                                                             | 3,502.64                   | 2,421.00                   | 2,420.71                   | 19.77                 | 73.52              | -86.53                       | 1,707.80          | 5,441.76          | 5,690.73                    | 5,599.00                     | 91.73                          | 62.038                   |                           |         |
| 3,800.00                                                             | 3,601.81                   | 2,421.00                   | 2,420.71                   | 20.14                 | 73.52              | -87.10                       | 1,707.80          | 5,441.76          | 5,709.63                    | 5,617.84                     | 91.79                          | 62.204                   |                           |         |
| 3,900.00                                                             | 3,701.52                   | 2,421.00                   | 2,420.71                   | 20.45                 | 73.52              | -87.74                       | 1,707.80          | 5,441.76          | 5,730.47                    | 5,638.71                     | 91.77                          | 62.447                   |                           |         |
| 3,993.52                                                             | 3,795.00                   | 2,421.00                   | 2,420.71                   | 20.68                 | 73.52              | 62.66                        | 1,707.80          | 5,441.76          | 5,751.65                    | 5,659.99                     | 91.66                          | 62.747                   |                           |         |
| 4,000.00                                                             | 3,801.48                   | 2,421.00                   | 2,420.71                   | 20.69                 | 73.52              | 62.66                        | 1,707.80          | 5,441.76          | 5,753.18                    | 5,661.52                     | 91.66                          | 62.770                   |                           |         |
| 4,100.00                                                             | 3,901.48                   | 2,421.00                   | 2,420.71                   | 20.91                 | 73.52              | 62.66                        | 1,707.80          | 5,441.76          | 5,777.60                    | 5,686.10                     | 91.49                          | 63.148                   |                           |         |
| 4,200.00                                                             | 4,001.48                   | 2,421.00                   | 2,420.71                   | 21.13                 | 73.52              | 62.66                        | 1,707.80          | 5,441.76          | 5,803.63                    | 5,712.32                     | 91.31                          | 63.558                   |                           |         |
| 4,300.00                                                             | 4,101.48                   | 2,421.00                   | 2,420.71                   | 21.36                 | 73.52              | 62.66                        | 1,707.80          | 5,441.76          | 5,831.27                    | 5,740.16                     | 91.11                          | 64.001                   |                           |         |
| 4,400.00                                                             | 4,201.48                   | 2,421.00                   | 2,420.71                   | 21.59                 | 73.52              | 62.66                        | 1,707.80          | 5,441.76          | 5,860.48                    | 5,769.59                     | 90.89                          | 64.475                   |                           |         |
| 4,500.00                                                             | 4,301.48                   | 2,421.00                   | 2,420.71                   | 21.82                 | 73.52              | 62.66                        | 1,707.80          | 5,441.76          | 5,891.25                    | 5,800.59                     | 90.66                          | 64.981                   |                           |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                      |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |
|----------------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|------------------------------------|--------------------------|
| <b>Offset Design:</b> Calloway Pad - Calloway LS 003 (P/A) - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  | <b>Offset Site Error:</b>          | 0.00 ft                  |
| <b>Survey Program:</b> 133-INCLINOMETER                              |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  | <b>Offset Well Error:</b>          | 0.00 ft                  |
| <b>Reference</b>                                                     |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Rule Assigned:</b>              |                          |
| <b>Measured Depth<br/>(ft)</b>                                       | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> | <b>Minimum Separation<br/>(ft)</b> | <b>Separation Factor</b> |
| 4,600.00                                                             | 4,401.48                       | 2,421.00                       | 2,420.71                       | 22.05                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 5,923.54                        | 5,833.13                         | 90.41                              | 65.519                   |
| 4,700.00                                                             | 4,501.48                       | 2,421.00                       | 2,420.71                       | 22.29                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 5,957.34                        | 5,867.20                         | 90.14                              | 66.087                   |
| 4,800.00                                                             | 4,601.48                       | 2,421.00                       | 2,420.71                       | 22.53                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 5,992.62                        | 5,902.75                         | 89.86                              | 66.685                   |
| 4,900.00                                                             | 4,701.48                       | 2,421.00                       | 2,420.71                       | 22.78                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,029.35                        | 5,939.78                         | 89.57                              | 67.314                   |
| 5,000.00                                                             | 4,801.48                       | 2,421.00                       | 2,420.71                       | 23.03                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,067.50                        | 5,978.24                         | 89.26                              | 67.973                   |
| 5,100.00                                                             | 4,901.48                       | 2,421.00                       | 2,420.71                       | 23.28                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,107.06                        | 6,018.11                         | 88.94                              | 68.661                   |
| 5,200.00                                                             | 5,001.48                       | 2,421.00                       | 2,420.71                       | 23.53                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,147.98                        | 6,059.37                         | 88.61                              | 69.379                   |
| 5,300.00                                                             | 5,101.48                       | 2,421.00                       | 2,420.71                       | 23.79                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,190.25                        | 6,101.98                         | 88.27                              | 70.125                   |
| 5,400.00                                                             | 5,201.48                       | 2,421.00                       | 2,420.71                       | 24.05                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,233.84                        | 6,145.92                         | 87.93                              | 70.899                   |
| 5,500.00                                                             | 5,301.48                       | 2,421.00                       | 2,420.71                       | 24.31                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,278.72                        | 6,191.16                         | 87.57                              | 71.702                   |
| 5,600.00                                                             | 5,401.48                       | 2,421.00                       | 2,420.71                       | 24.57                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,324.86                        | 6,237.66                         | 87.20                              | 72.532                   |
| 5,700.00                                                             | 5,501.48                       | 2,421.00                       | 2,420.71                       | 24.84                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,372.24                        | 6,285.41                         | 86.83                              | 73.389                   |
| 5,800.00                                                             | 5,601.48                       | 2,421.00                       | 2,420.71                       | 25.11                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,420.83                        | 6,334.38                         | 86.45                              | 74.272                   |
| 5,900.00                                                             | 5,701.48                       | 2,421.00                       | 2,420.71                       | 25.38                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,470.59                        | 6,384.53                         | 86.07                              | 75.182                   |
| 6,000.00                                                             | 5,801.48                       | 2,421.00                       | 2,420.71                       | 25.65                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,521.51                        | 6,435.84                         | 85.68                              | 76.118                   |
| 6,100.00                                                             | 5,901.48                       | 2,421.00                       | 2,420.71                       | 25.93                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,573.56                        | 6,488.28                         | 85.28                              | 77.079                   |
| 6,200.00                                                             | 6,001.48                       | 2,421.00                       | 2,420.71                       | 26.20                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,626.71                        | 6,541.82                         | 84.89                              | 78.065                   |
| 6,300.00                                                             | 6,101.48                       | 2,421.00                       | 2,420.71                       | 26.48                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,680.93                        | 6,596.44                         | 84.49                              | 79.075                   |
| 6,400.00                                                             | 6,201.48                       | 2,421.00                       | 2,420.71                       | 26.76                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,736.20                        | 6,652.11                         | 84.09                              | 80.109                   |
| 6,500.00                                                             | 6,301.48                       | 2,421.00                       | 2,420.71                       | 27.05                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,792.49                        | 6,708.80                         | 83.69                              | 81.166                   |
| 6,600.00                                                             | 6,401.48                       | 2,421.00                       | 2,420.71                       | 27.33                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,849.78                        | 6,766.49                         | 83.28                              | 82.246                   |
| 6,700.00                                                             | 6,501.48                       | 2,421.00                       | 2,420.71                       | 27.62                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,908.04                        | 6,825.16                         | 82.88                              | 83.348                   |
| 6,800.00                                                             | 6,601.48                       | 2,421.00                       | 2,420.71                       | 27.90                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 6,967.25                        | 6,884.77                         | 82.48                              | 84.472                   |
| 6,883.52                                                             | 6,685.00                       | 2,421.00                       | 2,420.71                       | 28.15                     | 73.52                  | 62.66                            | 1,707.80                      | 5,441.76              | 7,017.41                        | 6,935.26                         | 82.15                              | 85.427                   |



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |                                   |
|----------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|------------------------------------|--------------------------|-----------------------------------|
| <b>Offset Design:</b> Calloway Pad - Ella Rose 1 012 - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          | <b>Offset Site Error:</b> 0.00 ft |
| <b>Survey Program:</b> 358-MWD SDI                             |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          | <b>Offset Well Error:</b> 0.00 ft |
| <b>Reference</b>                                               |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Minimum Separation<br/>(ft)</b> | <b>Separation Factor</b> | <b>Warning</b>                    |
| <b>Measured Depth<br/>(ft)</b>                                 | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> |                                    |                          |                                   |
| 0.00                                                           | 0.00                           | 0.00                           | 0.00                           | 0.00                      | 0.00                   | 59.12                            | 3,575.50                      | 5,979.72              | 6,967.31                        |                                  |                                    |                          |                                   |
| 100.00                                                         | 100.00                         | 0.00                           | 0.00                           | 0.30                      | 0.00                   | 59.12                            | 3,575.50                      | 5,979.72              | 6,967.35                        | 6,967.05                         | 0.30                               | N/A                      |                                   |
| 200.00                                                         | 200.00                         | 108.04                         | 108.04                         | 0.66                      | 0.13                   | 59.13                            | 3,575.33                      | 5,980.22              | 6,967.65                        | 6,966.86                         | 0.78                               | 8,917.821                |                                   |
| 300.00                                                         | 300.00                         | 178.64                         | 178.63                         | 1.01                      | 0.21                   | 59.13                            | 3,575.04                      | 5,981.10              | 6,968.50                        | 6,967.28                         | 1.22                               | 5,704.693                |                                   |
| 400.00                                                         | 400.00                         | 249.23                         | 249.21                         | 1.37                      | 0.29                   | 59.14                            | 3,574.60                      | 5,982.42              | 6,969.78                        | 6,968.12                         | 1.66                               | 4,194.309                |                                   |
| 500.00                                                         | 500.00                         | 358.00                         | 357.94                         | 1.73                      | 0.42                   | 59.16                            | 3,573.64                      | 5,985.29              | 6,971.63                        | 6,969.48                         | 2.15                               | 3,248.902                |                                   |
| 600.00                                                         | 600.00                         | 441.21                         | 441.09                         | 2.09                      | 0.61                   | 59.18                            | 3,572.20                      | 5,987.93              | 6,973.41                        | 6,970.72                         | 2.69                               | 2,590.303                |                                   |
| 700.00                                                         | 700.00                         | 1,277.74                       | 1,264.57                       | 2.45                      | 3.54                   | 60.26                            | 3,444.50                      | 6,028.81              | 6,970.31                        | 6,964.30                         | 6.01                               | 1,159.913                |                                   |
| 800.00                                                         | 800.00                         | 1,700.43                       | 1,662.11                       | 2.81                      | 6.17                   | 61.38                            | 3,304.38                      | 6,054.44              | 6,957.13                        | 6,948.16                         | 8.97                               | 775.856                  |                                   |
| 900.00                                                         | 900.00                         | 1,735.00                       | 1,693.78                       | 3.17                      | 6.41                   | 61.49                            | 3,290.79                      | 6,057.24              | 6,944.52                        | 6,934.95                         | 9.57                               | 725.342                  |                                   |
| 918.00                                                         | 918.00                         | 1,735.00                       | 1,693.78                       | 3.23                      | 6.41                   | 61.49                            | 3,290.79                      | 6,057.24              | 6,942.36                        | 6,932.72                         | 9.64                               | 720.159                  |                                   |
| 1,000.00                                                       | 999.97                         | 1,776.37                       | 1,731.71                       | 3.51                      | 6.67                   | -89.73                           | 3,274.69                      | 6,060.87              | 6,932.82                        | 6,922.62                         | 10.19                              | 680.206                  |                                   |
| 1,100.00                                                       | 1,099.72                       | 1,828.61                       | 1,779.76                       | 3.84                      | 6.99                   | -89.92                           | 3,254.78                      | 6,065.70              | 6,921.95                        | 6,911.10                         | 10.85                              | 637.733                  |                                   |
| 1,200.00                                                       | 1,198.98                       | 1,925.28                       | 1,868.74                       | 4.18                      | 7.62                   | -90.03                           | 3,218.09                      | 6,074.86              | 6,911.52                        | 6,899.68                         | 11.84                              | 583.844                  |                                   |
| 1,300.00                                                       | 1,297.46                       | 2,137.25                       | 2,061.88                       | 4.54                      | 9.23                   | -89.95                           | 3,133.07                      | 6,094.69              | 6,899.66                        | 6,885.84                         | 13.82                              | 499.179                  |                                   |
| 1,400.00                                                       | 1,394.90                       | 2,176.00                       | 2,097.23                       | 4.92                      | 9.50                   | -90.24                           | 3,117.59                      | 6,098.23              | 6,888.10                        | 6,873.61                         | 14.49                              | 475.382                  |                                   |
| 1,500.00                                                       | 1,491.03                       | 2,240.00                       | 2,155.70                       | 5.33                      | 9.95                   | -90.51                           | 3,092.26                      | 6,104.12              | 6,876.98                        | 6,861.61                         | 15.37                              | 447.562                  |                                   |
| 1,600.00                                                       | 1,585.60                       | 2,303.00                       | 2,213.14                       | 5.79                      | 10.43                  | -90.77                           | 3,067.18                      | 6,110.52              | 6,866.57                        | 6,850.26                         | 16.31                              | 421.106                  |                                   |
| 1,700.00                                                       | 1,678.33                       | 2,429.00                       | 2,326.85                       | 6.30                      | 11.44                  | -91.03                           | 3,014.86                      | 6,124.91              | 6,856.35                        | 6,838.50                         | 17.85                              | 384.070                  |                                   |
| 1,797.05                                                       | 1,766.34                       | 2,493.00                       | 2,384.20                       | 6.85                      | 11.93                  | -91.31                           | 2,987.54                      | 6,132.64              | 6,846.57                        | 6,827.65                         | 18.92                              | 361.865                  |                                   |
| 1,800.00                                                       | 1,768.98                       | 2,493.00                       | 2,384.20                       | 6.87                      | 11.93                  | -91.31                           | 2,987.54                      | 6,132.64              | 6,846.29                        | 6,827.35                         | 18.94                              | 361.507                  |                                   |
| 1,900.00                                                       | 1,858.58                       | 2,556.00                       | 2,441.04                       | 7.49                      | 12.37                  | -91.33                           | 2,961.43                      | 6,140.18              | 6,836.80                        | 6,816.79                         | 20.02                              | 341.536                  |                                   |
| 2,000.00                                                       | 1,948.17                       | 2,620.00                       | 2,499.35                       | 8.15                      | 12.80                  | -91.35                           | 2,936.17                      | 6,147.73              | 6,828.05                        | 6,806.92                         | 21.12                              | 323.273                  |                                   |
| 2,100.00                                                       | 2,037.76                       | 2,683.00                       | 2,557.35                       | 8.83                      | 13.21                  | -91.39                           | 2,912.61                      | 6,154.84              | 6,819.87                        | 6,797.64                         | 22.23                              | 306.844                  |                                   |
| 2,200.00                                                       | 2,127.36                       | 2,746.00                       | 2,616.17                       | 9.53                      | 13.59                  | -91.44                           | 2,890.95                      | 6,161.09              | 6,812.10                        | 6,788.78                         | 23.32                              | 292.162                  |                                   |
| 2,300.00                                                       | 2,216.95                       | 2,809.00                       | 2,675.95                       | 10.25                     | 13.93                  | -91.52                           | 2,871.73                      | 6,166.15              | 6,804.73                        | 6,780.35                         | 24.38                              | 279.140                  |                                   |
| 2,400.00                                                       | 2,306.54                       | 2,872.00                       | 2,736.44                       | 10.97                     | 14.24                  | -91.62                           | 2,854.71                      | 6,170.54              | 6,798.10                        | 6,772.69                         | 25.41                              | 267.495                  |                                   |
| 2,500.00                                                       | 2,396.14                       | 2,899.91                       | 2,763.41                       | 11.71                     | 14.37                  | -91.67                           | 2,847.80                      | 6,172.44              | 6,792.29                        | 6,766.02                         | 26.27                              | 258.512                  |                                   |
| 2,600.00                                                       | 2,485.73                       | 3,002.50                       | 2,863.16                       | 12.45                     | 14.81                  | -91.87                           | 2,824.62                      | 6,178.60              | 6,787.19                        | 6,759.73                         | 27.46                              | 247.199                  |                                   |
| 2,700.00                                                       | 2,575.32                       | 3,096.69                       | 2,955.34                       | 13.21                     | 15.18                  | -92.08                           | 2,805.71                      | 6,182.62              | 6,781.92                        | 6,753.36                         | 28.56                              | 237.486                  |                                   |
| 2,800.00                                                       | 2,664.92                       | 3,164.92                       | 3,022.40                       | 13.96                     | 15.42                  | -92.24                           | 2,793.29                      | 6,184.86              | 6,776.87                        | 6,747.32                         | 29.54                              | 229.380                  |                                   |
| 2,900.00                                                       | 2,754.51                       | 3,235.64                       | 3,092.11                       | 14.72                     | 15.66                  | -92.42                           | 2,781.58                      | 6,186.96              | 6,772.43                        | 6,741.91                         | 30.53                              | 221.861                  |                                   |
| 3,000.00                                                       | 2,844.10                       | 3,288.10                       | 3,143.97                       | 15.49                     | 15.82                  | -92.56                           | 2,773.85                      | 6,188.16              | 6,768.51                        | 6,737.08                         | 31.43                              | 215.323                  |                                   |
| 3,100.00                                                       | 2,933.70                       | 3,342.26                       | 3,197.71                       | 16.26                     | 15.97                  | -92.72                           | 2,767.19                      | 6,189.10              | 6,765.41                        | 6,733.08                         | 32.33                              | 209.265                  |                                   |
| 3,114.47                                                       | 2,946.66                       | 3,352.17                       | 3,207.56                       | 16.37                     | 15.99                  | -92.74                           | 2,766.11                      | 6,189.21              | 6,765.01                        | 6,732.55                         | 32.46                              | 208.395                  |                                   |
| 3,200.00                                                       | 3,024.12                       | 3,379.00                       | 3,234.26                       | 17.01                     | 16.06                  | -92.76                           | 2,763.41                      | 6,189.43              | 6,762.90                        | 6,729.75                         | 33.15                              | 204.008                  |                                   |
| 3,300.00                                                       | 3,116.62                       | 3,404.88                       | 3,260.03                       | 17.69                     | 16.11                  | -92.78                           | 2,761.14                      | 6,189.70              | 6,761.21                        | 6,727.34                         | 33.87                              | 199.617                  |                                   |
| 3,400.00                                                       | 3,210.99                       | 3,452.24                       | 3,307.28                       | 18.31                     | 16.20                  | -92.86                           | 2,757.99                      | 6,190.67              | 6,760.67                        | 6,726.10                         | 34.56                              | 195.595                  |                                   |
| 3,500.00                                                       | 3,306.96                       | 3,608.31                       | 3,463.13                       | 18.86                     | 16.45                  | -93.14                           | 2,750.14                      | 6,190.04              | 6,758.88                        | 6,723.54                         | 35.33                              | 191.280                  |                                   |
| 3,600.00                                                       | 3,404.26                       | 3,733.74                       | 3,588.44                       | 19.35                     | 16.63                  | -93.30                           | 2,744.64                      | 6,188.67              | 6,756.87                        | 6,720.88                         | 35.99                              | 187.768                  |                                   |
| 3,700.00                                                       | 3,502.64                       | 3,835.32                       | 3,689.92                       | 19.77                     | 16.79                  | -93.35                           | 2,740.32                      | 6,187.30              | 6,754.46                        | 6,717.92                         | 36.54                              | 184.838                  |                                   |
| 3,800.00                                                       | 3,601.81                       | 3,922.09                       | 3,776.61                       | 20.14                     | 16.91                  | -93.35                           | 2,736.77                      | 6,186.06              | 6,751.81                        | 6,714.78                         | 37.02                              | 182.371                  |                                   |
| 3,900.00                                                       | 3,701.52                       | 3,999.08                       | 3,853.53                       | 20.45                     | 17.02                  | -93.30                           | 2,733.81                      | 6,185.06              | 6,749.10                        | 6,711.66                         | 37.43                              | 180.291                  |                                   |
| 3,993.52                                                       | 3,795.00                       | 4,146.78                       | 4,001.10                       | 20.68                     | 17.24                  | 57.84                            | 2,728.17                      | 6,182.67              | 6,746.01                        | 6,708.15                         | 37.87                              | 178.159                  |                                   |
| 4,000.00                                                       | 3,801.48                       | 4,140.00                       | 3,994.33                       | 20.69                     | 17.23                  | 57.84                            | 2,728.45                      | 6,182.79              | 6,745.78                        | 6,707.91                         | 37.87                              | 178.125                  |                                   |
| 4,100.00                                                       | 3,901.48                       | 4,224.09                       | 4,078.34                       | 20.91                     | 17.36                  | 57.86                            | 2,725.12                      | 6,181.48              | 6,742.35                        | 6,704.14                         | 38.21                              | 176.451                  |                                   |
| 4,200.00                                                       | 4,001.48                       | 4,285.00                       | 4,139.20                       | 21.13                     | 17.45                  | 57.87                            | 2,722.81                      | 6,180.48              | 6,739.08                        | 6,700.56                         | 38.52                              | 174.947                  |                                   |
| 4,300.00                                                       | 4,101.48                       | 4,285.00                       | 4,139.20                       | 21.36                     | 17.45                  | 57.87                            | 2,722.81                      | 6,180.48              | 6,737.08                        | 6,698.33                         | 38.75                              | 173.867                  |                                   |
| 4,384.72                                                       | 4,186.20                       | 4,285.00                       | 4,139.20                       | 21.55                     | 17.45                  | 57.87                            | 2,722.81                      | 6,180.48              | 6,736.55                        | 6,697.61                         | 38.94                              | 173.005 CC               |                                   |
| 4,400.00                                                       | 4,201.48                       | 4,285.00                       | 4,139.20                       | 21.59                     | 17.45                  | 57.87                            | 2,722.81                      | 6,180.48              | 6,736.57                        | 6,697.60                         | 38.97                              | 172.856 ES               |                                   |
| 4,500.00                                                       | 4,301.48                       | 4,285.00                       | 4,139.20                       | 21.82                     | 17.45                  | 57.87                            | 2,722.81                      | 6,180.48              | 6,737.54                        | 6,698.35                         | 39.19                              | 171.914                  |                                   |
| 4,600.00                                                       | 4,401.48                       | 4,285.00                       | 4,139.20                       | 22.05                     | 17.45                  | 57.87                            | 2,722.81                      | 6,180.48              | 6,739.99                        | 6,700.58                         | 39.41                              | 171.039                  |                                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                                        |                              |
|----------------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|---------------------------|------------------------|--------------------------------------|-------------------------------|-----------------------|-------------------------------------|--------------------------------------|----------------------------------------|------------------------------|
| <b>Offset Design:</b> Calloway Pad - Ella Rose 1 012 - OH - OH |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      | <b>Offset Site Error:</b>              | 0.00 ft                      |
| <b>Survey Program:</b> 358-MWD SDI                             |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      | <b>Offset Well Error:</b>              | 0.00 ft                      |
| <b>Reference</b>                                               |                                    | <b>Offset</b>                      |                                    | <b>Semi Major Axis</b>    |                        | <b>Highside<br/>Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                     |                                      | <b>Rule Assigned:</b>                  |                              |
| <b>Measured<br/>Depth<br/>(ft)</b>                             | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Measured<br/>Depth<br/>(ft)</b> | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                      | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between<br/>Centres<br/>(ft)</b> | <b>Between<br/>Ellipses<br/>(ft)</b> | <b>Minimum<br/>Separation<br/>(ft)</b> | <b>Separation<br/>Factor</b> |
| 4,700.00                                                       | 4,501.48                           | 4,285.00                           | 4,139.20                           | 22.29                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 6,743.92                            | 6,704.31                             | 39.62                                  | 170.232                      |
| 4,800.00                                                       | 4,601.48                           | 4,285.00                           | 4,139.20                           | 22.53                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 6,749.34                            | 6,709.52                             | 39.82                                  | 169.491                      |
| 4,900.00                                                       | 4,701.48                           | 4,285.00                           | 4,139.20                           | 22.78                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 6,756.23                            | 6,716.21                             | 40.02                                  | 168.816                      |
| 5,000.00                                                       | 4,801.48                           | 4,285.00                           | 4,139.20                           | 23.03                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 6,764.59                            | 6,724.37                             | 40.22                                  | 168.205                      |
| 5,100.00                                                       | 4,901.48                           | 4,285.00                           | 4,139.20                           | 23.28                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 6,774.42                            | 6,734.01                             | 40.41                                  | 167.660                      |
| 5,200.00                                                       | 5,001.48                           | 4,285.00                           | 4,139.20                           | 23.53                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 6,785.70                            | 6,745.12                             | 40.59                                  | 167.177                      |
| 5,300.00                                                       | 5,101.48                           | 4,285.00                           | 4,139.20                           | 23.79                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 6,798.44                            | 6,757.68                             | 40.77                                  | 166.757                      |
| 5,400.00                                                       | 5,201.48                           | 4,285.00                           | 4,139.20                           | 24.05                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 6,812.63                            | 6,771.69                             | 40.94                                  | 166.399                      |
| 5,500.00                                                       | 5,301.48                           | 4,285.00                           | 4,139.20                           | 24.31                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 6,828.25                            | 6,787.14                             | 41.11                                  | 166.101                      |
| 5,600.00                                                       | 5,401.48                           | 4,285.00                           | 4,139.20                           | 24.57                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 6,845.29                            | 6,804.02                             | 41.27                                  | 165.862                      |
| 5,700.00                                                       | 5,501.48                           | 4,285.00                           | 4,139.20                           | 24.84                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 6,863.75                            | 6,822.32                             | 41.43                                  | 165.682                      |
| 5,800.00                                                       | 5,601.48                           | 4,285.00                           | 4,139.20                           | 25.11                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 6,883.61                            | 6,842.04                             | 41.58                                  | 165.560                      |
| 5,900.00                                                       | 5,701.48                           | 4,285.00                           | 4,139.20                           | 25.38                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 6,904.87                            | 6,863.14                             | 41.72                                  | 165.493                      |
| 6,000.00                                                       | 5,801.48                           | 4,285.00                           | 4,139.20                           | 25.65                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 6,927.50                            | 6,885.64                             | 41.86                                  | 165.482 SF                   |
| 6,100.00                                                       | 5,901.48                           | 4,285.00                           | 4,139.20                           | 25.93                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 6,951.50                            | 6,909.50                             | 42.00                                  | 165.525                      |
| 6,200.00                                                       | 6,001.48                           | 4,285.00                           | 4,139.20                           | 26.20                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 6,976.84                            | 6,934.72                             | 42.13                                  | 165.621                      |
| 6,300.00                                                       | 6,101.48                           | 4,285.00                           | 4,139.20                           | 26.48                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 7,003.53                            | 6,961.28                             | 42.25                                  | 165.769                      |
| 6,400.00                                                       | 6,201.48                           | 4,285.00                           | 4,139.20                           | 26.76                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 7,031.53                            | 6,989.17                             | 42.37                                  | 165.967                      |
| 6,500.00                                                       | 6,301.48                           | 4,285.00                           | 4,139.20                           | 27.05                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 7,060.84                            | 7,018.36                             | 42.48                                  | 166.214                      |
| 6,600.00                                                       | 6,401.48                           | 4,285.00                           | 4,139.20                           | 27.33                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 7,091.44                            | 7,048.86                             | 42.59                                  | 166.510                      |
| 6,700.00                                                       | 6,501.48                           | 4,285.00                           | 4,139.20                           | 27.62                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 7,123.32                            | 7,080.62                             | 42.69                                  | 166.852                      |
| 6,800.00                                                       | 6,601.48                           | 4,285.00                           | 4,139.20                           | 27.90                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 7,156.44                            | 7,113.65                             | 42.79                                  | 167.240                      |
| 6,883.52                                                       | 6,685.00                           | 4,285.00                           | 4,139.20                           | 28.15                     | 17.45                  | 57.87                                | 2,722.81                      | 6,180.48              | 7,185.06                            | 7,142.19                             | 42.87                                  | 167.598                      |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                            |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          |                                   |
|------------------------------------------------------------|----------------------------|----------------------------|----------------------------|------------------------|--------------------|------------------------------|-------------------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|-----------------------------------|
| <b>Offset Design:</b> Calloway Pad - Federal 001 - OH - OH |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          | <b>Offset Site Error:</b> 0.00 ft |
| <b>Survey Program:</b> 263-INCLINOMETER                    |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          | <b>Offset Well Error:</b> 0.00 ft |
| <b>Reference</b>                                           |                            | <b>Offset</b>              |                            | <b>Semi Major Axis</b> |                    | <b>Highside Toolface (°)</b> | <b>Offset Wellbore Centre</b> |                   | <b>Distance</b>             |                              | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> | <b>Warning</b>                    |
| <b>Measured Depth (ft)</b>                                 | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b>  | <b>Offset (ft)</b> |                              | <b>+N/-S (ft)</b>             | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> |                                |                          |                                   |
| 0.00                                                       | 0.00                       | 103.00                     | 103.00                     | 0.00                   | 3.13               | 25.60                        | 6,906.14                      | 3,308.19          | 7,657.60                    |                              |                                |                          |                                   |
| 100.00                                                     | 100.00                     | 203.00                     | 203.00                     | 0.30                   | 6.16               | 25.60                        | 6,906.14                      | 3,308.19          | 7,657.60                    | 7,651.14                     | 6.46                           | 1,184.942                |                                   |
| 200.00                                                     | 200.00                     | 303.00                     | 303.00                     | 0.66                   | 9.20               | 25.60                        | 6,906.14                      | 3,308.19          | 7,657.60                    | 7,647.75                     | 9.86                           | 776.815                  |                                   |
| 300.00                                                     | 300.00                     | 403.00                     | 403.00                     | 1.01                   | 12.24              | 25.60                        | 6,906.14                      | 3,308.19          | 7,657.60                    | 7,644.35                     | 13.25                          | 577.814                  |                                   |
| 400.00                                                     | 400.00                     | 503.00                     | 503.00                     | 1.37                   | 15.27              | 25.60                        | 6,906.14                      | 3,308.19          | 7,657.60                    | 7,640.96                     | 16.65                          | 459.979                  |                                   |
| 500.00                                                     | 500.00                     | 606.19                     | 606.18                     | 1.73                   | 18.41              | 25.59                        | 6,906.81                      | 3,308.19          | 7,658.21                    | 7,638.07                     | 20.14                          | 380.261                  |                                   |
| 600.00                                                     | 600.00                     | 716.94                     | 716.93                     | 2.09                   | 21.77              | 25.59                        | 6,906.67                      | 3,308.19          | 7,658.10                    | 7,634.23                     | 23.86                          | 320.947                  |                                   |
| 700.00                                                     | 700.00                     | 827.70                     | 827.69                     | 2.45                   | 25.13              | 25.59                        | 6,906.36                      | 3,308.19          | 7,657.84                    | 7,630.26                     | 27.58                          | 277.634                  |                                   |
| 800.00                                                     | 800.00                     | 903.17                     | 903.00                     | 2.81                   | 27.43              | 25.60                        | 6,906.14                      | 3,308.19          | 7,657.60                    | 7,627.37                     | 30.23                          | 253.289                  |                                   |
| 900.00                                                     | 900.00                     | 1,003.24                   | 1,003.00                   | 3.17                   | 30.46              | 25.60                        | 6,906.14                      | 3,308.19          | 7,657.60                    | 7,623.97                     | 33.63                          | 227.704                  |                                   |
| 918.00                                                     | 918.00                     | 1,021.24                   | 1,021.00                   | 3.23                   | 31.01              | 25.60                        | 6,906.14                      | 3,308.19          | 7,657.60                    | 7,623.36                     | 34.24                          | 223.640                  | CC                                |
| 1,000.00                                                   | 999.97                     | 1,103.21                   | 1,102.97                   | 3.51                   | 33.50              | -125.44                      | 6,906.14                      | 3,308.19          | 7,658.62                    | 7,621.61                     | 37.01                          | 206.932                  | ES                                |
| 1,100.00                                                   | 1,099.72                   | 1,227.47                   | 1,227.17                   | 3.84                   | 37.27              | -125.41                      | 6,908.44                      | 3,308.18          | 7,664.74                    | 7,623.63                     | 41.11                          | 186.424                  |                                   |
| 1,200.00                                                   | 1,198.98                   | 1,302.32                   | 1,301.98                   | 4.18                   | 39.55              | -125.29                      | 6,906.14                      | 3,308.19          | 7,669.68                    | 7,625.95                     | 43.73                          | 175.393                  |                                   |
| 1,300.00                                                   | 1,297.46                   | 1,400.83                   | 1,400.46                   | 4.54                   | 42.54              | -125.14                      | 6,906.14                      | 3,308.19          | 7,679.75                    | 7,632.68                     | 47.07                          | 163.146                  |                                   |
| 1,400.00                                                   | 1,394.90                   | 1,498.44                   | 1,497.90                   | 4.92                   | 45.50              | -124.95                      | 6,906.14                      | 3,308.19          | 7,692.86                    | 7,642.45                     | 50.41                          | 152.614                  |                                   |
| 1,500.00                                                   | 1,491.03                   | 1,594.58                   | 1,594.03                   | 5.33                   | 48.42              | -124.71                      | 6,906.14                      | 3,308.19          | 7,708.98                    | 7,655.26                     | 53.72                          | 143.504                  |                                   |
| 1,600.00                                                   | 1,585.60                   | 1,700.27                   | 1,699.70                   | 5.79                   | 51.63              | -124.45                      | 6,908.13                      | 3,308.18          | 7,729.93                    | 7,672.58                     | 57.35                          | 134.782                  |                                   |
| 1,700.00                                                   | 1,678.33                   | 1,857.06                   | 1,856.46                   | 6.30                   | 56.39              | -124.27                      | 6,907.17                      | 3,308.18          | 7,751.55                    | 7,688.98                     | 62.57                          | 123.890                  |                                   |
| 1,797.05                                                   | 1,766.34                   | 2,006.98                   | 2,006.33                   | 6.85                   | 60.94              | -124.07                      | 6,904.93                      | 3,308.19          | 7,774.68                    | 7,707.09                     | 67.60                          | 115.011                  |                                   |
| 1,800.00                                                   | 1,768.98                   | 2,011.50                   | 2,010.85                   | 6.87                   | 61.08              | -124.08                      | 6,904.84                      | 3,308.19          | 7,775.42                    | 7,707.67                     | 67.75                          | 114.759                  |                                   |
| 1,900.00                                                   | 1,858.58                   | 1,962.40                   | 1,961.58                   | 7.49                   | 59.59              | -123.95                      | 6,906.14                      | 3,308.19          | 7,801.97                    | 7,735.17                     | 66.80                          | 116.798                  |                                   |
| 2,000.00                                                   | 1,948.17                   | 2,052.05                   | 2,051.17                   | 8.15                   | 62.31              | -124.20                      | 6,906.14                      | 3,308.19          | 7,828.73                    | 7,758.66                     | 70.07                          | 111.723                  |                                   |
| 2,100.00                                                   | 2,037.76                   | 2,141.64                   | 2,140.76                   | 8.83                   | 65.03              | -124.45                      | 6,906.14                      | 3,308.19          | 7,855.65                    | 7,782.29                     | 73.36                          | 107.082                  |                                   |
| 2,200.00                                                   | 2,127.36                   | 2,231.24                   | 2,230.36                   | 9.53                   | 67.75              | -124.69                      | 6,906.14                      | 3,308.19          | 7,882.73                    | 7,806.07                     | 76.66                          | 102.823                  |                                   |
| 2,300.00                                                   | 2,216.95                   | 2,320.83                   | 2,319.95                   | 10.25                  | 70.48              | -124.94                      | 6,906.14                      | 3,308.19          | 7,909.97                    | 7,829.99                     | 79.98                          | 98.905                   |                                   |
| 2,400.00                                                   | 2,306.54                   | 2,410.42                   | 2,409.54                   | 10.97                  | 73.20              | -125.19                      | 6,906.14                      | 3,308.19          | 7,937.36                    | 7,854.07                     | 83.30                          | 95.291                   |                                   |
| 2,500.00                                                   | 2,396.14                   | 2,500.02                   | 2,499.14                   | 11.71                  | 75.92              | -125.43                      | 6,906.14                      | 3,308.19          | 7,964.91                    | 7,878.29                     | 86.62                          | 91.950                   |                                   |
| 2,600.00                                                   | 2,485.73                   | 2,589.61                   | 2,588.73                   | 12.45                  | 78.64              | -125.67                      | 6,906.14                      | 3,308.19          | 7,992.61                    | 7,902.65                     | 89.95                          | 88.853                   |                                   |
| 2,700.00                                                   | 2,575.32                   | 2,670.00                   | 2,668.78                   | 13.21                  | 81.08              | -125.89                      | 6,906.14                      | 3,308.19          | 8,020.46                    | 7,927.45                     | 93.01                          | 86.235                   |                                   |
| 2,800.00                                                   | 2,664.92                   | 2,670.00                   | 2,668.78                   | 13.96                  | 81.08              | -125.89                      | 6,906.14                      | 3,308.19          | 8,049.06                    | 7,955.46                     | 93.60                          | 85.991                   |                                   |
| 2,900.00                                                   | 2,754.51                   | 2,670.00                   | 2,668.78                   | 14.72                  | 81.08              | -125.89                      | 6,906.14                      | 3,308.19          | 8,078.80                    | 7,984.61                     | 94.19                          | 85.773                   |                                   |
| 3,000.00                                                   | 2,844.10                   | 2,670.00                   | 2,668.78                   | 15.49                  | 81.08              | -125.89                      | 6,906.14                      | 3,308.19          | 8,109.66                    | 8,014.90                     | 94.76                          | 85.581                   |                                   |
| 3,100.00                                                   | 2,933.70                   | 2,670.00                   | 2,668.78                   | 16.26                  | 81.08              | -125.89                      | 6,906.14                      | 3,308.19          | 8,141.64                    | 8,046.32                     | 95.32                          | 85.413                   |                                   |
| 3,114.47                                                   | 2,946.66                   | 2,670.00                   | 2,668.78                   | 16.37                  | 81.08              | -125.89                      | 6,906.14                      | 3,308.19          | 8,146.36                    | 8,050.96                     | 95.40                          | 85.391                   |                                   |
| 3,200.00                                                   | 3,024.12                   | 2,670.00                   | 2,668.78                   | 17.01                  | 81.08              | -126.58                      | 6,906.14                      | 3,308.19          | 8,173.64                    | 8,077.79                     | 95.85                          | 85.275                   |                                   |
| 3,300.00                                                   | 3,116.62                   | 2,670.00                   | 2,668.78                   | 17.69                  | 81.08              | -127.34                      | 6,906.14                      | 3,308.19          | 8,203.82                    | 8,107.50                     | 96.32                          | 85.171                   |                                   |
| 3,400.00                                                   | 3,210.99                   | 2,670.00                   | 2,668.78                   | 18.31                  | 81.08              | -128.04                      | 6,906.14                      | 3,308.19          | 8,232.07                    | 8,135.34                     | 96.73                          | 85.101                   |                                   |
| 3,500.00                                                   | 3,306.96                   | 2,670.00                   | 2,668.78                   | 18.86                  | 81.08              | -128.68                      | 6,906.14                      | 3,308.19          | 8,258.35                    | 8,161.26                     | 97.09                          | 85.062                   |                                   |
| 3,600.00                                                   | 3,404.26                   | 2,670.00                   | 2,668.78                   | 19.35                  | 81.08              | -129.26                      | 6,906.14                      | 3,308.19          | 8,282.59                    | 8,185.21                     | 97.38                          | 85.053                   | SF                                |
| 3,700.00                                                   | 3,502.64                   | 2,670.00                   | 2,668.78                   | 19.77                  | 81.08              | -129.79                      | 6,906.14                      | 3,308.19          | 8,304.75                    | 8,207.13                     | 97.62                          | 85.072                   |                                   |
| 3,800.00                                                   | 3,601.81                   | 2,670.00                   | 2,668.78                   | 20.14                  | 81.08              | -130.26                      | 6,906.14                      | 3,308.19          | 8,324.79                    | 8,226.99                     | 97.80                          | 85.118                   |                                   |
| 3,900.00                                                   | 3,701.52                   | 2,670.00                   | 2,668.78                   | 20.45                  | 81.08              | -130.68                      | 6,906.14                      | 3,308.19          | 8,342.66                    | 8,244.73                     | 97.93                          | 85.187                   |                                   |
| 3,993.52                                                   | 3,795.00                   | 2,670.00                   | 2,668.78                   | 20.68                  | 81.08              | 20.04                        | 6,906.14                      | 3,308.19          | 8,357.39                    | 8,259.38                     | 98.00                          | 85.275                   |                                   |
| 4,000.00                                                   | 3,801.48                   | 2,670.00                   | 2,668.78                   | 20.69                  | 81.08              | 20.04                        | 6,906.14                      | 3,308.19          | 8,358.34                    | 8,260.34                     | 98.01                          | 85.283                   |                                   |
| 4,100.00                                                   | 3,901.48                   | 2,670.00                   | 2,668.78                   | 20.91                  | 81.08              | 20.04                        | 6,906.14                      | 3,308.19          | 8,373.71                    | 8,275.66                     | 98.05                          | 85.401                   |                                   |
| 4,200.00                                                   | 4,001.48                   | 2,670.00                   | 2,668.78                   | 21.13                  | 81.08              | 20.04                        | 6,906.14                      | 3,308.19          | 8,390.24                    | 8,292.16                     | 98.09                          | 85.540                   |                                   |
| 4,300.00                                                   | 4,101.48                   | 2,670.00                   | 2,668.78                   | 21.36                  | 81.08              | 20.04                        | 6,906.14                      | 3,308.19          | 8,407.93                    | 8,309.82                     | 98.11                          | 85.698                   |                                   |
| 4,400.00                                                   | 4,201.48                   | 2,670.00                   | 2,668.78                   | 21.59                  | 81.08              | 20.04                        | 6,906.14                      | 3,308.19          | 8,426.77                    | 8,328.64                     | 98.13                          | 85.876                   |                                   |
| 4,500.00                                                   | 4,301.48                   | 2,670.00                   | 2,668.78                   | 21.82                  | 81.08              | 20.04                        | 6,906.14                      | 3,308.19          | 8,446.75                    | 8,348.62                     | 98.13                          | 86.075                   |                                   |
| 4,600.00                                                   | 4,401.48                   | 2,670.00                   | 2,668.78                   | 22.05                  | 81.08              | 20.04                        | 6,906.14                      | 3,308.19          | 8,467.86                    | 8,369.73                     | 98.13                          | 86.292                   |                                   |
| 4,700.00                                                   | 4,501.48                   | 2,670.00                   | 2,668.78                   | 22.29                  | 81.08              | 20.04                        | 6,906.14                      | 3,308.19          | 8,490.10                    | 8,391.99                     | 98.12                          | 86.530                   |                                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                            |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                          |
|------------------------------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------|--------------------|------------------------------|-------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|
| <b>Offset Design:</b> Calloway Pad - Federal 001 - OH - OH |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              | <b>Offset Site Error:</b>      | 0.00 ft                  |
| <b>Survey Program:</b> 263-INCLINOMETER                    |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              | <b>Offset Well Error:</b>      | 0.00 ft                  |
| <b>Reference</b>                                           | <b>Offset</b>              | <b>Semi Major Axis</b>     |                            | <b>Distance</b>       |                    | <b>Rule Assigned:</b>        |                   | <b>Warning</b>    |                             |                              |                                |                          |
| <b>Measured Depth (ft)</b>                                 | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b> | <b>Offset (ft)</b> | <b>Highside Toolface (°)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> |
| 4,800.00                                                   | 4,601.48                   | 2,670.00                   | 2,668.78                   | 22.53                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 8,513.46                    | 8,415.36                     | 98.10                          | 86.787                   |
| 4,900.00                                                   | 4,701.48                   | 2,670.00                   | 2,668.78                   | 22.78                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 8,537.92                    | 8,439.86                     | 98.07                          | 87.063                   |
| 5,000.00                                                   | 4,801.48                   | 2,670.00                   | 2,668.78                   | 23.03                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 8,563.49                    | 8,465.46                     | 98.03                          | 87.359                   |
| 5,100.00                                                   | 4,901.48                   | 2,670.00                   | 2,668.78                   | 23.28                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 8,590.13                    | 8,492.16                     | 97.98                          | 87.673                   |
| 5,200.00                                                   | 5,001.48                   | 2,670.00                   | 2,668.78                   | 23.53                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 8,617.86                    | 8,519.94                     | 97.92                          | 88.007                   |
| 5,300.00                                                   | 5,101.48                   | 2,670.00                   | 2,668.78                   | 23.79                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 8,646.66                    | 8,548.80                     | 97.86                          | 88.359                   |
| 5,400.00                                                   | 5,201.48                   | 2,670.00                   | 2,668.78                   | 24.05                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 8,676.51                    | 8,578.73                     | 97.79                          | 88.730                   |
| 5,500.00                                                   | 5,301.48                   | 2,670.00                   | 2,668.78                   | 24.31                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 8,707.41                    | 8,609.70                     | 97.70                          | 89.119                   |
| 5,600.00                                                   | 5,401.48                   | 2,670.00                   | 2,668.78                   | 24.57                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 8,739.34                    | 8,641.73                     | 97.62                          | 89.527                   |
| 5,700.00                                                   | 5,501.48                   | 2,670.00                   | 2,668.78                   | 24.84                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 8,772.30                    | 8,674.78                     | 97.52                          | 89.953                   |
| 5,800.00                                                   | 5,601.48                   | 2,670.00                   | 2,668.78                   | 25.11                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 8,806.27                    | 8,708.85                     | 97.42                          | 90.396                   |
| 5,900.00                                                   | 5,701.48                   | 2,670.00                   | 2,668.78                   | 25.38                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 8,841.24                    | 8,743.93                     | 97.31                          | 90.858                   |
| 6,000.00                                                   | 5,801.48                   | 2,670.00                   | 2,668.78                   | 25.65                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 8,877.20                    | 8,780.01                     | 97.19                          | 91.336                   |
| 6,100.00                                                   | 5,901.48                   | 2,670.00                   | 2,668.78                   | 25.93                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 8,914.14                    | 8,817.07                     | 97.07                          | 91.832                   |
| 6,200.00                                                   | 6,001.48                   | 2,670.00                   | 2,668.78                   | 26.20                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 8,952.04                    | 8,855.10                     | 96.94                          | 92.345                   |
| 6,300.00                                                   | 6,101.48                   | 2,670.00                   | 2,668.78                   | 26.48                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 8,990.89                    | 8,894.08                     | 96.81                          | 92.875                   |
| 6,400.00                                                   | 6,201.48                   | 2,670.00                   | 2,668.78                   | 26.76                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 9,030.68                    | 8,934.02                     | 96.67                          | 93.422                   |
| 6,500.00                                                   | 6,301.48                   | 2,670.00                   | 2,668.78                   | 27.05                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 9,071.40                    | 8,974.88                     | 96.52                          | 93.985                   |
| 6,600.00                                                   | 6,401.48                   | 2,670.00                   | 2,668.78                   | 27.33                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 9,113.04                    | 9,016.67                     | 96.37                          | 94.564                   |
| 6,700.00                                                   | 6,501.48                   | 2,670.00                   | 2,668.78                   | 27.62                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 9,155.58                    | 9,059.37                     | 96.21                          | 95.159                   |
| 6,800.00                                                   | 6,601.48                   | 2,670.00                   | 2,668.78                   | 27.90                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 9,199.01                    | 9,102.96                     | 96.05                          | 95.770                   |
| 6,883.52                                                   | 6,685.00                   | 2,670.00                   | 2,668.78                   | 28.15                 | 81.08              | 20.04                        | 6,906.14          | 3,308.19          | 9,235.96                    | 9,140.04                     | 95.92                          | 96.291                   |



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                             |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          |                                   |
|-------------------------------------------------------------|----------------------------|----------------------------|----------------------------|------------------------|--------------------|------------------------------|-------------------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|-----------------------------------|
| <b>Offset Design:</b> Calloway Pad - Federal 100A - OH - OH |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          | <b>Offset Site Error:</b> 0.00 ft |
| <b>Survey Program:</b> 285-INCLINOMETER                     |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          | <b>Offset Well Error:</b> 0.00 ft |
| <b>Reference</b>                                            |                            | <b>Offset</b>              |                            | <b>Semi Major Axis</b> |                    | <b>Highside Toolface (°)</b> | <b>Offset Wellbore Centre</b> |                   | <b>Distance</b>             |                              | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> | <b>Warning</b>                    |
| <b>Measured Depth (ft)</b>                                  | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b>  | <b>Offset (ft)</b> |                              | <b>+N/-S (ft)</b>             | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> |                                |                          |                                   |
| 0.00                                                        | 0.00                       | 92.00                      | 92.00                      | 0.00                   | 2.79               | 19.91                        | 7,080.81                      | 2,565.14          | 7,531.12                    |                              |                                |                          |                                   |
| 100.00                                                      | 100.00                     | 192.00                     | 192.00                     | 0.30                   | 5.83               | 19.91                        | 7,080.81                      | 2,565.14          | 7,531.12                    | 7,524.99                     | 6.13                           | 1,228.890                |                                   |
| 200.00                                                      | 200.00                     | 292.00                     | 292.00                     | 0.66                   | 8.87               | 19.91                        | 7,080.81                      | 2,565.14          | 7,531.12                    | 7,521.60                     | 9.52                           | 790.777                  |                                   |
| 300.00                                                      | 300.00                     | 392.00                     | 392.00                     | 1.01                   | 11.90              | 19.91                        | 7,080.81                      | 2,565.14          | 7,531.12                    | 7,518.20                     | 12.92                          | 582.947                  |                                   |
| 400.00                                                      | 400.00                     | 492.00                     | 492.00                     | 1.37                   | 14.94              | 19.91                        | 7,080.81                      | 2,565.14          | 7,531.12                    | 7,514.81                     | 16.31                          | 461.624                  |                                   |
| 500.00                                                      | 500.00                     | 595.59                     | 595.59                     | 1.73                   | 18.09              | 19.91                        | 7,081.07                      | 2,565.14          | 7,531.37                    | 7,511.55                     | 19.82                          | 380.011                  |                                   |
| 600.00                                                      | 600.00                     | 702.13                     | 702.12                     | 2.09                   | 21.32              | 19.91                        | 7,080.97                      | 2,565.14          | 7,531.28                    | 7,507.86                     | 23.41                          | 321.677                  |                                   |
| 700.00                                                      | 700.00                     | 792.01                     | 792.00                     | 2.45                   | 24.05              | 19.91                        | 7,080.81                      | 2,565.14          | 7,531.12                    | 7,504.62                     | 26.50                          | 284.187                  |                                   |
| 800.00                                                      | 800.00                     | 892.01                     | 892.00                     | 2.81                   | 27.09              | 19.91                        | 7,080.81                      | 2,565.14          | 7,531.12                    | 7,501.23                     | 29.90                          | 251.911                  |                                   |
| 900.00                                                      | 900.00                     | 992.01                     | 992.00                     | 3.17                   | 30.13              | 19.91                        | 7,080.81                      | 2,565.14          | 7,531.12                    | 7,497.83                     | 33.29                          | 226.219                  |                                   |
| 918.00                                                      | 918.00                     | 1,010.01                   | 1,010.00                   | 3.23                   | 30.67              | 19.91                        | 7,080.81                      | 2,565.14          | 7,531.12                    | 7,497.22                     | 33.90                          | 222.141                  | CC                                |
| 1,000.00                                                    | 999.97                     | 1,095.51                   | 1,095.51                   | 3.51                   | 33.27              | -131.12                      | 7,081.07                      | 2,565.14          | 7,532.52                    | 7,495.74                     | 36.78                          | 204.801                  | ES                                |
| 1,100.00                                                    | 1,099.72                   | 1,201.86                   | 1,201.85                   | 3.84                   | 36.50              | -131.06                      | 7,080.97                      | 2,565.14          | 7,536.98                    | 7,496.64                     | 40.34                          | 186.832                  |                                   |
| 1,200.00                                                    | 1,198.98                   | 1,290.99                   | 1,290.98                   | 4.18                   | 39.21              | -130.95                      | 7,080.81                      | 2,565.14          | 7,544.81                    | 7,501.42                     | 43.39                          | 173.889                  |                                   |
| 1,300.00                                                    | 1,297.46                   | 1,389.47                   | 1,389.46                   | 4.54                   | 42.20              | -130.78                      | 7,080.81                      | 2,565.14          | 7,556.23                    | 7,509.49                     | 46.73                          | 161.695                  |                                   |
| 1,400.00                                                    | 1,394.90                   | 1,486.91                   | 1,486.90                   | 4.92                   | 45.16              | -130.57                      | 7,080.81                      | 2,565.14          | 7,571.06                    | 7,521.00                     | 50.06                          | 151.247                  |                                   |
| 1,500.00                                                    | 1,491.03                   | 1,585.97                   | 1,585.96                   | 5.33                   | 48.16              | -130.31                      | 7,081.07                      | 2,565.14          | 7,589.55                    | 7,536.10                     | 53.45                          | 141.986                  |                                   |
| 1,600.00                                                    | 1,585.60                   | 1,686.85                   | 1,686.83                   | 5.79                   | 51.23              | -129.99                      | 7,080.99                      | 2,565.14          | 7,611.10                    | 7,554.17                     | 56.93                          | 133.696                  |                                   |
| 1,700.00                                                    | 1,678.33                   | 1,785.83                   | 1,785.82                   | 6.30                   | 54.23              | -129.62                      | 7,080.82                      | 2,565.14          | 7,635.93                    | 7,575.55                     | 60.38                          | 126.469                  |                                   |
| 1,797.05                                                    | 1,766.34                   | 1,858.36                   | 1,858.34                   | 6.85                   | 56.44              | -129.15                      | 7,080.81                      | 2,565.14          | 7,663.34                    | 7,600.29                     | 63.04                          | 121.555                  |                                   |
| 1,800.00                                                    | 1,768.98                   | 1,861.00                   | 1,860.98                   | 6.87                   | 56.52              | -129.15                      | 7,080.81                      | 2,565.14          | 7,664.22                    | 7,601.08                     | 63.14                          | 121.379                  |                                   |
| 1,900.00                                                    | 1,858.58                   | 1,950.60                   | 1,950.58                   | 7.49                   | 59.24              | -129.39                      | 7,080.81                      | 2,565.14          | 7,694.17                    | 7,627.80                     | 66.37                          | 115.935                  |                                   |
| 2,000.00                                                    | 1,948.17                   | 2,040.19                   | 2,040.17                   | 8.15                   | 61.96              | -129.63                      | 7,080.81                      | 2,565.14          | 7,724.25                    | 7,654.64                     | 69.61                          | 110.965                  |                                   |
| 2,100.00                                                    | 2,037.76                   | 2,139.94                   | 2,139.92                   | 8.83                   | 64.99              | -129.90                      | 7,081.33                      | 2,565.14          | 7,754.97                    | 7,681.80                     | 73.18                          | 105.973                  |                                   |
| 2,200.00                                                    | 2,127.36                   | 2,242.00                   | 2,241.98                   | 9.53                   | 68.09              | -130.17                      | 7,081.11                      | 2,565.14          | 7,785.14                    | 7,708.31                     | 76.83                          | 101.329                  |                                   |
| 2,300.00                                                    | 2,216.95                   | 2,344.22                   | 2,344.19                   | 10.25                  | 71.19              | -130.43                      | 7,080.71                      | 2,565.14          | 7,815.30                    | 7,734.81                     | 80.50                          | 97.089                   |                                   |
| 2,400.00                                                    | 2,306.54                   | 2,398.61                   | 2,398.54                   | 10.97                  | 72.84              | -130.57                      | 7,080.81                      | 2,565.14          | 7,845.95                    | 7,763.23                     | 82.71                          | 94.857                   |                                   |
| 2,500.00                                                    | 2,396.14                   | 2,488.21                   | 2,488.14                   | 11.71                  | 75.56              | -130.81                      | 7,080.81                      | 2,565.14          | 7,876.70                    | 7,790.69                     | 86.01                          | 91.581                   |                                   |
| 2,600.00                                                    | 2,485.73                   | 2,577.80                   | 2,577.73                   | 12.45                  | 78.28              | -131.04                      | 7,080.81                      | 2,565.14          | 7,907.59                    | 7,818.28                     | 89.31                          | 88.543                   |                                   |
| 2,700.00                                                    | 2,575.32                   | 2,676.28                   | 2,676.20                   | 13.21                  | 81.27              | -131.29                      | 7,082.15                      | 2,565.14          | 7,939.89                    | 7,847.01                     | 92.88                          | 85.485                   |                                   |
| 2,800.00                                                    | 2,664.92                   | 2,790.28                   | 2,790.19                   | 13.96                  | 84.74              | -131.58                      | 7,081.83                      | 2,565.14          | 7,970.80                    | 7,873.87                     | 96.93                          | 82.232                   |                                   |
| 2,900.00                                                    | 2,754.51                   | 2,904.60                   | 2,904.50                   | 14.72                  | 88.21              | -131.86                      | 7,081.15                      | 2,565.14          | 8,001.55                    | 7,900.56                     | 100.99                         | 79.231                   |                                   |
| 3,000.00                                                    | 2,844.10                   | 3,019.24                   | 3,019.13                   | 15.49                  | 91.69              | -132.14                      | 7,080.11                      | 2,565.14          | 8,032.16                    | 7,927.09                     | 105.06                         | 76.452                   |                                   |
| 3,100.00                                                    | 2,933.70                   | 3,025.84                   | 3,025.70                   | 16.26                  | 91.89              | -132.16                      | 7,080.81                      | 2,565.14          | 8,063.92                    | 7,958.08                     | 105.84                         | 76.190                   |                                   |
| 3,114.47                                                    | 2,946.66                   | 3,038.81                   | 3,038.66                   | 16.37                  | 92.28              | -132.19                      | 7,080.81                      | 2,565.14          | 8,068.49                    | 7,962.17                     | 106.32                         | 75.890                   |                                   |
| 3,200.00                                                    | 3,024.12                   | 3,116.26                   | 3,116.12                   | 17.01                  | 94.64              | -132.97                      | 7,080.81                      | 2,565.14          | 8,094.32                    | 7,985.16                     | 109.16                         | 74.152                   |                                   |
| 3,300.00                                                    | 3,116.62                   | 3,215.45                   | 3,215.31                   | 17.69                  | 97.65              | -133.79                      | 7,081.57                      | 2,565.14          | 8,122.18                    | 8,009.47                     | 112.71                         | 72.065                   |                                   |
| 3,400.00                                                    | 3,210.99                   | 3,335.97                   | 3,335.82                   | 18.31                  | 101.31             | -134.51                      | 7,081.27                      | 2,565.14          | 8,145.64                    | 8,028.77                     | 116.87                         | 69.701                   |                                   |
| 3,500.00                                                    | 3,306.96                   | 3,458.73                   | 3,458.58                   | 18.86                  | 105.04             | -135.11                      | 7,080.55                      | 2,565.14          | 8,165.27                    | 8,044.21                     | 121.06                         | 67.450                   |                                   |
| 3,600.00                                                    | 3,404.26                   | 3,496.46                   | 3,496.26                   | 19.35                  | 106.18             | -135.50                      | 7,080.81                      | 2,565.14          | 8,181.87                    | 8,059.26                     | 122.61                         | 66.732                   |                                   |
| 3,700.00                                                    | 3,502.64                   | 3,594.83                   | 3,594.64                   | 19.77                  | 109.17             | -135.86                      | 7,080.81                      | 2,565.14          | 8,194.77                    | 8,068.80                     | 125.98                         | 65.050                   |                                   |
| 3,800.00                                                    | 3,601.81                   | 3,700.77                   | 3,700.56                   | 20.14                  | 112.39             | -136.12                      | 7,081.91                      | 2,565.14          | 8,205.02                    | 8,075.48                     | 129.54                         | 63.340                   |                                   |
| 3,900.00                                                    | 3,701.52                   | 3,837.92                   | 3,837.70                   | 20.45                  | 116.55             | -136.28                      | 7,081.47                      | 2,565.14          | 8,210.13                    | 8,076.11                     | 134.02                         | 61.260                   |                                   |
| 3,993.52                                                    | 3,795.00                   | 3,966.53                   | 3,966.31                   | 20.68                  | 120.46             | 14.74                        | 7,080.47                      | 2,565.14          | 8,211.09                    | 8,072.90                     | 138.19                         | 59.421                   |                                   |
| 4,000.00                                                    | 3,801.48                   | 3,975.45                   | 3,975.22                   | 20.69                  | 120.73             | 14.74                        | 7,080.38                      | 2,565.14          | 8,211.02                    | 8,072.55                     | 138.47                         | 59.297                   |                                   |
| 4,035.00                                                    | 3,836.48                   | 4,023.60                   | 4,023.36                   | 20.77                  | 122.19             | 14.74                        | 7,079.84                      | 2,565.14          | 8,210.65                    | 8,070.62                     | 140.02                         | 58.637                   |                                   |
| 4,100.00                                                    | 3,901.48                   | 3,993.72                   | 3,993.48                   | 20.91                  | 121.28             | 14.74                        | 7,080.81                      | 2,565.14          | 8,211.03                    | 8,071.77                     | 139.26                         | 58.960                   |                                   |
| 4,200.00                                                    | 4,001.48                   | 4,093.72                   | 4,093.48                   | 21.13                  | 124.32             | 14.74                        | 7,080.81                      | 2,565.14          | 8,211.03                    | 8,068.48                     | 142.56                         | 57.598                   |                                   |
| 4,300.00                                                    | 4,101.48                   | 4,193.72                   | 4,193.48                   | 21.36                  | 127.36             | 14.74                        | 7,080.81                      | 2,565.14          | 8,211.03                    | 8,065.18                     | 145.85                         | 56.297                   |                                   |
| 4,400.00                                                    | 4,201.48                   | 4,305.85                   | 4,305.60                   | 21.59                  | 130.76             | 14.74                        | 7,081.34                      | 2,565.14          | 8,211.56                    | 8,062.04                     | 149.52                         | 54.919                   |                                   |
| 4,500.00                                                    | 4,301.48                   | 4,420.07                   | 4,419.82                   | 21.82                  | 134.23             | 14.74                        | 7,081.07                      | 2,565.14          | 8,211.32                    | 8,058.06                     | 153.26                         | 53.578                   |                                   |
| 4,600.00                                                    | 4,401.48                   | 4,493.82                   | 4,493.48                   | 22.05                  | 136.47             | 14.74                        | 7,080.81                      | 2,565.14          | 8,211.03                    | 8,055.27                     | 155.76                         | 52.715                   |                                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                             |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                                        |                              |
|-------------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|---------------------------|------------------------|--------------------------------------|-------------------------------|-----------------------|-------------------------------------|--------------------------------------|----------------------------------------|------------------------------|
| <b>Offset Design:</b> Calloway Pad - Federal 100A - OH - OH |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      | <b>Offset Site Error:</b>              | 0.00 ft                      |
| <b>Survey Program:</b> 285-INCLINOMETER                     |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      | <b>Offset Well Error:</b>              | 0.00 ft                      |
| <b>Reference</b>                                            |                                    | <b>Offset</b>                      |                                    | <b>Semi Major Axis</b>    |                        | <b>Highside<br/>Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                     |                                      | <b>Rule Assigned:</b>                  |                              |
| <b>Measured<br/>Depth<br/>(ft)</b>                          | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Measured<br/>Depth<br/>(ft)</b> | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                      | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between<br/>Centres<br/>(ft)</b> | <b>Between<br/>Ellipses<br/>(ft)</b> | <b>Minimum<br/>Separation<br/>(ft)</b> | <b>Separation<br/>Factor</b> |
| 4,700.00                                                    | 4,501.48                           | 4,593.82                           | 4,593.48                           | 22.29                     | 139.51                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,211.03                            | 8,051.96                             | 159.07                                 | 51.619                       |
| 4,800.00                                                    | 4,601.48                           | 4,693.82                           | 4,693.48                           | 22.53                     | 142.54                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,211.03                            | 8,048.65                             | 162.38                                 | 50.567                       |
| 4,900.00                                                    | 4,701.48                           | 4,793.82                           | 4,793.48                           | 22.78                     | 145.58                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,211.03                            | 8,045.34                             | 165.69                                 | 49.555                       |
| 5,000.00                                                    | 4,801.48                           | 4,893.82                           | 4,893.48                           | 23.03                     | 148.61                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,211.03                            | 8,042.02                             | 169.01                                 | 48.583                       |
| 5,100.00                                                    | 4,901.48                           | 4,993.82                           | 4,993.48                           | 23.28                     | 151.65                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,211.03                            | 8,038.71                             | 172.33                                 | 47.648                       |
| 5,200.00                                                    | 5,001.48                           | 5,093.82                           | 5,093.48                           | 23.53                     | 154.69                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,211.03                            | 8,035.39                             | 175.65                                 | 46.747                       |
| 5,300.00                                                    | 5,101.48                           | 5,193.82                           | 5,193.48                           | 23.79                     | 157.72                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,211.03                            | 8,032.06                             | 178.97                                 | 45.879                       |
| 5,400.00                                                    | 5,201.48                           | 5,200.00                           | 5,199.42                           | 24.05                     | 157.91                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,211.57                            | 8,032.16                             | 179.41                                 | 45.770                       |
| 5,500.00                                                    | 5,301.48                           | 5,200.00                           | 5,199.42                           | 24.31                     | 157.91                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,213.33                            | 8,033.69                             | 179.64                                 | 45.722                       |
| 5,600.00                                                    | 5,401.48                           | 5,200.00                           | 5,199.42                           | 24.57                     | 157.91                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,216.30                            | 8,036.46                             | 179.84                                 | 45.687                       |
| 5,700.00                                                    | 5,501.48                           | 5,200.00                           | 5,199.42                           | 24.84                     | 157.91                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,220.48                            | 8,040.47                             | 180.02                                 | 45.665                       |
| 5,800.00                                                    | 5,601.48                           | 5,200.00                           | 5,199.42                           | 25.11                     | 157.91                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,225.88                            | 8,045.71                             | 180.17                                 | 45.656 SF                    |
| 5,900.00                                                    | 5,701.48                           | 5,200.00                           | 5,199.42                           | 25.38                     | 157.91                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,232.50                            | 8,052.19                             | 180.30                                 | 45.660                       |
| 6,000.00                                                    | 5,801.48                           | 5,200.00                           | 5,199.42                           | 25.65                     | 157.91                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,240.32                            | 8,059.91                             | 180.41                                 | 45.676                       |
| 6,100.00                                                    | 5,901.48                           | 5,200.00                           | 5,199.42                           | 25.93                     | 157.91                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,249.34                            | 8,068.85                             | 180.49                                 | 45.706                       |
| 6,200.00                                                    | 6,001.48                           | 5,200.00                           | 5,199.42                           | 26.20                     | 157.91                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,259.57                            | 8,079.02                             | 180.55                                 | 45.748                       |
| 6,300.00                                                    | 6,101.48                           | 5,200.00                           | 5,199.42                           | 26.48                     | 157.91                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,270.99                            | 8,090.41                             | 180.58                                 | 45.802                       |
| 6,400.00                                                    | 6,201.48                           | 5,200.00                           | 5,199.42                           | 26.76                     | 157.91                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,283.60                            | 8,103.01                             | 180.59                                 | 45.869                       |
| 6,500.00                                                    | 6,301.48                           | 5,200.00                           | 5,199.42                           | 27.05                     | 157.91                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,297.40                            | 8,116.82                             | 180.58                                 | 45.949                       |
| 6,600.00                                                    | 6,401.48                           | 5,200.00                           | 5,199.42                           | 27.33                     | 157.91                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,312.38                            | 8,131.84                             | 180.54                                 | 46.041                       |
| 6,700.00                                                    | 6,501.48                           | 5,200.00                           | 5,199.42                           | 27.62                     | 157.91                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,328.53                            | 8,148.05                             | 180.48                                 | 46.146                       |
| 6,800.00                                                    | 6,601.48                           | 5,200.00                           | 5,199.42                           | 27.90                     | 157.91                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,345.86                            | 8,165.45                             | 180.40                                 | 46.262                       |
| 6,883.52                                                    | 6,685.00                           | 5,200.00                           | 5,199.42                           | 28.15                     | 157.91                 | 14.74                                | 7,080.81                      | 2,565.14              | 8,361.21                            | 8,180.89                             | 180.32                                 | 46.369                       |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



## Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                            |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                          |                                   |
|------------------------------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------|--------------------|------------------------------|-------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|-----------------------------------|
| <b>Offset Design:</b> Calloway Pad - FJ Titt 002 - OH - OH |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                          | <b>Offset Site Error:</b> 0.00 ft |
| <b>Survey Program:</b> 1029-INCLINOMETER                   |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                          | <b>Offset Well Error:</b> 0.00 ft |
| <b>Reference</b>                                           | <b>Offset</b>              | <b>Semi Major Axis</b>     |                            | <b>Distance</b>       |                    | <b>Rule Assigned:</b>        |                   | <b>Warning</b>    |                             |                              |                                |                          |                                   |
| <b>Measured Depth (ft)</b>                                 | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b> | <b>Offset (ft)</b> | <b>Highside Toolface (°)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> |                                   |
| 0.00                                                       | 0.00                       | 63.00                      | 63.00                      | 0.00                  | 1.91               | 76.36                        | 1,883.09          | 7,761.92          | 7,987.08                    |                              |                                |                          |                                   |
| 100.00                                                     | 100.00                     | 163.00                     | 163.00                     | 0.30                  | 4.95               | 76.36                        | 1,883.09          | 7,761.92          | 7,987.08                    | 7,981.83                     | 5.25                           | 1,521.985                |                                   |
| 200.00                                                     | 200.00                     | 263.00                     | 263.00                     | 0.66                  | 7.99               | 76.36                        | 1,883.09          | 7,761.92          | 7,987.08                    | 7,978.44                     | 8.64                           | 924.096                  |                                   |
| 300.00                                                     | 300.00                     | 363.00                     | 363.00                     | 1.01                  | 11.02              | 76.36                        | 1,883.09          | 7,761.92          | 7,987.08                    | 7,975.04                     | 12.04                          | 663.464                  |                                   |
| 400.00                                                     | 400.00                     | 463.00                     | 463.00                     | 1.37                  | 14.06              | 76.36                        | 1,883.09          | 7,761.92          | 7,987.08                    | 7,971.65                     | 15.43                          | 517.506                  |                                   |
| 500.00                                                     | 500.00                     | 563.00                     | 563.00                     | 1.73                  | 17.10              | 76.36                        | 1,883.09          | 7,761.92          | 7,987.08                    | 7,968.25                     | 18.83                          | 424.188                  |                                   |
| 600.00                                                     | 600.00                     | 663.00                     | 663.00                     | 2.09                  | 20.13              | 76.36                        | 1,883.09          | 7,761.92          | 7,987.08                    | 7,964.85                     | 22.22                          | 359.383                  |                                   |
| 700.00                                                     | 700.00                     | 763.00                     | 763.00                     | 2.45                  | 23.17              | 76.36                        | 1,883.09          | 7,761.92          | 7,987.08                    | 7,961.46                     | 25.62                          | 311.755                  |                                   |
| 800.00                                                     | 800.00                     | 863.00                     | 863.00                     | 2.81                  | 26.21              | 76.36                        | 1,883.09          | 7,761.92          | 7,987.08                    | 7,958.06                     | 29.02                          | 275.273                  |                                   |
| 900.00                                                     | 900.00                     | 963.00                     | 963.00                     | 3.17                  | 29.25              | 76.36                        | 1,883.09          | 7,761.92          | 7,987.08                    | 7,954.67                     | 32.41                          | 246.436                  |                                   |
| 918.00                                                     | 918.00                     | 981.00                     | 981.00                     | 3.23                  | 29.79              | 76.36                        | 1,883.09          | 7,761.92          | 7,987.08                    | 7,954.06                     | 33.02                          | 241.875                  |                                   |
| 1,000.00                                                   | 999.97                     | 1,063.00                   | 1,062.97                   | 3.51                  | 32.28              | -74.71                       | 1,883.09          | 7,761.92          | 7,986.61                    | 7,950.82                     | 35.79                          | 223.141                  |                                   |
| 1,100.00                                                   | 1,099.72                   | 1,162.75                   | 1,162.72                   | 3.84                  | 35.31              | -74.82                       | 1,883.09          | 7,761.92          | 7,984.80                    | 7,945.64                     | 39.15                          | 203.951                  |                                   |
| 1,200.00                                                   | 1,198.98                   | 1,262.01                   | 1,261.98                   | 4.18                  | 38.33              | -74.99                       | 1,883.09          | 7,761.92          | 7,981.62                    | 7,939.11                     | 42.50                          | 187.785                  |                                   |
| 1,300.00                                                   | 1,297.46                   | 1,360.49                   | 1,360.46                   | 4.54                  | 41.32              | -75.24                       | 1,883.09          | 7,761.92          | 7,977.11                    | 7,931.26                     | 45.85                          | 173.985                  |                                   |
| 1,400.00                                                   | 1,394.90                   | 1,457.93                   | 1,457.90                   | 4.92                  | 44.28              | -75.56                       | 1,883.09          | 7,761.92          | 7,971.32                    | 7,922.13                     | 49.19                          | 162.065                  |                                   |
| 1,500.00                                                   | 1,491.03                   | 1,554.06                   | 1,554.03                   | 5.33                  | 47.19              | -75.95                       | 1,883.09          | 7,761.92          | 7,964.30                    | 7,911.78                     | 52.51                          | 151.659                  |                                   |
| 1,600.00                                                   | 1,585.60                   | 1,648.63                   | 1,648.60                   | 5.79                  | 50.07              | -76.40                       | 1,883.09          | 7,761.92          | 7,956.11                    | 7,900.28                     | 55.84                          | 142.490                  |                                   |
| 1,700.00                                                   | 1,678.33                   | 1,741.36                   | 1,741.33                   | 6.30                  | 52.88              | -76.92                       | 1,883.09          | 7,761.92          | 7,946.85                    | 7,887.70                     | 59.15                          | 134.341                  |                                   |
| 1,797.05                                                   | 1,766.34                   | 1,830.89                   | 1,830.85                   | 6.85                  | 55.60              | -77.49                       | 1,885.42          | 7,761.92          | 7,937.52                    | 7,875.10                     | 62.42                          | 127.166                  |                                   |
| 1,800.00                                                   | 1,768.98                   | 1,833.59                   | 1,833.54                   | 6.87                  | 55.68              | -77.50                       | 1,885.42          | 7,761.92          | 7,937.20                    | 7,874.68                     | 62.52                          | 126.957                  |                                   |
| 1,900.00                                                   | 1,858.58                   | 1,924.96                   | 1,924.91                   | 7.49                  | 58.46              | -77.79                       | 1,885.31          | 7,761.92          | 7,926.62                    | 7,860.71                     | 65.91                          | 120.270                  |                                   |
| 2,000.00                                                   | 1,948.17                   | 2,016.40                   | 2,016.35                   | 8.15                  | 61.24              | -78.08                       | 1,885.13          | 7,761.92          | 7,916.25                    | 7,846.92                     | 69.33                          | 114.184                  |                                   |
| 2,100.00                                                   | 2,037.76                   | 2,107.91                   | 2,107.85                   | 8.83                  | 64.01              | -78.37                       | 1,884.87          | 7,761.92          | 7,906.09                    | 7,833.32                     | 72.78                          | 108.633                  |                                   |
| 2,200.00                                                   | 2,127.36                   | 2,199.48                   | 2,199.42                   | 9.53                  | 66.79              | -78.65                       | 1,884.53          | 7,761.92          | 7,896.15                    | 7,819.90                     | 76.25                          | 103.558                  |                                   |
| 2,300.00                                                   | 2,216.95                   | 2,291.12                   | 2,291.06                   | 10.25                 | 69.58              | -78.94                       | 1,884.12          | 7,761.92          | 7,886.62                    | 7,806.69                     | 79.74                          | 98.904                   |                                   |
| 2,400.00                                                   | 2,306.54                   | 2,382.83                   | 2,382.76                   | 10.97                 | 72.36              | -79.23                       | 1,883.63          | 7,761.92          | 7,876.91                    | 7,793.67                     | 83.24                          | 94.626                   |                                   |
| 2,500.00                                                   | 2,396.14                   | 2,474.60                   | 2,474.53                   | 11.71                 | 75.15              | -79.52                       | 1,883.06          | 7,761.92          | 7,867.61                    | 7,780.85                     | 86.76                          | 90.683                   |                                   |
| 2,600.00                                                   | 2,485.73                   | 2,548.82                   | 2,548.73                   | 12.45                 | 77.40              | -79.76                       | 1,883.09          | 7,761.92          | 7,858.70                    | 7,768.94                     | 89.75                          | 87.559                   |                                   |
| 2,700.00                                                   | 2,575.32                   | 2,638.41                   | 2,638.32                   | 13.21                 | 80.12              | -80.04                       | 1,883.09          | 7,761.92          | 7,850.04                    | 7,756.82                     | 93.22                          | 84.208                   |                                   |
| 2,800.00                                                   | 2,664.92                   | 2,728.01                   | 2,727.92                   | 13.96                 | 82.85              | -80.33                       | 1,883.09          | 7,761.92          | 7,841.62                    | 7,744.92                     | 96.70                          | 81.095                   |                                   |
| 2,900.00                                                   | 2,754.51                   | 2,817.60                   | 2,817.51                   | 14.72                 | 85.57              | -80.62                       | 1,883.09          | 7,761.92          | 7,833.44                    | 7,733.27                     | 100.18                         | 78.196                   |                                   |
| 3,000.00                                                   | 2,844.10                   | 2,907.19                   | 2,907.10                   | 15.49                 | 88.29              | -80.91                       | 1,883.09          | 7,761.92          | 7,825.51                    | 7,721.85                     | 103.66                         | 75.490                   |                                   |
| 3,100.00                                                   | 2,933.70                   | 2,996.79                   | 2,996.70                   | 16.26                 | 91.01              | -81.20                       | 1,883.09          | 7,761.92          | 7,817.82                    | 7,710.67                     | 107.15                         | 72.960                   |                                   |
| 3,114.47                                                   | 2,946.66                   | 3,009.75                   | 3,009.66                   | 16.37                 | 91.40              | -81.24                       | 1,883.09          | 7,761.92          | 7,816.73                    | 7,709.07                     | 107.66                         | 72.607                   |                                   |
| 3,200.00                                                   | 3,024.12                   | 3,087.20                   | 3,087.12                   | 17.01                 | 93.75              | -81.30                       | 1,883.09          | 7,761.92          | 7,810.67                    | 7,700.02                     | 110.65                         | 70.591                   |                                   |
| 3,300.00                                                   | 3,116.62                   | 3,179.71                   | 3,179.62                   | 17.69                 | 96.56              | -81.37                       | 1,883.09          | 7,761.92          | 7,804.49                    | 7,690.35                     | 114.14                         | 68.376                   |                                   |
| 3,400.00                                                   | 3,210.99                   | 3,274.08                   | 3,273.99                   | 18.31                 | 99.43              | -81.44                       | 1,883.09          | 7,761.92          | 7,799.26                    | 7,681.64                     | 117.63                         | 66.305                   |                                   |
| 3,500.00                                                   | 3,306.96                   | 3,370.55                   | 3,370.46                   | 18.86                 | 102.36             | -81.51                       | 1,883.99          | 7,761.92          | 7,795.24                    | 7,674.13                     | 121.11                         | 64.365                   |                                   |
| 3,600.00                                                   | 3,404.26                   | 3,468.56                   | 3,468.47                   | 19.35                 | 105.33             | -81.57                       | 1,883.96          | 7,761.92          | 7,791.75                    | 7,667.17                     | 124.58                         | 62.546                   |                                   |
| 3,700.00                                                   | 3,502.64                   | 3,567.66                   | 3,567.57                   | 19.77                 | 108.34             | -81.62                       | 1,883.90          | 7,761.92          | 7,789.07                    | 7,661.06                     | 128.01                         | 60.846                   |                                   |
| 3,800.00                                                   | 3,601.81                   | 3,667.56                   | 3,667.47                   | 20.14                 | 111.38             | -81.66                       | 1,883.82          | 7,761.92          | 7,787.18                    | 7,655.77                     | 131.41                         | 59.257                   |                                   |
| 3,900.00                                                   | 3,701.52                   | 3,768.00                   | 3,767.91                   | 20.45                 | 114.43             | -81.68                       | 1,883.71          | 7,761.92          | 7,786.05                    | 7,651.28                     | 134.77                         | 57.771                   |                                   |
| 3,993.52                                                   | 3,795.00                   | 3,862.17                   | 3,862.07                   | 20.68                 | 117.29             | 69.37                        | 1,883.58          | 7,761.92          | 7,785.67                    | 7,647.81                     | 137.87                         | 56.472                   |                                   |
| 4,000.00                                                   | 3,801.48                   | 3,868.69                   | 3,868.60                   | 20.69                 | 117.49             | 69.37                        | 1,883.57          | 7,761.92          | 7,785.67                    | 7,647.59                     | 138.08                         | 56.386                   |                                   |
| 4,100.00                                                   | 3,901.48                   | 3,969.42                   | 3,969.33                   | 20.91                 | 120.54             | 69.37                        | 1,883.40          | 7,761.92          | 7,785.61                    | 7,644.26                     | 141.36                         | 55.078                   |                                   |
| 4,200.00                                                   | 4,001.48                   | 4,070.15                   | 4,070.06                   | 21.13                 | 123.60             | 69.37                        | 1,883.21          | 7,761.92          | 7,785.55                    | 7,640.91                     | 144.64                         | 53.829                   |                                   |
| 4,300.00                                                   | 4,101.48                   | 4,164.73                   | 4,164.48                   | 21.36                 | 126.47             | 69.37                        | 1,883.09          | 7,761.92          | 7,785.50                    | 7,637.77                     | 147.73                         | 52.700                   |                                   |
| 4,400.00                                                   | 4,201.48                   | 4,264.73                   | 4,264.48                   | 21.59                 | 129.51             | 69.37                        | 1,883.09          | 7,761.92          | 7,785.50                    | 7,634.50                     | 151.00                         | 51.560                   |                                   |
| 4,500.00                                                   | 4,301.48                   | 4,364.73                   | 4,364.48                   | 21.82                 | 132.55             | 69.37                        | 1,883.09          | 7,761.92          | 7,785.50                    | 7,631.23                     | 154.27                         | 50.467                   |                                   |
| 4,600.00                                                   | 4,401.48                   | 4,464.73                   | 4,464.48                   | 22.05                 | 135.59             | 69.37                        | 1,883.09          | 7,761.92          | 7,785.50                    | 7,627.96                     | 157.54                         | 49.419                   |                                   |
| 4,700.00                                                   | 4,501.48                   | 4,564.73                   | 4,564.48                   | 22.29                 | 138.62             | 69.37                        | 1,883.09          | 7,761.92          | 7,785.50                    | 7,624.69                     | 160.82                         | 48.413                   |                                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                            |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                              |                |
|------------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|---------------------------|------------------------|--------------------------------------|-------------------------------|-----------------------|-------------------------------------|--------------------------------------|------------------------------|----------------|
| <b>Offset Design:</b> Calloway Pad - FJ Titt 002 - OH - OH |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      | <b>Offset Site Error:</b>    | 0.00 ft        |
| <b>Survey Program:</b> 1029-INCLINOMETER                   |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      | <b>Offset Well Error:</b>    | 0.00 ft        |
| <b>Reference</b>                                           |                                    | <b>Offset</b>                      |                                    | <b>Semi Major Axis</b>    |                        | <b>Highside<br/>Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                     |                                      | <b>Separation<br/>Factor</b> | <b>Warning</b> |
| <b>Measured<br/>Depth<br/>(ft)</b>                         | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Measured<br/>Depth<br/>(ft)</b> | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                      | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between<br/>Centres<br/>(ft)</b> | <b>Between<br/>Ellipses<br/>(ft)</b> |                              |                |
| 4,800.00                                                   | 4,601.48                           | 4,664.73                           | 4,664.48                           | 22.53                     | 141.66                 | 69.37                                | 1,883.09                      | 7,761.92              | 7,785.50                            | 7,621.41                             | 164.09                       | 47.445         |
| 4,900.00                                                   | 4,701.48                           | 4,764.73                           | 4,764.48                           | 22.78                     | 144.70                 | 69.37                                | 1,883.09                      | 7,761.92              | 7,785.50                            | 7,618.13                             | 167.38                       | 46.515         |
| 5,000.00                                                   | 4,801.48                           | 4,869.45                           | 4,869.15                           | 23.03                     | 147.87                 | 69.35                                | 1,886.51                      | 7,761.92              | 7,786.71                            | 7,615.90                             | 170.80                       | 45.588         |
| 5,100.00                                                   | 4,901.48                           | 4,974.37                           | 4,974.06                           | 23.28                     | 151.06                 | 69.35                                | 1,886.23                      | 7,761.92              | 7,786.61                            | 7,612.37                             | 174.24                       | 44.689         |
| 5,200.00                                                   | 5,001.48                           | 5,079.29                           | 5,078.98                           | 23.53                     | 154.25                 | 69.35                                | 1,885.77                      | 7,761.92              | 7,786.46                            | 7,608.78                             | 177.68                       | 43.823         |
| 5,300.00                                                   | 5,101.48                           | 5,184.23                           | 5,183.90                           | 23.79                     | 157.43                 | 69.36                                | 1,885.13                      | 7,761.92              | 7,786.24                            | 7,605.12                             | 181.12                       | 42.989         |
| 5,400.00                                                   | 5,201.48                           | 5,289.16                           | 5,288.82                           | 24.05                     | 160.62                 | 69.36                                | 1,884.29                      | 7,761.92              | 7,785.96                            | 7,601.39                             | 184.57                       | 42.185         |
| 5,500.00                                                   | 5,301.48                           | 5,394.10                           | 5,393.75                           | 24.31                     | 163.81                 | 69.37                                | 1,883.27                      | 7,761.92              | 7,785.62                            | 7,597.60                             | 188.02                       | 41.409         |
| 5,544.61                                                   | 5,346.09                           | 5,440.91                           | 5,440.55                           | 24.43                     | 165.23                 | 69.37                                | 1,882.76                      | 7,761.92              | 7,785.45                            | 7,595.89                             | 189.55                       | 41.072 CC      |
| 5,600.00                                                   | 5,401.48                           | 5,465.10                           | 5,464.48                           | 24.57                     | 165.96                 | 69.37                                | 1,883.09                      | 7,761.92              | 7,785.50                            | 7,595.06                             | 190.44                       | 40.882         |
| 5,700.00                                                   | 5,501.48                           | 5,565.10                           | 5,564.48                           | 24.84                     | 169.00                 | 69.37                                | 1,883.09                      | 7,761.92              | 7,785.50                            | 7,591.76                             | 193.74                       | 40.185         |
| 5,800.00                                                   | 5,601.48                           | 5,676.40                           | 5,675.76                           | 25.11                     | 172.38                 | 69.36                                | 1,884.28                      | 7,761.92              | 7,785.93                            | 7,588.54                             | 197.39                       | 39.444         |
| 5,900.00                                                   | 5,701.48                           | 5,798.09                           | 5,797.42                           | 25.38                     | 176.08                 | 69.37                                | 1,883.30                      | 7,761.92              | 7,785.65                            | 7,584.29                             | 201.35                       | 38.666         |
| 6,000.00                                                   | 5,801.48                           | 5,865.22                           | 5,864.48                           | 25.65                     | 178.11                 | 69.37                                | 1,883.09                      | 7,761.92              | 7,785.50                            | 7,581.83                             | 203.67                       | 38.226         |
| 6,100.00                                                   | 5,901.48                           | 5,965.22                           | 5,964.48                           | 25.93                     | 181.15                 | 69.37                                | 1,883.09                      | 7,761.92              | 7,785.50                            | 7,578.52                             | 206.98                       | 37.614         |
| 6,200.00                                                   | 6,001.48                           | 6,065.22                           | 6,064.48                           | 26.20                     | 184.19                 | 69.37                                | 1,883.09                      | 7,761.92              | 7,785.50                            | 7,575.21                             | 210.30                       | 37.022         |
| 6,300.00                                                   | 6,101.48                           | 6,170.48                           | 6,169.71                           | 26.48                     | 187.38                 | 69.36                                | 1,884.69                      | 7,761.92              | 7,786.07                            | 7,572.30                             | 213.77                       | 36.422         |
| 6,400.00                                                   | 6,201.48                           | 6,281.49                           | 6,280.72                           | 26.76                     | 190.76                 | 69.36                                | 1,884.26                      | 7,761.92              | 7,785.93                            | 7,568.51                             | 217.42                       | 35.810         |
| 6,500.00                                                   | 6,301.48                           | 6,392.51                           | 6,391.73                           | 27.05                     | 194.13                 | 69.37                                | 1,883.38                      | 7,761.92              | 7,785.65                            | 7,564.57                             | 221.08                       | 35.217         |
| 6,600.00                                                   | 6,401.48                           | 6,465.31                           | 6,464.48                           | 27.33                     | 196.34                 | 69.37                                | 1,883.09                      | 7,761.92              | 7,785.50                            | 7,561.93                             | 223.57                       | 34.823         |
| 6,700.00                                                   | 6,501.48                           | 6,565.31                           | 6,564.48                           | 27.62                     | 199.37                 | 69.37                                | 1,883.09                      | 7,761.92              | 7,785.50                            | 7,558.60                             | 226.90                       | 34.313         |
| 6,800.00                                                   | 6,601.48                           | 6,665.31                           | 6,664.48                           | 27.90                     | 202.41                 | 69.37                                | 1,883.09                      | 7,761.92              | 7,785.50                            | 7,555.28                             | 230.22                       | 33.817         |
| 6,883.52                                                   | 6,685.00                           | 6,748.83                           | 6,748.00                           | 28.15                     | 204.95                 | 69.37                                | 1,883.09                      | 7,761.92              | 7,785.50                            | 7,552.50                             | 233.00                       | 33.414 ES, SF  |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                  |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          |                                   |
|------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|------------------------|--------------------|------------------------------|-------------------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|-----------------------------------|
| <b>Offset Design:</b> Calloway Pad - FJ Titt Com (P/A) - OH - OH |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          | <b>Offset Site Error:</b> 0.00 ft |
| <b>Survey Program:</b> 100-UNKNOWN                               |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          | <b>Offset Well Error:</b> 0.00 ft |
| <b>Reference</b>                                                 |                            | <b>Offset</b>              |                            | <b>Semi Major Axis</b> |                    | <b>Highside Toolface (°)</b> | <b>Offset Wellbore Centre</b> |                   | <b>Distance</b>             |                              | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> | <b>Warning</b>                    |
| <b>Measured Depth (ft)</b>                                       | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b>  | <b>Offset (ft)</b> |                              | <b>+N/-S (ft)</b>             | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> |                                |                          |                                   |
| 0.00                                                             | 0.00                       | 52.00                      | 52.00                      | 0.00                   | 2.08               | 96.05                        | -836.34                       | 7,894.35          | 7,938.53                    |                              |                                |                          |                                   |
| 100.00                                                           | 100.00                     | 152.00                     | 152.00                     | 0.30                   | 6.08               | 96.05                        | -836.34                       | 7,894.35          | 7,938.53                    | 7,932.15                     | 6.38                           | 1,244.765                |                                   |
| 200.00                                                           | 200.00                     | 252.00                     | 252.00                     | 0.66                   | 10.08              | 96.05                        | -836.34                       | 7,894.35          | 7,938.53                    | 7,927.79                     | 10.74                          | 739.431                  |                                   |
| 300.00                                                           | 300.00                     | 352.00                     | 352.00                     | 1.01                   | 14.08              | 96.05                        | -836.34                       | 7,894.35          | 7,938.53                    | 7,923.43                     | 15.09                          | 525.923                  |                                   |
| 400.00                                                           | 400.00                     | 452.00                     | 452.00                     | 1.37                   | 18.08              | 96.05                        | -836.34                       | 7,894.35          | 7,938.53                    | 7,919.08                     | 19.45                          | 408.089                  |                                   |
| 500.00                                                           | 500.00                     | 552.00                     | 552.00                     | 1.73                   | 22.08              | 96.05                        | -836.34                       | 7,894.35          | 7,938.53                    | 7,914.72                     | 23.81                          | 333.392                  |                                   |
| 600.00                                                           | 600.00                     | 652.00                     | 652.00                     | 2.09                   | 26.08              | 96.05                        | -836.34                       | 7,894.35          | 7,938.53                    | 7,910.36                     | 28.17                          | 281.809                  |                                   |
| 700.00                                                           | 700.00                     | 752.00                     | 752.00                     | 2.45                   | 30.08              | 96.05                        | -836.34                       | 7,894.35          | 7,938.53                    | 7,906.00                     | 32.53                          | 244.049                  |                                   |
| 800.00                                                           | 800.00                     | 852.00                     | 852.00                     | 2.81                   | 34.08              | 96.05                        | -836.34                       | 7,894.35          | 7,938.53                    | 7,901.64                     | 36.89                          | 215.213                  |                                   |
| 900.00                                                           | 900.00                     | 952.00                     | 952.00                     | 3.17                   | 38.08              | 96.05                        | -836.34                       | 7,894.35          | 7,938.53                    | 7,897.28                     | 41.25                          | 192.471                  |                                   |
| 918.00                                                           | 918.00                     | 970.00                     | 970.00                     | 3.23                   | 38.80              | 96.05                        | -836.34                       | 7,894.35          | 7,938.53                    | 7,896.50                     | 42.03                          | 188.878                  |                                   |
| 1,000.00                                                         | 999.97                     | 1,051.97                   | 1,051.97                   | 3.51                   | 42.08              | -55.04                       | -836.34                       | 7,894.35          | 7,937.52                    | 7,891.93                     | 45.59                          | 174.111                  |                                   |
| 1,100.00                                                         | 1,099.72                   | 1,151.72                   | 1,151.72                   | 3.84                   | 46.07              | -55.18                       | -836.34                       | 7,894.35          | 7,933.56                    | 7,883.65                     | 49.91                          | 158.962                  |                                   |
| 1,200.00                                                         | 1,198.98                   | 1,250.98                   | 1,250.98                   | 4.18                   | 50.04              | -55.42                       | -836.34                       | 7,894.35          | 7,926.63                    | 7,872.41                     | 54.22                          | 146.201                  |                                   |
| 1,300.00                                                         | 1,297.46                   | 1,349.46                   | 1,349.46                   | 4.54                   | 53.98              | -55.77                       | -836.34                       | 7,894.35          | 7,916.75                    | 7,858.25                     | 58.51                          | 135.312                  |                                   |
| 1,400.00                                                         | 1,394.90                   | 1,446.90                   | 1,446.90                   | 4.92                   | 57.88              | -56.22                       | -836.34                       | 7,894.35          | 7,903.99                    | 7,841.21                     | 62.77                          | 125.912                  |                                   |
| 1,500.00                                                         | 1,491.03                   | 1,543.03                   | 1,543.03                   | 5.33                   | 61.72              | -56.78                       | -836.34                       | 7,894.35          | 7,888.39                    | 7,821.38                     | 67.01                          | 117.716                  |                                   |
| 1,600.00                                                         | 1,585.60                   | 1,637.60                   | 1,637.60                   | 5.79                   | 65.50              | -57.44                       | -836.34                       | 7,894.35          | 7,870.05                    | 7,798.83                     | 71.22                          | 110.505                  |                                   |
| 1,700.00                                                         | 1,678.33                   | 1,730.33                   | 1,730.33                   | 6.30                   | 69.21              | -58.20                       | -836.34                       | 7,894.35          | 7,849.05                    | 7,773.66                     | 75.39                          | 104.109                  |                                   |
| 1,797.05                                                         | 1,766.34                   | 1,818.34                   | 1,818.34                   | 6.85                   | 72.73              | -59.04                       | -836.34                       | 7,894.35          | 7,826.24                    | 7,746.83                     | 79.41                          | 98.555                   |                                   |
| 1,800.00                                                         | 1,768.98                   | 1,820.98                   | 1,820.98                   | 6.87                   | 72.84              | -59.05                       | -836.34                       | 7,894.35          | 7,825.51                    | 7,745.97                     | 79.53                          | 98.392                   |                                   |
| 1,900.00                                                         | 1,858.58                   | 1,910.58                   | 1,910.58                   | 7.49                   | 76.42              | -59.31                       | -836.34                       | 7,894.35          | 7,800.89                    | 7,717.22                     | 83.67                          | 93.237                   |                                   |
| 2,000.00                                                         | 1,948.17                   | 2,000.17                   | 2,000.17                   | 8.15                   | 80.01              | -59.57                       | -836.34                       | 7,894.35          | 7,776.44                    | 7,688.61                     | 87.83                          | 88.539                   |                                   |
| 2,100.00                                                         | 2,037.76                   | 2,089.76                   | 2,089.76                   | 8.83                   | 83.59              | -59.83                       | -836.34                       | 7,894.35          | 7,752.18                    | 7,660.16                     | 92.02                          | 84.247                   |                                   |
| 2,200.00                                                         | 2,127.36                   | 2,179.36                   | 2,179.36                   | 9.53                   | 87.17              | -60.09                       | -836.34                       | 7,894.35          | 7,728.09                    | 7,631.87                     | 96.22                          | 80.314                   |                                   |
| 2,300.00                                                         | 2,216.95                   | 2,268.95                   | 2,268.95                   | 10.25                  | 90.76              | -60.36                       | -836.34                       | 7,894.35          | 7,704.18                    | 7,603.74                     | 100.45                         | 76.700                   |                                   |
| 2,400.00                                                         | 2,306.54                   | 2,350.00                   | 2,350.00                   | 10.97                  | 94.00              | -60.60                       | -836.34                       | 7,894.35          | 7,680.47                    | 7,576.12                     | 104.34                         | 73.609                   |                                   |
| 2,500.00                                                         | 2,396.14                   | 2,350.00                   | 2,350.00                   | 11.71                  | 94.00              | -60.60                       | -836.34                       | 7,894.35          | 7,657.55                    | 7,552.54                     | 105.01                         | 72.924                   |                                   |
| 2,600.00                                                         | 2,485.73                   | 2,350.00                   | 2,350.00                   | 12.45                  | 94.00              | -60.60                       | -836.34                       | 7,894.35          | 7,635.87                    | 7,530.20                     | 105.67                         | 72.261                   |                                   |
| 2,700.00                                                         | 2,575.32                   | 2,350.00                   | 2,350.00                   | 13.21                  | 94.00              | -60.60                       | -836.34                       | 7,894.35          | 7,615.45                    | 7,509.12                     | 106.33                         | 71.620                   |                                   |
| 2,800.00                                                         | 2,664.92                   | 2,350.00                   | 2,350.00                   | 13.96                  | 94.00              | -60.60                       | -836.34                       | 7,894.35          | 7,596.29                    | 7,489.31                     | 106.98                         | 71.004                   |                                   |
| 2,900.00                                                         | 2,754.51                   | 2,350.00                   | 2,350.00                   | 14.72                  | 94.00              | -60.60                       | -836.34                       | 7,894.35          | 7,578.40                    | 7,470.77                     | 107.63                         | 70.411                   |                                   |
| 3,000.00                                                         | 2,844.10                   | 2,350.00                   | 2,350.00                   | 15.49                  | 94.00              | -60.60                       | -836.34                       | 7,894.35          | 7,561.79                    | 7,453.52                     | 108.27                         | 69.843                   |                                   |
| 3,100.00                                                         | 2,933.70                   | 2,350.00                   | 2,350.00                   | 16.26                  | 94.00              | -60.60                       | -836.34                       | 7,894.35          | 7,546.47                    | 7,437.57                     | 108.90                         | 69.298                   |                                   |
| 3,114.47                                                         | 2,946.66                   | 2,350.00                   | 2,350.00                   | 16.37                  | 94.00              | -60.60                       | -836.34                       | 7,894.35          | 7,544.36                    | 7,435.37                     | 108.99                         | 69.222                   |                                   |
| 3,200.00                                                         | 3,024.12                   | 2,350.00                   | 2,350.00                   | 17.01                  | 94.00              | -60.31                       | -836.34                       | 7,894.35          | 7,533.38                    | 7,423.88                     | 109.49                         | 68.802                   |                                   |
| 3,300.00                                                         | 3,116.62                   | 2,350.00                   | 2,350.00                   | 17.69                  | 94.00              | -60.07                       | -836.34                       | 7,894.35          | 7,524.15                    | 7,414.13                     | 110.02                         | 68.390                   |                                   |
| 3,400.00                                                         | 3,210.99                   | 2,350.00                   | 2,350.00                   | 18.31                  | 94.00              | -59.93                       | -836.34                       | 7,894.35          | 7,518.85                    | 7,408.38                     | 110.47                         | 68.064                   |                                   |
| 3,484.21                                                         | 3,291.71                   | 2,350.00                   | 2,350.00                   | 18.77                  | 94.00              | -59.89                       | -836.34                       | 7,894.35          | 7,517.44                    | 7,406.66                     | 110.78                         | 67.859 CC                |                                   |
| 3,500.00                                                         | 3,306.96                   | 2,350.00                   | 2,350.00                   | 18.86                  | 94.00              | -59.89                       | -836.34                       | 7,894.35          | 7,517.49                    | 7,406.66                     | 110.84                         | 67.824 ES                |                                   |
| 3,600.00                                                         | 3,404.26                   | 2,350.00                   | 2,350.00                   | 19.35                  | 94.00              | -59.96                       | -836.34                       | 7,894.35          | 7,520.10                    | 7,408.96                     | 111.13                         | 67.669                   |                                   |
| 3,700.00                                                         | 3,502.64                   | 2,350.00                   | 2,350.00                   | 19.77                  | 94.00              | -60.13                       | -836.34                       | 7,894.35          | 7,526.64                    | 7,415.29                     | 111.35                         | 67.595 SF                |                                   |
| 3,800.00                                                         | 3,601.81                   | 2,350.00                   | 2,350.00                   | 20.14                  | 94.00              | -60.41                       | -836.34                       | 7,894.35          | 7,537.10                    | 7,425.61                     | 111.49                         | 67.602                   |                                   |
| 3,900.00                                                         | 3,701.52                   | 2,350.00                   | 2,350.00                   | 20.45                  | 94.00              | -60.78                       | -836.34                       | 7,894.35          | 7,551.43                    | 7,439.87                     | 111.56                         | 67.687                   |                                   |
| 3,993.52                                                         | 3,795.00                   | 2,350.00                   | 2,350.00                   | 20.68                  | 94.00              | 89.82                        | -836.34                       | 7,894.35          | 7,568.29                    | 7,456.72                     | 111.56                         | 67.839                   |                                   |
| 4,000.00                                                         | 3,801.48                   | 2,350.00                   | 2,350.00                   | 20.69                  | 94.00              | 89.82                        | -836.34                       | 7,894.35          | 7,569.57                    | 7,458.01                     | 111.56                         | 67.852                   |                                   |
| 4,100.00                                                         | 3,901.48                   | 2,350.00                   | 2,350.00                   | 20.91                  | 94.00              | 89.82                        | -836.34                       | 7,894.35          | 7,590.07                    | 7,478.56                     | 111.51                         | 68.068                   |                                   |
| 4,200.00                                                         | 4,001.48                   | 2,350.00                   | 2,350.00                   | 21.13                  | 94.00              | 89.82                        | -836.34                       | 7,894.35          | 7,611.82                    | 7,500.38                     | 111.44                         | 68.304                   |                                   |
| 4,300.00                                                         | 4,101.48                   | 2,350.00                   | 2,350.00                   | 21.36                  | 94.00              | 89.82                        | -836.34                       | 7,894.35          | 7,634.82                    | 7,523.46                     | 111.36                         | 68.559                   |                                   |
| 4,400.00                                                         | 4,201.48                   | 2,350.00                   | 2,350.00                   | 21.59                  | 94.00              | 89.82                        | -836.34                       | 7,894.35          | 7,659.06                    | 7,547.79                     | 111.27                         | 68.834                   |                                   |
| 4,500.00                                                         | 4,301.48                   | 2,350.00                   | 2,350.00                   | 21.82                  | 94.00              | 89.82                        | -836.34                       | 7,894.35          | 7,684.52                    | 7,573.36                     | 111.16                         | 69.128                   |                                   |
| 4,600.00                                                         | 4,401.48                   | 2,350.00                   | 2,350.00                   | 22.05                  | 94.00              | 89.82                        | -836.34                       | 7,894.35          | 7,711.20                    | 7,600.15                     | 111.05                         | 69.442                   |                                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                  |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                          |                           |         |
|------------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|--------------------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - FJ Titt Com (P/A) - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                          | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 100-UNKNOWN                               |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                          | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                                 |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Separation Factor</b> | <b>Warning</b>            |         |
| <b>Measured Depth<br/>(ft)</b>                                   | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> |                          |                           |         |
| 4,700.00                                                         | 4,501.48                       | 2,350.00                       | 2,350.00                       | 22.29                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 7,739.07                        | 7,628.16                         | 110.91                   | 69.775                    |         |
| 4,800.00                                                         | 4,601.48                       | 2,350.00                       | 2,350.00                       | 22.53                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 7,768.14                        | 7,657.37                         | 110.77                   | 70.127                    |         |
| 4,900.00                                                         | 4,701.48                       | 2,350.00                       | 2,350.00                       | 22.78                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 7,798.38                        | 7,687.76                         | 110.62                   | 70.499                    |         |
| 5,000.00                                                         | 4,801.48                       | 2,350.00                       | 2,350.00                       | 23.03                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 7,829.77                        | 7,719.32                         | 110.45                   | 70.889                    |         |
| 5,100.00                                                         | 4,901.48                       | 2,350.00                       | 2,350.00                       | 23.28                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 7,862.32                        | 7,752.04                         | 110.28                   | 71.297                    |         |
| 5,200.00                                                         | 5,001.48                       | 2,350.00                       | 2,350.00                       | 23.53                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 7,896.00                        | 7,785.91                         | 110.09                   | 71.724                    |         |
| 5,300.00                                                         | 5,101.48                       | 2,350.00                       | 2,350.00                       | 23.79                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 7,930.79                        | 7,820.90                         | 109.89                   | 72.170                    |         |
| 5,400.00                                                         | 5,201.48                       | 2,350.00                       | 2,350.00                       | 24.05                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 7,966.69                        | 7,857.01                         | 109.68                   | 72.634                    |         |
| 5,500.00                                                         | 5,301.48                       | 2,350.00                       | 2,350.00                       | 24.31                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 8,003.68                        | 7,894.21                         | 109.47                   | 73.116                    |         |
| 5,600.00                                                         | 5,401.48                       | 2,350.00                       | 2,350.00                       | 24.57                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 8,041.74                        | 7,932.50                         | 109.24                   | 73.615                    |         |
| 5,700.00                                                         | 5,501.48                       | 2,350.00                       | 2,350.00                       | 24.84                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 8,080.86                        | 7,971.85                         | 109.01                   | 74.132                    |         |
| 5,800.00                                                         | 5,601.48                       | 2,350.00                       | 2,350.00                       | 25.11                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 8,121.02                        | 8,012.25                         | 108.76                   | 74.667                    |         |
| 5,900.00                                                         | 5,701.48                       | 2,350.00                       | 2,350.00                       | 25.38                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 8,162.21                        | 8,053.69                         | 108.51                   | 75.219                    |         |
| 6,000.00                                                         | 5,801.48                       | 2,350.00                       | 2,350.00                       | 25.65                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 8,204.41                        | 8,096.15                         | 108.26                   | 75.788                    |         |
| 6,100.00                                                         | 5,901.48                       | 2,350.00                       | 2,350.00                       | 25.93                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 8,247.61                        | 8,139.62                         | 107.99                   | 76.373                    |         |
| 6,200.00                                                         | 6,001.48                       | 2,350.00                       | 2,350.00                       | 26.20                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 8,291.79                        | 8,184.07                         | 107.72                   | 76.976                    |         |
| 6,300.00                                                         | 6,101.48                       | 2,350.00                       | 2,350.00                       | 26.48                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 8,336.93                        | 8,229.49                         | 107.44                   | 77.595                    |         |
| 6,400.00                                                         | 6,201.48                       | 2,350.00                       | 2,350.00                       | 26.76                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 8,383.02                        | 8,275.87                         | 107.16                   | 78.230                    |         |
| 6,500.00                                                         | 6,301.48                       | 2,350.00                       | 2,350.00                       | 27.05                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 8,430.05                        | 8,323.18                         | 106.87                   | 78.880                    |         |
| 6,600.00                                                         | 6,401.48                       | 2,350.00                       | 2,350.00                       | 27.33                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 8,478.00                        | 8,371.42                         | 106.58                   | 79.547                    |         |
| 6,700.00                                                         | 6,501.48                       | 2,350.00                       | 2,350.00                       | 27.62                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 8,526.85                        | 8,420.57                         | 106.28                   | 80.229                    |         |
| 6,800.00                                                         | 6,601.48                       | 2,350.00                       | 2,350.00                       | 27.90                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 8,576.59                        | 8,470.61                         | 105.98                   | 80.926                    |         |
| 6,883.52                                                         | 6,685.00                       | 2,350.00                       | 2,350.00                       | 28.15                     | 94.00                  | 89.82                            | -836.34                       | 7,894.35              | 8,618.80                        | 8,513.07                         | 105.73                   | 81.520                    |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                   |                       |                       |                       |                  |               |                          |                               |            |                      |                       |                           |                          |                           |         |
|-------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|--------------------------|-------------------------------|------------|----------------------|-----------------------|---------------------------|--------------------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - Flood LS 001 (P/A) - OH - OH |                       |                       |                       |                  |               |                          |                               |            |                      |                       |                           |                          | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 100-UNKNOWN                                |                       |                       |                       |                  |               |                          |                               |            |                      |                       |                           |                          | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                                  |                       |                       |                       |                  |               |                          |                               |            |                      |                       |                           |                          | <b>Rule Assigned:</b>     |         |
| <b>Measured Depth</b>                                             | <b>Vertical Depth</b> | <b>Measured Depth</b> | <b>Vertical Depth</b> | <b>Reference</b> | <b>Offset</b> | <b>Highside Toolface</b> | <b>Offset Wellbore Centre</b> |            | <b>Distance</b>      |                       | <b>Minimum Separation</b> | <b>Separation Factor</b> | <b>Warning</b>            |         |
| (ft)                                                              | (ft)                  | (ft)                  | (ft)                  | (ft)             | (ft)          | (°)                      | +N/-S (ft)                    | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | (ft)                      |                          |                           |         |
| 0.00                                                              | 0.00                  | 0.00                  | 0.00                  | 0.00             | 0.00          | 31.61                    | 5,209.64                      | 3,205.99   | 6,144.15             |                       |                           |                          |                           |         |
| 100.00                                                            | 100.00                | 0.00                  | 0.00                  | 0.30             | 0.00          | 31.61                    | 5,209.64                      | 3,205.99   | 6,135.58             | 6,135.23              | 0.35                      | N/A                      |                           |         |
| 200.00                                                            | 200.00                | 0.00                  | 0.00                  | 0.66             | 0.00          | 31.61                    | 5,209.64                      | 3,205.99   | 6,128.63             | 6,127.96              | 0.67                      | 9,145.893                |                           |         |
| 300.00                                                            | 300.00                | 0.00                  | 0.00                  | 1.01             | 0.00          | 31.61                    | 5,209.64                      | 3,205.99   | 6,123.31             | 6,122.29              | 1.02                      | 6,008.964                |                           |         |
| 400.00                                                            | 400.00                | 0.00                  | 0.00                  | 1.37             | 0.00          | 31.61                    | 5,209.64                      | 3,205.99   | 6,119.62             | 6,118.24              | 1.37                      | 4,453.134                |                           |         |
| 500.00                                                            | 500.00                | 0.00                  | 0.00                  | 1.73             | 0.00          | 31.61                    | 5,209.64                      | 3,205.99   | 6,117.56             | 6,115.83              | 1.73                      | 3,532.622                |                           |         |
| 600.00                                                            | 600.00                | 24.00                 | 24.00                 | 2.09             | 0.96          | 31.61                    | 5,209.64                      | 3,205.99   | 6,117.09             | 6,114.04              | 3.05                      | 2,005.575                |                           |         |
| 700.00                                                            | 700.00                | 124.00                | 124.00                | 2.45             | 4.96          | 31.61                    | 5,209.64                      | 3,205.99   | 6,117.09             | 6,109.68              | 7.41                      | 825.700                  |                           |         |
| 800.00                                                            | 800.00                | 224.00                | 224.00                | 2.81             | 8.96          | 31.61                    | 5,209.64                      | 3,205.99   | 6,117.09             | 6,105.32              | 11.77                     | 519.858                  |                           |         |
| 900.00                                                            | 900.00                | 324.00                | 324.00                | 3.17             | 12.96         | 31.61                    | 5,209.64                      | 3,205.99   | 6,117.09             | 6,100.96              | 16.13                     | 379.347                  |                           |         |
| 918.00                                                            | 918.00                | 342.00                | 342.00                | 3.23             | 13.68         | 31.61                    | 5,209.64                      | 3,205.99   | 6,117.09             | 6,100.18              | 16.91                     | 361.747 CC               |                           |         |
| 1,000.00                                                          | 999.97                | 423.97                | 423.97                | 3.51             | 16.96         | -119.44                  | 5,209.64                      | 3,205.99   | 6,117.95             | 6,097.48              | 20.47                     | 298.885                  |                           |         |
| 1,100.00                                                          | 1,099.72              | 523.72                | 523.72                | 3.84             | 20.95         | -119.40                  | 5,209.64                      | 3,205.99   | 6,121.35             | 6,096.56              | 24.79                     | 246.924 ES               |                           |         |
| 1,200.00                                                          | 1,198.98              | 622.98                | 622.98                | 4.18             | 24.92         | -119.34                  | 5,209.64                      | 3,205.99   | 6,127.33             | 6,098.23              | 29.10                     | 210.552                  |                           |         |
| 1,300.00                                                          | 1,297.46              | 721.46                | 721.46                | 4.54             | 28.86         | -119.26                  | 5,209.64                      | 3,205.99   | 6,135.89             | 6,102.50              | 33.39                     | 183.738                  |                           |         |
| 1,400.00                                                          | 1,394.90              | 818.90                | 818.90                | 4.92             | 32.76         | -119.14                  | 5,209.64                      | 3,205.99   | 6,147.05             | 6,109.39              | 37.67                     | 163.201                  |                           |         |
| 1,500.00                                                          | 1,491.03              | 915.03                | 915.03                | 5.33             | 36.60         | -119.00                  | 5,209.64                      | 3,205.99   | 6,160.82             | 6,118.91              | 41.91                     | 147.003                  |                           |         |
| 1,600.00                                                          | 1,585.60              | 1,009.60              | 1,009.60              | 5.79             | 40.38         | -118.81                  | 5,209.64                      | 3,205.99   | 6,177.20             | 6,131.08              | 46.12                     | 133.929                  |                           |         |
| 1,700.00                                                          | 1,678.33              | 1,102.33              | 1,102.33              | 6.30             | 44.09         | -118.59                  | 5,209.64                      | 3,205.99   | 6,196.22             | 6,145.92              | 50.30                     | 123.178                  |                           |         |
| 1,797.05                                                          | 1,766.34              | 1,190.34              | 1,190.34              | 6.85             | 47.61         | -118.33                  | 5,209.64                      | 3,205.99   | 6,217.20             | 6,162.87              | 54.32                     | 114.445                  |                           |         |
| 1,800.00                                                          | 1,768.98              | 1,192.98              | 1,192.98              | 6.87             | 47.72         | -118.34                  | 5,209.64                      | 3,205.99   | 6,217.87             | 6,163.43              | 54.45                     | 114.197                  |                           |         |
| 1,900.00                                                          | 1,858.58              | 1,282.58              | 1,282.58              | 7.49             | 51.30         | -118.67                  | 5,209.64                      | 3,205.99   | 6,240.90             | 6,182.32              | 58.58                     | 106.529                  |                           |         |
| 2,000.00                                                          | 1,948.17              | 1,372.17              | 1,372.17              | 8.15             | 54.89         | -119.00                  | 5,209.64                      | 3,205.99   | 6,264.16             | 6,201.42              | 62.74                     | 99.838                   |                           |         |
| 2,100.00                                                          | 2,037.76              | 1,461.76              | 1,461.76              | 8.83             | 58.47         | -119.33                  | 5,209.64                      | 3,205.99   | 6,287.64             | 6,220.72              | 66.92                     | 93.958                   |                           |         |
| 2,200.00                                                          | 2,127.36              | 1,551.36              | 1,551.36              | 9.53             | 62.05         | -119.65                  | 5,209.64                      | 3,205.99   | 6,311.35             | 6,240.24              | 71.11                     | 88.755                   |                           |         |
| 2,300.00                                                          | 2,216.95              | 1,640.95              | 1,640.95              | 10.25            | 65.64         | -119.97                  | 5,209.64                      | 3,205.99   | 6,335.29             | 6,259.97              | 75.31                     | 84.122                   |                           |         |
| 2,400.00                                                          | 2,306.54              | 1,730.54              | 1,730.54              | 10.97            | 69.22         | -120.29                  | 5,209.64                      | 3,205.99   | 6,359.44             | 6,279.92              | 79.52                     | 79.974                   |                           |         |
| 2,500.00                                                          | 2,396.14              | 1,820.14              | 1,820.14              | 11.71            | 72.81         | -120.61                  | 5,209.64                      | 3,205.99   | 6,383.81             | 6,300.08              | 83.73                     | 76.240                   |                           |         |
| 2,600.00                                                          | 2,485.73              | 1,909.73              | 1,909.73              | 12.45            | 76.39         | -120.93                  | 5,209.64                      | 3,205.99   | 6,408.39             | 6,320.44              | 87.95                     | 72.863                   |                           |         |
| 2,700.00                                                          | 2,575.32              | 1,999.32              | 1,999.32              | 13.21            | 79.97         | -121.24                  | 5,209.64                      | 3,205.99   | 6,433.19             | 6,341.02              | 92.17                     | 69.796                   |                           |         |
| 2,800.00                                                          | 2,664.92              | 2,088.92              | 2,088.92              | 13.96            | 83.56         | -121.55                  | 5,209.64                      | 3,205.99   | 6,458.20             | 6,361.81              | 96.39                     | 66.998                   |                           |         |
| 2,900.00                                                          | 2,754.51              | 2,178.51              | 2,178.51              | 14.72            | 87.14         | -121.86                  | 5,209.64                      | 3,205.99   | 6,483.42             | 6,382.80              | 100.62                    | 64.436                   |                           |         |
| 3,000.00                                                          | 2,844.10              | 2,268.10              | 2,268.10              | 15.49            | 90.72         | -122.17                  | 5,209.64                      | 3,205.99   | 6,508.84             | 6,404.00              | 104.84                    | 62.082                   |                           |         |
| 3,100.00                                                          | 2,933.70              | 2,357.70              | 2,357.70              | 16.26            | 94.31         | -122.48                  | 5,209.64                      | 3,205.99   | 6,534.46             | 6,425.40              | 109.07                    | 59.912                   |                           |         |
| 3,114.47                                                          | 2,946.66              | 2,370.66              | 2,370.66              | 16.37            | 94.83         | -122.52                  | 5,209.64                      | 3,205.99   | 6,538.19             | 6,428.51              | 109.68                    | 59.612                   |                           |         |
| 3,200.00                                                          | 3,024.12              | 2,448.12              | 2,448.12              | 17.01            | 97.92         | -123.32                  | 5,209.64                      | 3,205.99   | 6,559.28             | 6,445.97              | 113.31                    | 57.889                   |                           |         |
| 3,300.00                                                          | 3,116.62              | 2,474.00              | 2,474.00              | 17.69            | 98.96         | -123.97                  | 5,209.64                      | 3,205.99   | 6,581.83             | 6,466.94              | 114.90                    | 57.285                   |                           |         |
| 3,400.00                                                          | 3,210.99              | 2,474.00              | 2,474.00              | 18.31            | 98.96         | -124.51                  | 5,209.64                      | 3,205.99   | 6,602.93             | 6,487.55              | 115.37                    | 57.231                   |                           |         |
| 3,500.00                                                          | 3,306.96              | 2,474.00              | 2,474.00              | 18.86            | 98.96         | -125.00                  | 5,209.64                      | 3,205.99   | 6,622.57             | 6,506.79              | 115.78                    | 57.201                   |                           |         |
| 3,600.00                                                          | 3,404.26              | 2,474.00              | 2,474.00              | 19.35            | 98.96         | -125.45                  | 5,209.64                      | 3,205.99   | 6,640.72             | 6,524.61              | 116.11                    | 57.194 SF                |                           |         |
| 3,700.00                                                          | 3,502.64              | 2,474.00              | 2,474.00              | 19.77            | 98.96         | -125.87                  | 5,209.64                      | 3,205.99   | 6,657.33             | 6,540.97              | 116.37                    | 57.210                   |                           |         |
| 3,800.00                                                          | 3,601.81              | 2,474.00              | 2,474.00              | 20.14            | 98.96         | -126.23                  | 5,209.64                      | 3,205.99   | 6,672.39             | 6,555.83              | 116.56                    | 57.246                   |                           |         |
| 3,900.00                                                          | 3,701.52              | 2,474.00              | 2,474.00              | 20.45            | 98.96         | -126.56                  | 5,209.64                      | 3,205.99   | 6,685.85             | 6,569.17              | 116.68                    | 57.301                   |                           |         |
| 3,993.52                                                          | 3,795.00              | 2,474.00              | 2,474.00              | 20.68            | 98.96         | 24.22                    | 5,209.64                      | 3,205.99   | 6,696.97             | 6,580.24              | 116.73                    | 57.371                   |                           |         |
| 4,000.00                                                          | 3,801.48              | 2,474.00              | 2,474.00              | 20.69            | 98.96         | 24.22                    | 5,209.64                      | 3,205.99   | 6,697.69             | 6,580.96              | 116.73                    | 57.377                   |                           |         |
| 4,100.00                                                          | 3,901.48              | 2,474.00              | 2,474.00              | 20.91            | 98.96         | 24.22                    | 5,209.64                      | 3,205.99   | 6,709.65             | 6,592.91              | 116.74                    | 57.475                   |                           |         |
| 4,200.00                                                          | 4,001.48              | 2,474.00              | 2,474.00              | 21.13            | 98.96         | 24.22                    | 5,209.64                      | 3,205.99   | 6,723.07             | 6,606.34              | 116.73                    | 57.596                   |                           |         |
| 4,300.00                                                          | 4,101.48              | 2,474.00              | 2,474.00              | 21.36            | 98.96         | 24.22                    | 5,209.64                      | 3,205.99   | 6,737.95             | 6,621.25              | 116.70                    | 57.739                   |                           |         |
| 4,400.00                                                          | 4,201.48              | 2,474.00              | 2,474.00              | 21.59            | 98.96         | 24.22                    | 5,209.64                      | 3,205.99   | 6,754.28             | 6,637.63              | 116.64                    | 57.906                   |                           |         |
| 4,500.00                                                          | 4,301.48              | 2,474.00              | 2,474.00              | 21.82            | 98.96         | 24.22                    | 5,209.64                      | 3,205.99   | 6,772.04             | 6,655.47              | 116.57                    | 58.095                   |                           |         |
| 4,600.00                                                          | 4,401.48              | 2,474.00              | 2,474.00              | 22.05            | 98.96         | 24.22                    | 5,209.64                      | 3,205.99   | 6,791.23             | 6,674.76              | 116.47                    | 58.307                   |                           |         |
| 4,700.00                                                          | 4,501.48              | 2,474.00              | 2,474.00              | 22.29            | 98.96         | 24.22                    | 5,209.64                      | 3,205.99   | 6,811.84             | 6,695.48              | 116.36                    | 58.541                   |                           |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                   |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                          |                           |         |
|-------------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|--------------------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - Flood LS 001 (P/A) - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                          | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 100-UNKNOWN                                |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                          | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                                  |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Separation Factor</b> | <b>Warning</b>            |         |
| <b>Measured Depth<br/>(ft)</b>                                    | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> |                          |                           |         |
| 4,800.00                                                          | 4,601.48                       | 2,474.00                       | 2,474.00                       | 22.53                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 6,833.84                        | 6,717.62                         | 116.23                   | 58.797                    |         |
| 4,900.00                                                          | 4,701.48                       | 2,474.00                       | 2,474.00                       | 22.78                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 6,857.24                        | 6,741.16                         | 116.08                   | 59.075                    |         |
| 5,000.00                                                          | 4,801.48                       | 2,474.00                       | 2,474.00                       | 23.03                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 6,882.01                        | 6,766.10                         | 115.91                   | 59.375                    |         |
| 5,100.00                                                          | 4,901.48                       | 2,474.00                       | 2,474.00                       | 23.28                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 6,908.13                        | 6,792.41                         | 115.72                   | 59.697                    |         |
| 5,200.00                                                          | 5,001.48                       | 2,474.00                       | 2,474.00                       | 23.53                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 6,935.61                        | 6,820.09                         | 115.52                   | 60.041                    |         |
| 5,300.00                                                          | 5,101.48                       | 2,474.00                       | 2,474.00                       | 23.79                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 6,964.40                        | 6,849.11                         | 115.29                   | 60.406                    |         |
| 5,400.00                                                          | 5,201.48                       | 2,474.00                       | 2,474.00                       | 24.05                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 6,994.51                        | 6,879.46                         | 115.06                   | 60.792                    |         |
| 5,500.00                                                          | 5,301.48                       | 2,474.00                       | 2,474.00                       | 24.31                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 7,025.92                        | 6,911.11                         | 114.80                   | 61.199                    |         |
| 5,600.00                                                          | 5,401.48                       | 2,474.00                       | 2,474.00                       | 24.57                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 7,058.60                        | 6,944.06                         | 114.54                   | 61.627                    |         |
| 5,700.00                                                          | 5,501.48                       | 2,474.00                       | 2,474.00                       | 24.84                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 7,092.54                        | 6,978.28                         | 114.26                   | 62.075                    |         |
| 5,800.00                                                          | 5,601.48                       | 2,474.00                       | 2,474.00                       | 25.11                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 7,127.72                        | 7,013.76                         | 113.96                   | 62.545                    |         |
| 5,900.00                                                          | 5,701.48                       | 2,474.00                       | 2,474.00                       | 25.38                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 7,164.13                        | 7,050.47                         | 113.66                   | 63.034                    |         |
| 6,000.00                                                          | 5,801.48                       | 2,474.00                       | 2,474.00                       | 25.65                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 7,201.74                        | 7,088.40                         | 113.34                   | 63.543                    |         |
| 6,100.00                                                          | 5,901.48                       | 2,474.00                       | 2,474.00                       | 25.93                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 7,240.53                        | 7,127.53                         | 113.01                   | 64.072                    |         |
| 6,200.00                                                          | 6,001.48                       | 2,474.00                       | 2,474.00                       | 26.20                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 7,280.49                        | 7,167.83                         | 112.66                   | 64.621                    |         |
| 6,300.00                                                          | 6,101.48                       | 2,474.00                       | 2,474.00                       | 26.48                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 7,321.60                        | 7,209.29                         | 112.31                   | 65.189                    |         |
| 6,400.00                                                          | 6,201.48                       | 2,474.00                       | 2,474.00                       | 26.76                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 7,363.84                        | 7,251.89                         | 111.95                   | 65.777                    |         |
| 6,500.00                                                          | 6,301.48                       | 2,474.00                       | 2,474.00                       | 27.05                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 7,407.19                        | 7,295.61                         | 111.58                   | 66.383                    |         |
| 6,600.00                                                          | 6,401.48                       | 2,474.00                       | 2,474.00                       | 27.33                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 7,451.63                        | 7,340.42                         | 111.21                   | 67.007                    |         |
| 6,700.00                                                          | 6,501.48                       | 2,474.00                       | 2,474.00                       | 27.62                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 7,497.14                        | 7,386.32                         | 110.82                   | 67.651                    |         |
| 6,800.00                                                          | 6,601.48                       | 2,474.00                       | 2,474.00                       | 27.90                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 7,543.70                        | 7,433.27                         | 110.43                   | 68.312                    |         |
| 6,883.52                                                          | 6,685.00                       | 2,474.00                       | 2,474.00                       | 28.15                     | 98.96                  | 24.22                            | 5,209.64                      | 3,205.99              | 7,583.37                        | 7,473.28                         | 110.10                   | 68.878                    |         |



## Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

| Offset Design: Calloway Pad - Heaton 101 - OH - OH |                     |                     |                     |                |             |                       |                |            |                      |                       |                         |                   | Offset Site Error: | 0.00 ft |
|----------------------------------------------------|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|----------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|
| Survey Program:                                    |                     | 60-INCLINOMETER     |                     |                |             |                       | Rule Assigned: |            |                      | Offset Well Error:    |                         | 0.00 ft           |                    |         |
| Reference                                          | Offset              | Semi Major Axis     |                     | Distance       |             |                       | Warning        |            |                      |                       |                         |                   |                    |         |
| Measured Depth (ft)                                | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | +N/-S (ft)     | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | Warning            |         |
| 0.00                                               | 0.00                | 126.00              | 126.00              | 0.00           | 3.83        | 1.88                  | 4,991.03       | 163.47     | 4,993.70             |                       |                         |                   |                    |         |
| 100.00                                             | 100.00              | 226.01              | 226.00              | 0.30           | 6.86        | 1.88                  | 4,991.03       | 163.47     | 4,993.70             | 4,986.54              | 7.16                    | 697.343           |                    |         |
| 200.00                                             | 200.00              | 327.93              | 327.92              | 0.66           | 9.96        | 1.88                  | 4,991.81       | 163.47     | 4,994.49             | 4,983.87              | 10.61                   | 470.521           |                    |         |
| 300.00                                             | 300.00              | 459.89              | 459.87              | 1.01           | 13.97       | 1.88                  | 4,991.34       | 163.47     | 4,994.13             | 4,979.15              | 14.98                   | 333.376           |                    |         |
| 400.00                                             | 400.00              | 526.04              | 526.00              | 1.37           | 15.98       | 1.88                  | 4,991.03       | 163.47     | 4,993.70             | 4,976.36              | 17.35                   | 287.855           |                    |         |
| 500.00                                             | 500.00              | 626.04              | 626.00              | 1.73           | 19.01       | 1.88                  | 4,991.03       | 163.47     | 4,993.70             | 4,972.96              | 20.74                   | 240.738           |                    |         |
| 600.00                                             | 600.00              | 726.04              | 726.00              | 2.09           | 22.05       | 1.88                  | 4,991.03       | 163.47     | 4,993.70             | 4,969.57              | 24.14                   | 206.876           |                    |         |
| 700.00                                             | 700.00              | 833.30              | 833.26              | 2.45           | 25.31       | 1.88                  | 4,991.51       | 163.47     | 4,994.19             | 4,966.44              | 27.75                   | 179.942           |                    |         |
| 800.00                                             | 800.00              | 942.85              | 942.81              | 2.81           | 28.63       | 1.88                  | 4,991.25       | 163.47     | 4,993.95             | 4,962.51              | 31.44                   | 158.842           |                    |         |
| 900.00                                             | 900.00              | 1,026.08            | 1,026.00            | 3.17           | 31.16       | 1.88                  | 4,991.03       | 163.47     | 4,993.70             | 4,959.38              | 34.33                   | 145.479           |                    |         |
| 918.00                                             | 918.00              | 1,044.08            | 1,044.00            | 3.23           | 31.71       | 1.88                  | 4,991.03       | 163.47     | 4,993.70             | 4,958.77              | 34.94                   | 142.934           | CC                 |         |
| 1,000.00                                           | 999.97              | 1,126.06            | 1,125.97            | 3.51           | 34.20       | -149.16               | 4,991.03       | 163.47     | 4,995.22             | 4,957.51              | 37.71                   | 132.474           | ES                 |         |
| 1,100.00                                           | 1,099.72            | 1,225.81            | 1,225.72            | 3.84           | 37.23       | -149.11               | 4,991.03       | 163.47     | 5,001.15             | 4,960.08              | 41.07                   | 121.774           |                    |         |
| 1,200.00                                           | 1,198.98            | 1,330.89            | 1,330.80            | 4.18           | 40.42       | -149.03               | 4,992.28       | 163.47     | 5,012.82             | 4,968.21              | 44.60                   | 112.393           |                    |         |
| 1,300.00                                           | 1,297.46            | 1,446.83            | 1,446.72            | 4.54           | 43.94       | -148.92               | 4,991.94       | 163.47     | 5,027.41             | 4,978.94              | 48.47                   | 103.725           |                    |         |
| 1,400.00                                           | 1,394.90            | 1,561.71            | 1,561.60            | 4.92           | 47.43       | -148.78               | 4,991.21       | 163.47     | 5,046.10             | 4,993.79              | 52.31                   | 96.459            |                    |         |
| 1,500.00                                           | 1,491.03            | 1,617.17            | 1,617.03            | 5.33           | 49.11       | -148.49               | 4,991.03       | 163.47     | 5,069.47             | 5,015.10              | 54.37                   | 93.244            |                    |         |
| 1,600.00                                           | 1,585.60            | 1,711.73            | 1,711.60            | 5.79           | 51.98       | -148.22               | 4,991.03       | 163.47     | 5,097.54             | 5,039.92              | 57.62                   | 88.468            |                    |         |
| 1,700.00                                           | 1,678.33            | 1,804.47            | 1,804.33            | 6.30           | 54.80       | -147.90               | 4,991.03       | 163.47     | 5,129.91             | 5,069.08              | 60.83                   | 84.328            |                    |         |
| 1,797.05                                           | 1,766.34            | 1,900.41            | 1,900.28            | 6.85           | 57.71       | -147.55               | 4,991.47       | 163.47     | 5,165.84             | 5,101.69              | 64.15                   | 80.529            |                    |         |
| 1,800.00                                           | 1,768.98            | 1,903.35            | 1,903.21            | 6.87           | 57.80       | -147.55               | 4,991.47       | 163.47     | 5,166.97             | 5,102.72              | 64.26                   | 80.412            |                    |         |
| 1,900.00                                           | 1,858.58            | 2,002.64            | 2,002.50            | 7.49           | 60.82       | -147.84               | 4,991.22       | 163.47     | 5,205.38             | 5,137.69              | 67.69                   | 76.899            |                    |         |
| 2,000.00                                           | 1,948.17            | 2,074.32            | 2,074.17            | 8.15           | 62.99       | -148.04               | 4,991.03       | 163.47     | 5,243.89             | 5,173.59              | 70.30                   | 74.595            |                    |         |
| 2,100.00                                           | 2,037.76            | 2,163.92            | 2,163.76            | 8.83           | 65.71       | -148.29               | 4,991.03       | 163.47     | 5,282.70             | 5,209.24              | 73.46                   | 71.911            |                    |         |
| 2,200.00                                           | 2,127.36            | 2,253.51            | 2,253.36            | 9.53           | 68.44       | -148.53               | 4,991.03       | 163.47     | 5,321.61             | 5,244.97              | 76.63                   | 69.442            |                    |         |
| 2,300.00                                           | 2,216.95            | 2,346.87            | 2,346.72            | 10.25          | 71.27       | -148.78               | 4,991.57       | 163.47     | 5,361.14             | 5,281.21              | 79.93                   | 67.074            |                    |         |
| 2,400.00                                           | 2,306.54            | 2,445.66            | 2,445.51            | 10.97          | 74.27       | -149.04               | 4,991.41       | 163.47     | 5,400.07             | 5,316.68              | 83.39                   | 64.754            |                    |         |
| 2,500.00                                           | 2,396.14            | 2,544.60            | 2,544.44            | 11.71          | 77.28       | -149.30               | 4,991.09       | 163.47     | 5,438.94             | 5,352.07              | 86.87                   | 62.611            |                    |         |
| 2,600.00                                           | 2,485.73            | 2,590.00            | 2,589.75            | 12.45          | 78.65       | -149.42               | 4,991.03       | 163.47     | 5,478.11             | 5,389.40              | 88.71                   | 61.755            | SF                 |         |
| 2,700.00                                           | 2,575.32            | 2,590.00            | 2,589.75            | 13.21          | 78.65       | -149.42               | 4,991.03       | 163.47     | 5,518.50             | 5,429.37              | 89.14                   | 61.911            |                    |         |
| 2,800.00                                           | 2,664.92            | 2,590.00            | 2,589.75            | 13.96          | 78.65       | -149.42               | 4,991.03       | 163.47     | 5,560.41             | 5,470.87              | 89.54                   | 62.100            |                    |         |
| 2,900.00                                           | 2,754.51            | 2,590.00            | 2,589.75            | 14.72          | 78.65       | -149.42               | 4,991.03       | 163.47     | 5,603.78             | 5,513.86              | 89.92                   | 62.321            |                    |         |
| 3,000.00                                           | 2,844.10            | 2,590.00            | 2,589.75            | 15.49          | 78.65       | -149.42               | 4,991.03       | 163.47     | 5,648.59             | 5,558.32              | 90.27                   | 62.572            |                    |         |
| 3,100.00                                           | 2,933.70            | 2,590.00            | 2,589.75            | 16.26          | 78.65       | -149.42               | 4,991.03       | 163.47     | 5,694.81             | 5,604.21              | 90.60                   | 62.854            |                    |         |
| 3,114.47                                           | 2,946.66            | 2,590.00            | 2,589.75            | 16.37          | 78.65       | -149.42               | 4,991.03       | 163.47     | 5,701.61             | 5,610.96              | 90.65                   | 62.897            |                    |         |
| 3,200.00                                           | 3,024.12            | 2,590.00            | 2,589.75            | 17.01          | 78.65       | -150.09               | 4,991.03       | 163.47     | 5,740.94             | 5,650.04              | 90.90                   | 63.156            |                    |         |
| 3,300.00                                           | 3,116.62            | 2,590.00            | 2,589.75            | 17.69          | 78.65       | -150.80               | 4,991.03       | 163.47     | 5,784.44             | 5,693.29              | 91.15                   | 63.461            |                    |         |
| 3,400.00                                           | 3,210.99            | 2,590.00            | 2,589.75            | 18.31          | 78.65       | -151.45               | 4,991.03       | 163.47     | 5,825.23             | 5,733.87              | 91.35                   | 63.766            |                    |         |
| 3,500.00                                           | 3,306.96            | 2,590.00            | 2,589.75            | 18.86          | 78.65       | -152.03               | 4,991.03       | 163.47     | 5,863.23             | 5,771.72              | 91.51                   | 64.072            |                    |         |
| 3,600.00                                           | 3,404.26            | 2,590.00            | 2,589.75            | 19.35          | 78.65       | -152.56               | 4,991.03       | 163.47     | 5,898.41             | 5,806.79              | 91.62                   | 64.381            |                    |         |
| 3,700.00                                           | 3,502.64            | 2,590.00            | 2,589.75            | 19.77          | 78.65       | -153.03               | 4,991.03       | 163.47     | 5,930.72             | 5,839.04              | 91.68                   | 64.691            |                    |         |
| 3,800.00                                           | 3,601.81            | 2,590.00            | 2,589.75            | 20.14          | 78.65       | -153.44               | 4,991.03       | 163.47     | 5,960.11             | 5,868.42              | 91.69                   | 65.004            |                    |         |
| 3,900.00                                           | 3,701.52            | 2,590.00            | 2,589.75            | 20.45          | 78.65       | -153.81               | 4,991.03       | 163.47     | 5,986.56             | 5,894.90              | 91.65                   | 65.318            |                    |         |
| 3,993.52                                           | 3,795.00            | 2,590.00            | 2,589.75            | 20.68          | 78.65       | -3.05                 | 4,991.03       | 163.47     | 6,008.59             | 5,917.02              | 91.57                   | 65.616            |                    |         |
| 4,000.00                                           | 3,801.48            | 2,590.00            | 2,589.75            | 20.69          | 78.65       | -3.05                 | 4,991.03       | 163.47     | 6,010.03             | 5,918.47              | 91.56                   | 65.638            |                    |         |
| 4,100.00                                           | 3,901.48            | 2,590.00            | 2,589.75            | 20.91          | 78.65       | -3.05                 | 4,991.03       | 163.47     | 6,033.08             | 5,941.63              | 91.45                   | 65.975            |                    |         |
| 4,200.00                                           | 4,001.48            | 2,590.00            | 2,589.75            | 21.13          | 78.65       | -3.05                 | 4,991.03       | 163.47     | 6,057.68             | 5,966.38              | 91.31                   | 66.343            |                    |         |
| 4,300.00                                           | 4,101.48            | 2,590.00            | 2,589.75            | 21.36          | 78.65       | -3.05                 | 4,991.03       | 163.47     | 6,083.84             | 5,992.68              | 91.15                   | 66.742            |                    |         |
| 4,400.00                                           | 4,201.48            | 2,590.00            | 2,589.75            | 21.59          | 78.65       | -3.05                 | 4,991.03       | 163.47     | 6,111.52             | 6,020.53              | 90.98                   | 67.171            |                    |         |
| 4,500.00                                           | 4,301.48            | 2,590.00            | 2,589.75            | 21.82          | 78.65       | -3.05                 | 4,991.03       | 163.47     | 6,140.70             | 6,049.90              | 90.80                   | 67.631            |                    |         |
| 4,600.00                                           | 4,401.48            | 2,590.00            | 2,589.75            | 22.05          | 78.65       | -3.05                 | 4,991.03       | 163.47     | 6,171.36             | 6,080.77              | 90.60                   | 68.120            |                    |         |
| 4,700.00                                           | 4,501.48            | 2,590.00            | 2,589.75            | 22.29          | 78.65       | -3.05                 | 4,991.03       | 163.47     | 6,203.49             | 6,113.11              | 90.38                   | 68.639            |                    |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                           |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |
|-----------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|------------------------------------|--------------------------|
| <b>Offset Design:</b> Calloway Pad - Heaton 101 - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  | <b>Offset Site Error:</b>          | 0.00 ft                  |
| <b>Survey Program:</b> 60-INCLINOMETER                    |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  | <b>Offset Well Error:</b>          | 0.00 ft                  |
| <b>Reference</b>                                          |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Rule Assigned:</b>              |                          |
| <b>Measured Depth<br/>(ft)</b>                            | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> | <b>Minimum Separation<br/>(ft)</b> | <b>Separation Factor</b> |
| 4,800.00                                                  | 4,601.48                       | 2,590.00                       | 2,589.75                       | 22.53                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,237.05                        | 6,146.90                         | 90.15                              | 69.187                   |
| 4,900.00                                                  | 4,701.48                       | 2,590.00                       | 2,589.75                       | 22.78                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,272.03                        | 6,182.13                         | 89.90                              | 69.765                   |
| 5,000.00                                                  | 4,801.48                       | 2,590.00                       | 2,589.75                       | 23.03                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,308.40                        | 6,218.75                         | 89.64                              | 70.371                   |
| 5,100.00                                                  | 4,901.48                       | 2,590.00                       | 2,589.75                       | 23.28                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,346.14                        | 6,256.76                         | 89.38                              | 71.005                   |
| 5,200.00                                                  | 5,001.48                       | 2,590.00                       | 2,589.75                       | 23.53                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,385.22                        | 6,296.12                         | 89.09                              | 71.668                   |
| 5,300.00                                                  | 5,101.48                       | 2,590.00                       | 2,589.75                       | 23.79                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,425.62                        | 6,336.81                         | 88.80                              | 72.358                   |
| 5,400.00                                                  | 5,201.48                       | 2,590.00                       | 2,589.75                       | 24.05                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,467.31                        | 6,378.81                         | 88.50                              | 73.075                   |
| 5,500.00                                                  | 5,301.48                       | 2,590.00                       | 2,589.75                       | 24.31                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,510.27                        | 6,422.08                         | 88.19                              | 73.819                   |
| 5,600.00                                                  | 5,401.48                       | 2,590.00                       | 2,589.75                       | 24.57                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,554.48                        | 6,466.60                         | 87.87                              | 74.589                   |
| 5,700.00                                                  | 5,501.48                       | 2,590.00                       | 2,589.75                       | 24.84                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,599.90                        | 6,512.36                         | 87.55                              | 75.386                   |
| 5,800.00                                                  | 5,601.48                       | 2,590.00                       | 2,589.75                       | 25.11                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,646.52                        | 6,559.31                         | 87.22                              | 76.208                   |
| 5,900.00                                                  | 5,701.48                       | 2,590.00                       | 2,589.75                       | 25.38                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,694.31                        | 6,607.44                         | 86.88                              | 77.055                   |
| 6,000.00                                                  | 5,801.48                       | 2,590.00                       | 2,589.75                       | 25.65                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,743.25                        | 6,656.71                         | 86.53                              | 77.927                   |
| 6,100.00                                                  | 5,901.48                       | 2,590.00                       | 2,589.75                       | 25.93                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,793.30                        | 6,707.12                         | 86.18                              | 78.824                   |
| 6,200.00                                                  | 6,001.48                       | 2,590.00                       | 2,589.75                       | 26.20                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,844.45                        | 6,758.62                         | 85.83                              | 79.744                   |
| 6,300.00                                                  | 6,101.48                       | 2,590.00                       | 2,589.75                       | 26.48                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,896.67                        | 6,811.19                         | 85.47                              | 80.687                   |
| 6,400.00                                                  | 6,201.48                       | 2,590.00                       | 2,589.75                       | 26.76                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 6,949.93                        | 6,864.82                         | 85.11                              | 81.654                   |
| 6,500.00                                                  | 6,301.48                       | 2,590.00                       | 2,589.75                       | 27.05                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 7,004.22                        | 6,919.47                         | 84.75                              | 82.643                   |
| 6,600.00                                                  | 6,401.48                       | 2,590.00                       | 2,589.75                       | 27.33                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 7,059.51                        | 6,975.12                         | 84.39                              | 83.653                   |
| 6,700.00                                                  | 6,501.48                       | 2,590.00                       | 2,589.75                       | 27.62                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 7,115.77                        | 7,031.74                         | 84.03                              | 84.685                   |
| 6,800.00                                                  | 6,601.48                       | 2,590.00                       | 2,589.75                       | 27.90                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 7,172.99                        | 7,089.33                         | 83.66                              | 85.738                   |
| 6,883.52                                                  | 6,685.00                       | 2,590.00                       | 2,589.75                       | 28.15                     | 78.65                  | -3.05                            | 4,991.03                      | 163.47                | 7,221.49                        | 7,138.13                         | 83.36                              | 86.633                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



## Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                           |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |                |                           |         |
|-----------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|------------------------------------|--------------------------|----------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - Lester 001 - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |                | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 938-INCLINOMETER                   |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |                | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                          |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Minimum Separation<br/>(ft)</b> | <b>Separation Factor</b> | <b>Warning</b> |                           |         |
| <b>Measured Depth<br/>(ft)</b>                            | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> |                                    |                          |                |                           |         |
| 0.00                                                      | 0.00                           | 40.00                          | 40.00                          | 0.00                      | 1.21                   | 98.54                            | -884.16                       | 5,887.03              | 5,953.06                        |                                  |                                    |                          |                |                           |         |
| 100.00                                                    | 100.00                         | 140.00                         | 140.00                         | 0.30                      | 4.25                   | 98.54                            | -884.16                       | 5,887.03              | 5,953.06                        | 5,948.51                         | 4.55                               | 1,308.559                |                |                           |         |
| 200.00                                                    | 200.00                         | 240.00                         | 240.00                         | 0.66                      | 7.29                   | 98.54                            | -884.16                       | 5,887.03              | 5,953.06                        | 5,945.11                         | 7.94                               | 749.317                  |                |                           |         |
| 300.00                                                    | 300.00                         | 340.00                         | 340.00                         | 1.01                      | 10.33                  | 98.54                            | -884.16                       | 5,887.03              | 5,953.06                        | 5,941.72                         | 11.34                              | 524.962                  |                |                           |         |
| 400.00                                                    | 400.00                         | 440.00                         | 440.00                         | 1.37                      | 13.36                  | 98.54                            | -884.16                       | 5,887.03              | 5,953.06                        | 5,938.32                         | 14.74                              | 404.000                  |                |                           |         |
| 500.00                                                    | 500.00                         | 540.00                         | 540.00                         | 1.73                      | 16.40                  | 98.54                            | -884.16                       | 5,887.03              | 5,953.06                        | 5,934.93                         | 18.13                              | 328.343                  |                |                           |         |
| 600.00                                                    | 600.00                         | 640.00                         | 640.00                         | 2.09                      | 19.44                  | 98.54                            | -884.16                       | 5,887.03              | 5,953.06                        | 5,931.53                         | 21.53                              | 276.553                  |                |                           |         |
| 700.00                                                    | 700.00                         | 740.00                         | 740.00                         | 2.45                      | 22.47                  | 98.54                            | -884.16                       | 5,887.03              | 5,953.06                        | 5,928.14                         | 24.92                              | 238.875                  |                |                           |         |
| 800.00                                                    | 800.00                         | 840.00                         | 840.00                         | 2.81                      | 25.51                  | 98.54                            | -884.16                       | 5,887.03              | 5,953.06                        | 5,924.74                         | 28.32                              | 210.232                  |                |                           |         |
| 900.00                                                    | 900.00                         | 940.03                         | 940.00                         | 3.17                      | 28.55                  | 98.54                            | -884.16                       | 5,887.03              | 5,953.06                        | 5,921.35                         | 31.71                              | 187.718                  |                |                           |         |
| 918.00                                                    | 918.00                         | 958.03                         | 958.00                         | 3.23                      | 29.09                  | 98.54                            | -884.16                       | 5,887.03              | 5,953.06                        | 5,920.73                         | 32.32                              | 184.169                  |                |                           |         |
| 1,000.00                                                  | 999.97                         | 1,040.00                       | 1,039.97                       | 3.51                      | 31.58                  | -52.55                           | -884.16                       | 5,887.03              | 5,951.99                        | 5,916.89                         | 35.09                              | 169.604                  |                |                           |         |
| 1,100.00                                                  | 1,099.72                       | 1,139.75                       | 1,139.72                       | 3.84                      | 34.61                  | -52.70                           | -884.16                       | 5,887.03              | 5,947.79                        | 5,909.34                         | 38.45                              | 154.679                  |                |                           |         |
| 1,200.00                                                  | 1,198.98                       | 1,238.04                       | 1,238.01                       | 4.18                      | 37.60                  | -52.98                           | -883.35                       | 5,887.03              | 5,940.32                        | 5,898.54                         | 41.78                              | 142.194                  |                |                           |         |
| 1,300.00                                                  | 1,297.46                       | 1,334.46                       | 1,334.42                       | 4.54                      | 40.53                  | -53.36                           | -883.57                       | 5,887.03              | 5,929.88                        | 5,884.82                         | 45.05                              | 131.616                  |                |                           |         |
| 1,400.00                                                  | 1,394.90                       | 1,429.96                       | 1,429.92                       | 4.92                      | 43.43                  | -53.85                           | -884.03                       | 5,887.03              | 5,916.42                        | 5,868.09                         | 48.32                              | 122.438                  |                |                           |         |
| 1,500.00                                                  | 1,491.03                       | 1,531.10                       | 1,531.03                       | 5.33                      | 46.50                  | -54.48                           | -884.16                       | 5,887.03              | 5,899.92                        | 5,848.13                         | 51.78                              | 113.933                  |                |                           |         |
| 1,600.00                                                  | 1,585.60                       | 1,625.67                       | 1,625.60                       | 5.79                      | 49.37                  | -55.21                           | -884.16                       | 5,887.03              | 5,880.51                        | 5,825.43                         | 55.08                              | 106.769                  |                |                           |         |
| 1,700.00                                                  | 1,678.33                       | 1,718.34                       | 1,718.26                       | 6.30                      | 52.18                  | -56.07                           | -883.30                       | 5,887.03              | 5,858.21                        | 5,799.86                         | 58.35                              | 100.397                  |                |                           |         |
| 1,797.05                                                  | 1,766.34                       | 1,804.83                       | 1,804.75                       | 6.85                      | 54.81                  | -57.00                           | -883.40                       | 5,887.03              | 5,834.14                        | 5,772.67                         | 61.47                              | 94.914                   |                |                           |         |
| 1,800.00                                                  | 1,768.98                       | 1,807.44                       | 1,807.36                       | 6.87                      | 54.89                  | -57.01                           | -883.40                       | 5,887.03              | 5,833.37                        | 5,771.80                         | 61.56                              | 94.752                   |                |                           |         |
| 1,900.00                                                  | 1,858.58                       | 1,895.66                       | 1,895.58                       | 7.49                      | 57.57                  | -57.34                           | -883.70                       | 5,887.03              | 5,807.45                        | 5,742.67                         | 64.79                              | 89.641                   |                |                           |         |
| 2,000.00                                                  | 1,948.17                       | 1,988.29                       | 1,988.17                       | 8.15                      | 60.38                  | -57.69                           | -884.16                       | 5,887.03              | 5,781.78                        | 5,713.61                         | 68.17                              | 84.814                   |                |                           |         |
| 2,100.00                                                  | 2,037.76                       | 2,077.88                       | 2,077.76                       | 8.83                      | 63.10                  | -58.04                           | -884.16                       | 5,887.03              | 5,756.28                        | 5,684.79                         | 71.49                              | 80.523                   |                |                           |         |
| 2,200.00                                                  | 2,127.36                       | 2,167.47                       | 2,167.36                       | 9.53                      | 65.82                  | -58.39                           | -884.16                       | 5,887.03              | 5,731.01                        | 5,656.18                         | 74.82                              | 76.594                   |                |                           |         |
| 2,300.00                                                  | 2,216.95                       | 2,256.63                       | 2,256.51                       | 10.25                     | 68.53                  | -58.74                           | -883.37                       | 5,887.03              | 5,705.90                        | 5,627.73                         | 78.16                              | 72.998                   |                |                           |         |
| 2,400.00                                                  | 2,306.54                       | 2,345.15                       | 2,345.02                       | 10.97                     | 71.22                  | -59.09                           | -883.55                       | 5,887.03              | 5,681.12                        | 5,599.62                         | 81.50                              | 69.706                   |                |                           |         |
| 2,500.00                                                  | 2,396.14                       | 2,433.85                       | 2,433.72                       | 11.71                     | 73.91                  | -59.44                           | -883.94                       | 5,887.03              | 5,656.60                        | 5,571.74                         | 84.86                              | 66.661                   |                |                           |         |
| 2,600.00                                                  | 2,485.73                       | 2,525.89                       | 2,525.73                       | 12.45                     | 76.71                  | -59.81                           | -884.16                       | 5,887.03              | 5,632.30                        | 5,543.97                         | 88.32                              | 63.768                   |                |                           |         |
| 2,700.00                                                  | 2,575.32                       | 2,615.48                       | 2,615.32                       | 13.21                     | 79.43                  | -60.17                           | -884.16                       | 5,887.03              | 5,608.23                        | 5,516.50                         | 91.73                              | 61.139                   |                |                           |         |
| 2,800.00                                                  | 2,664.92                       | 2,705.07                       | 2,704.92                       | 13.96                     | 82.15                  | -60.53                           | -884.16                       | 5,887.03              | 5,584.41                        | 5,489.27                         | 95.14                              | 58.695                   |                |                           |         |
| 2,900.00                                                  | 2,754.51                       | 2,794.67                       | 2,794.51                       | 14.72                     | 84.87                  | -60.90                           | -884.16                       | 5,887.03              | 5,560.84                        | 5,462.28                         | 98.56                              | 56.418                   |                |                           |         |
| 3,000.00                                                  | 2,844.10                       | 2,884.17                       | 2,884.00                       | 15.49                     | 87.59                  | -61.28                           | -882.89                       | 5,887.03              | 5,537.47                        | 5,435.48                         | 101.99                             | 54.293                   |                |                           |         |
| 3,100.00                                                  | 2,933.70                       | 2,973.48                       | 2,973.31                       | 16.26                     | 90.30                  | -61.65                           | -883.00                       | 5,887.03              | 5,514.43                        | 5,409.01                         | 105.42                             | 52.308                   |                |                           |         |
| 3,114.47                                                  | 2,946.66                       | 2,986.41                       | 2,986.24                       | 16.37                     | 90.69                  | -61.71                           | -883.02                       | 5,887.03              | 5,511.12                        | 5,405.20                         | 105.92                             | 52.032                   |                |                           |         |
| 3,200.00                                                  | 3,024.12                       | 3,063.73                       | 3,063.55                       | 17.01                     | 93.04                  | -61.51                           | -883.23                       | 5,887.03              | 5,492.54                        | 5,383.68                         | 108.86                             | 50.453                   |                |                           |         |
| 3,300.00                                                  | 3,116.62                       | 3,156.15                       | 3,155.98                       | 17.69                     | 95.85                  | -61.32                           | -883.62                       | 5,887.03              | 5,473.29                        | 5,360.97                         | 112.32                             | 48.729                   |                |                           |         |
| 3,400.00                                                  | 3,210.99                       | 3,251.21                       | 3,250.99                       | 18.31                     | 98.74                  | -61.16                           | -884.16                       | 5,887.03              | 5,456.68                        | 5,340.88                         | 115.80                             | 47.121                   |                |                           |         |
| 3,500.00                                                  | 3,306.96                       | 3,347.18                       | 3,346.96                       | 18.86                     | 101.65                 | -61.04                           | -884.16                       | 5,887.03              | 5,442.68                        | 5,323.42                         | 119.25                             | 45.640                   |                |                           |         |
| 3,600.00                                                  | 3,404.26                       | 3,444.48                       | 3,444.25                       | 19.35                     | 104.60                 | -60.95                           | -883.54                       | 5,887.03              | 5,431.27                        | 5,308.58                         | 122.69                             | 44.268                   |                |                           |         |
| 3,700.00                                                  | 3,502.64                       | 3,542.72                       | 3,542.48                       | 19.77                     | 107.59                 | -60.88                           | -883.71                       | 5,887.03              | 5,422.47                        | 5,296.37                         | 126.10                             | 43.002                   |                |                           |         |
| 3,800.00                                                  | 3,601.81                       | 3,642.06                       | 3,641.81                       | 20.14                     | 110.60                 | -60.83                           | -884.16                       | 5,887.03              | 5,416.24                        | 5,286.76                         | 129.48                             | 41.829                   |                |                           |         |
| 3,900.00                                                  | 3,701.52                       | 3,741.77                       | 3,741.52                       | 20.45                     | 113.63                 | -60.80                           | -884.16                       | 5,887.03              | 5,412.57                        | 5,279.74                         | 132.83                             | 40.748                   |                |                           |         |
| 3,993.46                                                  | 3,794.94                       | 3,835.11                       | 3,834.86                       | 20.68                     | 116.47                 | 90.26                            | -884.07                       | 5,887.03              | 5,411.46                        | 5,275.55                         | 135.90                             | 39.818                   |                |                           |         |
| 3,993.52                                                  | 3,795.00                       | 3,835.17                       | 3,834.92                       | 20.68                     | 116.47                 | 90.26                            | -884.07                       | 5,887.03              | 5,411.46                        | 5,275.55                         | 135.91                             | 39.817                   |                |                           |         |
| 4,000.00                                                  | 3,801.48                       | 3,841.64                       | 3,841.39                       | 20.69                     | 116.67                 | 90.26                            | -884.09                       | 5,887.03              | 5,411.46                        | 5,275.34                         | 136.12                             | 39.756                   |                |                           |         |
| 4,100.00                                                  | 3,901.48                       | 3,941.74                       | 3,941.48                       | 20.91                     | 119.71                 | 90.26                            | -884.16                       | 5,887.03              | 5,411.46                        | 5,272.07                         | 139.38                             | 38.824                   |                |                           |         |
| 4,129.76                                                  | 3,931.24                       | 3,971.50                       | 3,971.24                       | 20.98                     | 120.61                 | 90.25                            | -883.92                       | 5,887.03              | 5,411.45                        | 5,271.10                         | 140.36                             | 38.555                   |                |                           |         |
| 4,200.00                                                  | 4,001.48                       | 4,041.67                       | 4,041.41                       | 21.13                     | 122.74                 | 90.26                            | -884.02                       | 5,887.03              | 5,411.45                        | 5,268.80                         | 142.65                             | 37.935                   |                |                           |         |
| 4,300.00                                                  | 4,101.48                       | 4,141.75                       | 4,141.48                       | 21.36                     | 125.78                 | 90.26                            | -884.16                       | 5,887.03              | 5,411.46                        | 5,265.53                         | 145.92                             | 37.084                   |                |                           |         |
| 4,375.09                                                  | 4,176.57                       | 4,216.83                       | 4,216.57                       | 21.53                     | 128.06                 | 90.25                            | -883.87                       | 5,887.03              | 5,411.45                        | 5,263.07                         | 148.38                             | 36.470                   |                |                           |         |
| 4,400.00                                                  | 4,201.48                       | 4,241.73                       | 4,241.46                       | 21.59                     | 128.82                 | 90.25                            | -883.88                       | 5,887.03              | 5,411.45                        | 5,262.26                         | 149.20                             | 36.270                   |                |                           |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                           |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                           |                |
|-----------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|---------------------------|----------------|
| <b>Offset Design:</b> Calloway Pad - Lester 001 - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  | <b>Offset Site Error:</b> | 0.00 ft        |
| <b>Survey Program:</b> 938-INCLINOMETER                   |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  | <b>Offset Well Error:</b> | 0.00 ft        |
| <b>Reference</b>                                          |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Separation Factor</b>  | <b>Warning</b> |
| <b>Measured Depth<br/>(ft)</b>                            | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> |                           |                |
| 4,500.00                                                  | 4,301.48                       | 4,341.65                       | 4,341.38                       | 21.82                     | 131.85                 | 90.26                            | -884.13                       | 5,887.03              | 5,411.46                        | 5,258.98                         | 152.47                    | 35.491         |
| 4,600.00                                                  | 4,401.48                       | 4,441.76                       | 4,441.48                       | 22.05                     | 134.89                 | 90.26                            | -884.16                       | 5,887.03              | 5,411.46                        | 5,255.70                         | 155.76                    | 34.743         |
| 4,658.06                                                  | 4,459.54                       | 4,499.81                       | 4,499.53                       | 22.19                     | 136.65                 | 90.25                            | -883.84                       | 5,887.03              | 5,411.45                        | 5,253.79                         | 157.67                    | 34.322 CC      |
| 4,700.00                                                  | 4,501.48                       | 4,541.72                       | 4,541.45                       | 22.29                     | 137.93                 | 90.25                            | -883.87                       | 5,887.03              | 5,411.45                        | 5,252.41                         | 159.04                    | 34.025         |
| 4,800.00                                                  | 4,601.48                       | 4,641.66                       | 4,641.38                       | 22.53                     | 140.96                 | 90.26                            | -884.16                       | 5,887.03              | 5,411.46                        | 5,249.13                         | 162.33                    | 33.336         |
| 4,900.00                                                  | 4,701.48                       | 4,741.77                       | 4,741.48                       | 22.78                     | 144.00                 | 90.26                            | -884.16                       | 5,887.03              | 5,411.46                        | 5,245.83                         | 165.62                    | 32.673         |
| 5,000.00                                                  | 4,801.48                       | 4,841.77                       | 4,841.48                       | 23.03                     | 147.04                 | 90.26                            | -884.16                       | 5,887.03              | 5,411.46                        | 5,242.54                         | 168.92                    | 32.036         |
| 5,100.00                                                  | 4,901.48                       | 4,941.77                       | 4,941.48                       | 23.28                     | 150.07                 | 90.26                            | -884.16                       | 5,887.03              | 5,411.46                        | 5,239.24                         | 172.21                    | 31.423         |
| 5,200.00                                                  | 5,001.48                       | 5,041.77                       | 5,041.48                       | 23.53                     | 153.11                 | 90.26                            | -884.16                       | 5,887.03              | 5,411.46                        | 5,235.94                         | 175.51                    | 30.832         |
| 5,300.00                                                  | 5,101.48                       | 5,141.77                       | 5,141.48                       | 23.79                     | 156.15                 | 90.26                            | -884.16                       | 5,887.03              | 5,411.46                        | 5,232.64                         | 178.82                    | 30.263         |
| 5,400.00                                                  | 5,201.48                       | 5,241.77                       | 5,241.48                       | 24.05                     | 159.19                 | 90.26                            | -884.16                       | 5,887.03              | 5,411.46                        | 5,229.34                         | 182.12                    | 29.714         |
| 5,500.00                                                  | 5,301.48                       | 5,341.77                       | 5,341.48                       | 24.31                     | 162.22                 | 90.26                            | -884.16                       | 5,887.03              | 5,411.46                        | 5,226.03                         | 185.43                    | 29.184         |
| 5,600.00                                                  | 5,401.48                       | 5,441.77                       | 5,441.48                       | 24.57                     | 165.26                 | 90.26                            | -884.16                       | 5,887.03              | 5,411.46                        | 5,222.72                         | 188.74                    | 28.672         |
| 5,700.00                                                  | 5,501.48                       | 5,541.77                       | 5,541.48                       | 24.84                     | 168.30                 | 90.26                            | -884.16                       | 5,887.03              | 5,411.46                        | 5,219.41                         | 192.05                    | 28.178         |
| 5,800.00                                                  | 5,601.48                       | 5,641.77                       | 5,641.48                       | 25.11                     | 171.33                 | 90.26                            | -884.16                       | 5,887.03              | 5,411.46                        | 5,216.09                         | 195.36                    | 27.700         |
| 5,900.00                                                  | 5,701.48                       | 5,741.77                       | 5,741.48                       | 25.38                     | 174.37                 | 90.26                            | -884.16                       | 5,887.03              | 5,411.46                        | 5,212.78                         | 198.68                    | 27.237 ES      |
| 6,000.00                                                  | 5,801.48                       | 5,749.00                       | 5,748.67                       | 25.65                     | 174.59                 | 90.26                            | -884.16                       | 5,887.03              | 5,412.25                        | 5,213.07                         | 199.18                    | 27.173         |
| 6,100.00                                                  | 5,901.48                       | 5,749.00                       | 5,748.67                       | 25.93                     | 174.59                 | 90.26                            | -884.16                       | 5,887.03              | 5,414.89                        | 5,215.50                         | 199.39                    | 27.157 SF      |
| 6,200.00                                                  | 6,001.48                       | 5,749.00                       | 5,748.67                       | 26.20                     | 174.59                 | 90.26                            | -884.16                       | 5,887.03              | 5,419.37                        | 5,219.83                         | 199.54                    | 27.159         |
| 6,300.00                                                  | 6,101.48                       | 5,749.00                       | 5,748.67                       | 26.48                     | 174.59                 | 90.26                            | -884.16                       | 5,887.03              | 5,425.69                        | 5,226.06                         | 199.63                    | 27.179         |
| 6,400.00                                                  | 6,201.48                       | 5,749.00                       | 5,748.67                       | 26.76                     | 174.59                 | 90.26                            | -884.16                       | 5,887.03              | 5,433.85                        | 5,234.20                         | 199.65                    | 27.216         |
| 6,500.00                                                  | 6,301.48                       | 5,749.00                       | 5,748.67                       | 27.05                     | 174.59                 | 90.26                            | -884.16                       | 5,887.03              | 5,443.83                        | 5,244.22                         | 199.61                    | 27.272         |
| 6,600.00                                                  | 6,401.48                       | 5,749.00                       | 5,748.67                       | 27.33                     | 174.59                 | 90.26                            | -884.16                       | 5,887.03              | 5,455.62                        | 5,256.12                         | 199.51                    | 27.345         |
| 6,700.00                                                  | 6,501.48                       | 5,749.00                       | 5,748.67                       | 27.62                     | 174.59                 | 90.26                            | -884.16                       | 5,887.03              | 5,469.22                        | 5,269.88                         | 199.34                    | 27.436         |
| 6,800.00                                                  | 6,601.48                       | 5,749.00                       | 5,748.67                       | 27.90                     | 174.59                 | 90.26                            | -884.16                       | 5,887.03              | 5,484.61                        | 5,285.49                         | 199.12                    | 27.544         |
| 6,883.52                                                  | 6,685.00                       | 5,749.00                       | 5,748.67                       | 28.15                     | 174.59                 | 90.26                            | -884.16                       | 5,887.03              | 5,498.82                        | 5,299.94                         | 198.88                    | 27.648         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                            |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |                                   |
|------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|------------------------------------|--------------------------|-----------------------------------|
| <b>Offset Design:</b> Calloway Pad - Lester 001A - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          | <b>Offset Site Error:</b> 0.00 ft |
| <b>Survey Program:</b> 100-UNKNOWN                         |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          | <b>Offset Well Error:</b> 0.00 ft |
| <b>Reference</b>                                           |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Minimum Separation<br/>(ft)</b> | <b>Separation Factor</b> | <b>Warning</b>                    |
| <b>Measured Depth<br/>(ft)</b>                             | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> |                                    |                          |                                   |
| 0.00                                                       | 0.00                           | 0.00                           | 0.00                           | 0.00                      | 0.00                   | 91.20                            | -54.62                        | 2,615.53              | 2,617.04                        |                                  |                                    |                          |                                   |
| 100.00                                                     | 100.00                         | 30.00                          | 30.00                          | 0.30                      | 1.20                   | 91.20                            | -54.62                        | 2,615.53              | 2,616.10                        | 2,614.61                         | 1.50                               | 1,746.780                |                                   |
| 200.00                                                     | 200.00                         | 130.00                         | 130.00                         | 0.66                      | 5.20                   | 91.20                            | -54.62                        | 2,615.53              | 2,616.10                        | 2,610.25                         | 5.86                               | 446.739                  |                                   |
| 300.00                                                     | 300.00                         | 230.00                         | 230.00                         | 1.01                      | 9.20                   | 91.20                            | -54.62                        | 2,615.53              | 2,616.10                        | 2,605.89                         | 10.21                              | 256.117                  |                                   |
| 400.00                                                     | 400.00                         | 330.00                         | 330.00                         | 1.37                      | 13.20                  | 91.20                            | -54.62                        | 2,615.53              | 2,616.10                        | 2,601.53                         | 14.57                              | 179.518                  |                                   |
| 500.00                                                     | 500.00                         | 430.00                         | 430.00                         | 1.73                      | 17.20                  | 91.20                            | -54.62                        | 2,615.53              | 2,616.10                        | 2,597.17                         | 18.93                              | 138.188                  |                                   |
| 600.00                                                     | 600.00                         | 530.00                         | 530.00                         | 2.09                      | 21.20                  | 91.20                            | -54.62                        | 2,615.53              | 2,616.10                        | 2,592.81                         | 23.29                              | 112.328                  |                                   |
| 700.00                                                     | 700.00                         | 630.00                         | 630.00                         | 2.45                      | 25.20                  | 91.20                            | -54.62                        | 2,615.53              | 2,616.10                        | 2,588.45                         | 27.65                              | 94.621                   |                                   |
| 800.00                                                     | 800.00                         | 730.00                         | 730.00                         | 2.81                      | 29.20                  | 91.20                            | -54.62                        | 2,615.53              | 2,616.10                        | 2,584.10                         | 32.01                              | 81.736                   |                                   |
| 900.00                                                     | 900.00                         | 830.00                         | 830.00                         | 3.17                      | 33.20                  | 91.20                            | -54.62                        | 2,615.53              | 2,616.10                        | 2,579.74                         | 36.37                              | 71.940                   |                                   |
| 918.00                                                     | 918.00                         | 848.00                         | 848.00                         | 3.23                      | 33.92                  | 91.20                            | -54.62                        | 2,615.53              | 2,616.10                        | 2,578.95                         | 37.15                              | 70.420                   |                                   |
| 1,000.00                                                   | 999.97                         | 929.97                         | 929.97                         | 3.51                      | 37.20                  | -59.91                           | -54.62                        | 2,615.53              | 2,615.22                        | 2,574.51                         | 40.71                              | 64.242                   |                                   |
| 1,100.00                                                   | 1,099.72                       | 1,029.72                       | 1,029.72                       | 3.84                      | 41.19                  | -60.13                           | -54.62                        | 2,615.53              | 2,611.76                        | 2,566.73                         | 45.03                              | 58.003                   |                                   |
| 1,200.00                                                   | 1,198.98                       | 1,128.98                       | 1,128.98                       | 4.18                      | 45.16                  | -60.52                           | -54.62                        | 2,615.53              | 2,605.73                        | 2,556.39                         | 49.34                              | 52.815                   |                                   |
| 1,300.00                                                   | 1,297.46                       | 1,227.46                       | 1,227.46                       | 4.54                      | 49.10                  | -61.07                           | -54.62                        | 2,615.53              | 2,597.19                        | 2,543.56                         | 53.63                              | 48.429                   |                                   |
| 1,400.00                                                   | 1,394.90                       | 1,324.90                       | 1,324.90                       | 4.92                      | 53.00                  | -61.79                           | -54.62                        | 2,615.53              | 2,586.25                        | 2,528.35                         | 57.90                              | 44.669                   |                                   |
| 1,500.00                                                   | 1,491.03                       | 1,421.03                       | 1,421.03                       | 5.33                      | 56.84                  | -62.67                           | -54.62                        | 2,615.53              | 2,573.04                        | 2,510.90                         | 62.14                              | 41.406                   |                                   |
| 1,600.00                                                   | 1,585.60                       | 1,515.60                       | 1,515.60                       | 5.79                      | 60.62                  | -63.70                           | -54.62                        | 2,615.53              | 2,557.72                        | 2,491.36                         | 66.36                              | 38.543                   |                                   |
| 1,700.00                                                   | 1,678.33                       | 1,608.33                       | 1,608.33                       | 6.30                      | 64.33                  | -64.89                           | -54.62                        | 2,615.53              | 2,540.49                        | 2,469.94                         | 70.55                              | 36.009                   |                                   |
| 1,797.05                                                   | 1,766.34                       | 1,696.34                       | 1,696.34                       | 6.85                      | 67.85                  | -66.18                           | -54.62                        | 2,615.53              | 2,522.16                        | 2,447.56                         | 74.59                              | 33.812                   |                                   |
| 1,800.00                                                   | 1,768.98                       | 1,698.98                       | 1,698.98                       | 6.87                      | 67.96                  | -66.20                           | -54.62                        | 2,615.53              | 2,521.58                        | 2,446.86                         | 74.72                              | 33.748                   |                                   |
| 1,900.00                                                   | 1,858.58                       | 1,788.58                       | 1,788.58                       | 7.49                      | 71.54                  | -67.05                           | -54.62                        | 2,615.53              | 2,502.28                        | 2,423.39                         | 78.89                              | 31.719                   |                                   |
| 2,000.00                                                   | 1,948.17                       | 1,878.17                       | 1,878.17                       | 8.15                      | 75.13                  | -67.91                           | -54.62                        | 2,615.53              | 2,483.62                        | 2,400.53                         | 83.09                              | 29.890                   |                                   |
| 2,100.00                                                   | 2,037.76                       | 1,967.76                       | 1,967.76                       | 8.83                      | 78.71                  | -68.78                           | -54.62                        | 2,615.53              | 2,465.62                        | 2,378.30                         | 87.33                              | 28.234                   |                                   |
| 2,200.00                                                   | 2,127.36                       | 2,057.36                       | 2,057.36                       | 9.53                      | 82.29                  | -69.66                           | -54.62                        | 2,615.53              | 2,448.30                        | 2,356.71                         | 91.59                              | 26.732                   |                                   |
| 2,300.00                                                   | 2,216.95                       | 2,146.95                       | 2,146.95                       | 10.25                     | 85.88                  | -70.55                           | -54.62                        | 2,615.53              | 2,431.67                        | 2,335.80                         | 95.87                              | 25.365                   |                                   |
| 2,400.00                                                   | 2,306.54                       | 2,236.54                       | 2,236.54                       | 10.97                     | 89.46                  | -71.45                           | -54.62                        | 2,615.53              | 2,415.73                        | 2,315.57                         | 100.17                             | 24.117                   |                                   |
| 2,500.00                                                   | 2,396.14                       | 2,326.14                       | 2,326.14                       | 11.71                     | 93.05                  | -72.36                           | -54.62                        | 2,615.53              | 2,400.52                        | 2,296.04                         | 104.48                             | 22.976                   |                                   |
| 2,600.00                                                   | 2,485.73                       | 2,415.73                       | 2,415.73                       | 12.45                     | 96.63                  | -73.28                           | -54.62                        | 2,615.53              | 2,386.03                        | 2,277.22                         | 108.81                             | 21.929                   |                                   |
| 2,700.00                                                   | 2,575.32                       | 2,505.32                       | 2,505.32                       | 13.21                     | 100.21                 | -74.21                           | -54.62                        | 2,615.53              | 2,372.29                        | 2,259.14                         | 113.15                             | 20.966                   |                                   |
| 2,800.00                                                   | 2,664.92                       | 2,594.92                       | 2,594.92                       | 13.96                     | 103.80                 | -75.15                           | -54.62                        | 2,615.53              | 2,359.30                        | 2,241.80                         | 117.50                             | 20.080                   |                                   |
| 2,900.00                                                   | 2,754.51                       | 2,684.51                       | 2,684.51                       | 14.72                     | 107.38                 | -76.10                           | -54.62                        | 2,615.53              | 2,347.08                        | 2,225.23                         | 121.85                             | 19.261                   |                                   |
| 3,000.00                                                   | 2,844.10                       | 2,774.10                       | 2,774.10                       | 15.49                     | 110.96                 | -77.05                           | -54.62                        | 2,615.53              | 2,335.64                        | 2,209.42                         | 126.22                             | 18.504                   |                                   |
| 3,100.00                                                   | 2,933.70                       | 2,863.70                       | 2,863.70                       | 16.26                     | 114.55                 | -78.01                           | -54.62                        | 2,615.53              | 2,325.00                        | 2,194.41                         | 130.59                             | 17.803                   |                                   |
| 3,114.47                                                   | 2,946.66                       | 2,876.66                       | 2,876.66                       | 16.37                     | 115.07                 | -78.15                           | -54.62                        | 2,615.53              | 2,323.52                        | 2,192.30                         | 131.23                             | 17.706                   |                                   |
| 3,200.00                                                   | 3,024.12                       | 2,954.12                       | 2,954.12                       | 17.01                     | 118.16                 | -78.71                           | -54.62                        | 2,615.53              | 2,315.53                        | 2,180.55                         | 134.98                             | 17.155                   |                                   |
| 3,300.00                                                   | 3,116.62                       | 3,046.62                       | 3,046.62                       | 17.69                     | 121.86                 | -79.34                           | -54.62                        | 2,615.53              | 2,307.73                        | 2,168.35                         | 139.38                             | 16.557                   |                                   |
| 3,400.00                                                   | 3,210.99                       | 3,140.99                       | 3,140.99                       | 18.31                     | 125.64                 | -79.92                           | -54.62                        | 2,615.53              | 2,301.44                        | 2,157.64                         | 143.79                             | 16.005                   |                                   |
| 3,500.00                                                   | 3,306.96                       | 3,236.96                       | 3,236.96                       | 18.86                     | 129.48                 | -80.43                           | -54.62                        | 2,615.53              | 2,296.45                        | 2,148.25                         | 148.20                             | 15.496                   |                                   |
| 3,600.00                                                   | 3,404.26                       | 3,334.26                       | 3,334.26                       | 19.35                     | 133.37                 | -80.87                           | -54.62                        | 2,615.53              | 2,292.61                        | 2,140.01                         | 152.59                             | 15.024                   |                                   |
| 3,700.00                                                   | 3,502.64                       | 3,432.64                       | 3,432.64                       | 19.77                     | 137.31                 | -81.22                           | -54.62                        | 2,615.53              | 2,289.78                        | 2,132.81                         | 156.96                             | 14.588                   |                                   |
| 3,800.00                                                   | 3,601.81                       | 3,531.81                       | 3,531.81                       | 20.14                     | 141.27                 | -81.48                           | -54.62                        | 2,615.53              | 2,287.85                        | 2,126.54                         | 161.30                             | 14.183                   |                                   |
| 3,900.00                                                   | 3,701.52                       | 3,631.52                       | 3,631.52                       | 20.45                     | 145.26                 | -81.63                           | -54.62                        | 2,615.53              | 2,286.74                        | 2,121.13                         | 165.61                             | 13.808                   |                                   |
| 3,993.52                                                   | 3,795.00                       | 3,725.00                       | 3,725.00                       | 20.68                     | 149.00                 | 69.38                            | -54.62                        | 2,615.53              | 2,286.41                        | 2,116.83                         | 169.58                             | 13.483                   |                                   |
| 4,000.00                                                   | 3,801.48                       | 3,731.48                       | 3,731.48                       | 20.69                     | 149.26                 | 69.38                            | -54.62                        | 2,615.53              | 2,286.41                        | 2,116.56                         | 169.85                             | 13.461                   |                                   |
| 4,100.00                                                   | 3,901.48                       | 3,831.48                       | 3,831.48                       | 20.91                     | 153.26                 | 69.38                            | -54.62                        | 2,615.53              | 2,286.41                        | 2,112.34                         | 174.07                             | 13.135                   |                                   |
| 4,200.00                                                   | 4,001.48                       | 3,931.48                       | 3,931.48                       | 21.13                     | 157.26                 | 69.38                            | -54.62                        | 2,615.53              | 2,286.41                        | 2,108.12                         | 178.29                             | 12.824                   |                                   |
| 4,300.00                                                   | 4,101.48                       | 4,031.48                       | 4,031.48                       | 21.36                     | 161.26                 | 69.38                            | -54.62                        | 2,615.53              | 2,286.41                        | 2,103.89                         | 182.52                             | 12.527                   |                                   |
| 4,400.00                                                   | 4,201.48                       | 4,131.48                       | 4,131.48                       | 21.59                     | 165.26                 | 69.38                            | -54.62                        | 2,615.53              | 2,286.41                        | 2,099.66                         | 186.75                             | 12.243                   |                                   |
| 4,500.00                                                   | 4,301.48                       | 4,231.48                       | 4,231.48                       | 21.82                     | 169.26                 | 69.38                            | -54.62                        | 2,615.53              | 2,286.41                        | 2,095.43                         | 190.98                             | 11.972                   |                                   |
| 4,600.00                                                   | 4,401.48                       | 4,331.48                       | 4,331.48                       | 22.05                     | 173.26                 | 69.38                            | -54.62                        | 2,615.53              | 2,286.41                        | 2,091.19                         | 195.21                             | 11.712                   |                                   |
| 4,700.00                                                   | 4,501.48                       | 4,431.48                       | 4,431.48                       | 22.29                     | 177.26                 | 69.38                            | -54.62                        | 2,615.53              | 2,286.41                        | 2,086.96                         | 199.45                             | 11.463                   |                                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

| Offset Design: Calloway Pad - Lester 001A - OH - OH |                        |                        |                        |                   |                |                          |                        |                |                         |                          |                            |                   | Offset Site Error: | 0.00 ft |
|-----------------------------------------------------|------------------------|------------------------|------------------------|-------------------|----------------|--------------------------|------------------------|----------------|-------------------------|--------------------------|----------------------------|-------------------|--------------------|---------|
| Survey Program:                                     |                        | 100-UNKNOWN            |                        |                   |                |                          |                        | Rule Assigned: |                         |                          |                            |                   | Offset Well Error: | 0.00 ft |
| Reference                                           |                        | Offset                 |                        | Semi Major Axis   |                | Highside Toolface<br>(°) | Offset Wellbore Centre |                | Distance                |                          |                            |                   | Warning            |         |
| Measured Depth<br>(ft)                              | Vertical Depth<br>(ft) | Measured Depth<br>(ft) | Vertical Depth<br>(ft) | Reference<br>(ft) | Offset<br>(ft) |                          | +N/-S<br>(ft)          | +E/-W<br>(ft)  | Between Centres<br>(ft) | Between Ellipses<br>(ft) | Minimum Separation<br>(ft) | Separation Factor |                    |         |
| 4,800.00                                            | 4,601.48               | 4,531.48               | 4,531.48               | 22.53             | 181.26         | 69.38                    | -54.62                 | 2,615.53       | 2,286.41                | 2,082.71                 | 203.70                     | 11.225            |                    |         |
| 4,900.00                                            | 4,701.48               | 4,631.48               | 4,631.48               | 22.78             | 185.26         | 69.38                    | -54.62                 | 2,615.53       | 2,286.41                | 2,078.47                 | 207.94                     | 10.995            |                    |         |
| 4,910.00                                            | 4,711.48               | 4,641.48               | 4,641.48               | 22.80             | 185.66         | 69.38                    | -54.62                 | 2,615.53       | 2,286.41                | 2,078.04                 | 208.37                     | 10.973            | CC                 |         |
| 5,000.00                                            | 4,801.48               | 4,690.00               | 4,690.00               | 23.03             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,286.79                | 2,076.28                 | 210.50                     | 10.863            | ES, SF             |         |
| 5,100.00                                            | 4,901.48               | 4,690.00               | 4,690.00               | 23.28             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,290.78                | 2,080.37                 | 210.41                     | 10.887            |                    |         |
| 5,200.00                                            | 5,001.48               | 4,690.00               | 4,690.00               | 23.53             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,299.13                | 2,089.19                 | 209.93                     | 10.952            |                    |         |
| 5,300.00                                            | 5,101.48               | 4,690.00               | 4,690.00               | 23.79             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,311.77                | 2,102.69                 | 209.08                     | 11.057            |                    |         |
| 5,400.00                                            | 5,201.48               | 4,690.00               | 4,690.00               | 24.05             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,328.64                | 2,120.78                 | 207.86                     | 11.203            |                    |         |
| 5,500.00                                            | 5,301.48               | 4,690.00               | 4,690.00               | 24.31             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,349.65                | 2,143.34                 | 206.31                     | 11.389            |                    |         |
| 5,600.00                                            | 5,401.48               | 4,690.00               | 4,690.00               | 24.57             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,374.69                | 2,170.25                 | 204.45                     | 11.615            |                    |         |
| 5,700.00                                            | 5,501.48               | 4,690.00               | 4,690.00               | 24.84             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,403.63                | 2,201.33                 | 202.30                     | 11.881            |                    |         |
| 5,800.00                                            | 5,601.48               | 4,690.00               | 4,690.00               | 25.11             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,436.34                | 2,236.43                 | 199.91                     | 12.187            |                    |         |
| 5,900.00                                            | 5,701.48               | 4,690.00               | 4,690.00               | 25.38             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,472.66                | 2,275.35                 | 197.31                     | 12.532            |                    |         |
| 6,000.00                                            | 5,801.48               | 4,690.00               | 4,690.00               | 25.65             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,512.44                | 2,317.92                 | 194.52                     | 12.916            |                    |         |
| 6,100.00                                            | 5,901.48               | 4,690.00               | 4,690.00               | 25.93             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,555.51                | 2,363.93                 | 191.58                     | 13.339            |                    |         |
| 6,200.00                                            | 6,001.48               | 4,690.00               | 4,690.00               | 26.20             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,601.72                | 2,413.19                 | 188.53                     | 13.800            |                    |         |
| 6,300.00                                            | 6,101.48               | 4,690.00               | 4,690.00               | 26.48             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,650.89                | 2,465.51                 | 185.38                     | 14.300            |                    |         |
| 6,400.00                                            | 6,201.48               | 4,690.00               | 4,690.00               | 26.76             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,702.88                | 2,520.70                 | 182.17                     | 14.837            |                    |         |
| 6,500.00                                            | 6,301.48               | 4,690.00               | 4,690.00               | 27.05             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,757.50                | 2,578.58                 | 178.93                     | 15.411            |                    |         |
| 6,600.00                                            | 6,401.48               | 4,690.00               | 4,690.00               | 27.33             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,814.63                | 2,638.96                 | 175.66                     | 16.023            |                    |         |
| 6,700.00                                            | 6,501.48               | 4,690.00               | 4,690.00               | 27.62             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,874.10                | 2,701.70                 | 172.40                     | 16.671            |                    |         |
| 6,800.00                                            | 6,601.48               | 4,690.00               | 4,690.00               | 27.90             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,935.77                | 2,766.61                 | 169.15                     | 17.356            |                    |         |
| 6,883.52                                            | 6,685.00               | 4,690.00               | 4,690.00               | 28.15             | 187.60         | 69.38                    | -54.62                 | 2,615.53       | 2,988.86                | 2,822.39                 | 166.47                     | 17.955            |                    |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                            |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                                        |                              |                                   |
|------------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|---------------------------|------------------------|--------------------------------------|-------------------------------|-----------------------|-------------------------------------|--------------------------------------|----------------------------------------|------------------------------|-----------------------------------|
| <b>Offset Design:</b> Calloway Pad - Lester 001B - OH - OH |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                                        |                              | <b>Offset Site Error:</b> 0.00 ft |
| <b>Survey Program:</b> 265-MWD SDI                         |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                                        |                              | <b>Offset Well Error:</b> 0.00 ft |
| <b>Reference</b>                                           |                                    | <b>Offset</b>                      |                                    | <b>Semi Major Axis</b>    |                        | <b>Highside<br/>Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                     |                                      | <b>Minimum<br/>Separation<br/>(ft)</b> | <b>Separation<br/>Factor</b> | <b>Warning</b>                    |
| <b>Measured<br/>Depth<br/>(ft)</b>                         | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Measured<br/>Depth<br/>(ft)</b> | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                      | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between<br/>Centres<br/>(ft)</b> | <b>Between<br/>Ellipses<br/>(ft)</b> |                                        |                              |                                   |
| 0.00                                                       | 0.00                               | 0.00                               | 0.00                               | 0.00                      | 0.00                   | 76.27                                | 728.13                        | 2,981.21              | 3,069.68                            |                                      |                                        |                              |                                   |
| 100.00                                                     | 100.00                             | 26.81                              | 26.81                              | 0.30                      | 0.03                   | 76.27                                | 728.13                        | 2,981.21              | 3,068.84                            | 3,068.51                             | 0.33                                   | 9,361.006                    |                                   |
| 200.00                                                     | 200.00                             | 122.56                             | 122.56                             | 0.66                      | 0.14                   | 76.27                                | 728.22                        | 2,981.30              | 3,068.95                            | 3,068.16                             | 0.79                                   | 3,866.096                    |                                   |
| 300.00                                                     | 300.00                             | 218.30                             | 218.30                             | 1.01                      | 0.25                   | 76.27                                | 728.42                        | 2,981.49              | 3,069.20                            | 3,067.94                             | 1.26                                   | 2,436.274                    |                                   |
| 400.00                                                     | 400.00                             | 316.90                             | 316.90                             | 1.37                      | 0.40                   | 76.27                                | 728.47                        | 2,981.84              | 3,069.56                            | 3,067.78                             | 1.78                                   | 1,727.219                    |                                   |
| 500.00                                                     | 500.00                             | 418.91                             | 418.84                             | 1.73                      | 0.62                   | 76.33                                | 725.26                        | 2,982.98              | 3,069.90                            | 3,067.55                             | 2.35                                   | 1,307.585                    |                                   |
| 600.00                                                     | 600.00                             | 512.00                             | 511.61                             | 2.09                      | 0.84                   | 76.48                                | 718.02                        | 2,985.14              | 3,070.32                            | 3,067.39                             | 2.93                                   | 1,048.424                    |                                   |
| 700.00                                                     | 700.00                             | 587.44                             | 586.51                             | 2.45                      | 1.05                   | 76.64                                | 709.48                        | 2,987.96              | 3,071.32                            | 3,067.82                             | 3.50                                   | 877.094                      |                                   |
| 800.00                                                     | 800.00                             | 666.52                             | 664.69                             | 2.81                      | 1.30                   | 76.86                                | 698.27                        | 2,992.01              | 3,073.07                            | 3,068.95                             | 4.12                                   | 746.233                      |                                   |
| 900.00                                                     | 900.00                             | 752.43                             | 749.16                             | 3.17                      | 1.62                   | 77.15                                | 683.60                        | 2,997.40              | 3,075.38                            | 3,070.58                             | 4.80                                   | 640.761                      |                                   |
| 918.00                                                     | 918.00                             | 767.83                             | 764.24                             | 3.23                      | 1.68                   | 77.21                                | 680.67                        | 2,998.47              | 3,075.85                            | 3,070.92                             | 4.92                                   | 624.622                      |                                   |
| 1,000.00                                                   | 999.97                             | 839.86                             | 834.64                             | 3.51                      | 1.98                   | -73.54                               | 666.39                        | 3,003.74              | 3,077.69                            | 3,072.18                             | 5.51                                   | 558.398                      |                                   |
| 1,100.00                                                   | 1,099.72                           | 923.58                             | 916.35                             | 3.84                      | 2.34                   | -73.26                               | 649.35                        | 3,010.25              | 3,079.02                            | 3,072.81                             | 6.21                                   | 495.631                      |                                   |
| 1,200.00                                                   | 1,198.98                           | 998.09                             | 988.91                             | 4.18                      | 2.69                   | -73.10                               | 633.69                        | 3,016.62              | 3,079.52                            | 3,072.62                             | 6.90                                   | 446.259                      |                                   |
| 1,300.00                                                   | 1,297.46                           | 1,070.58                           | 1,059.06                           | 4.54                      | 3.05                   | -72.99                               | 616.92                        | 3,023.84              | 3,079.44                            | 3,071.82                             | 7.62                                   | 404.048                      |                                   |
| 1,400.00                                                   | 1,394.90                           | 1,151.01                           | 1,136.24                           | 4.92                      | 3.48                   | -72.92                               | 596.17                        | 3,032.88              | 3,078.60                            | 3,070.15                             | 8.45                                   | 364.414                      |                                   |
| 1,500.00                                                   | 1,491.03                           | 1,227.00                           | 1,208.40                           | 5.33                      | 3.94                   | -72.90                               | 574.27                        | 3,042.21              | 3,076.73                            | 3,067.41                             | 9.32                                   | 330.097                      |                                   |
| 1,600.00                                                   | 1,585.60                           | 1,317.00                           | 1,293.20                           | 5.79                      | 4.51                   | -72.95                               | 546.60                        | 3,054.22              | 3,073.95                            | 3,063.58                             | 10.37                                  | 296.566                      |                                   |
| 1,700.00                                                   | 1,678.33                           | 1,385.98                           | 1,357.76                           | 6.30                      | 4.98                   | -73.07                               | 524.47                        | 3,064.23              | 3,070.49                            | 3,059.14                             | 11.35                                  | 270.516                      |                                   |
| 1,797.05                                                   | 1,766.34                           | 1,464.91                           | 1,430.97                           | 6.85                      | 5.55                   | -73.25                               | 497.66                        | 3,076.53              | 3,066.40                            | 3,053.91                             | 12.48                                  | 245.651                      |                                   |
| 1,800.00                                                   | 1,768.98                           | 1,467.39                           | 1,433.26                           | 6.87                      | 5.57                   | -73.25                               | 496.79                        | 3,076.93              | 3,066.26                            | 3,053.74                             | 12.52                                  | 244.921                      |                                   |
| 1,900.00                                                   | 1,858.58                           | 1,556.68                           | 1,515.24                           | 7.49                      | 6.25                   | -73.32                               | 464.63                        | 3,091.63              | 3,061.79                            | 3,047.95                             | 13.84                                  | 221.278                      |                                   |
| 2,000.00                                                   | 1,948.17                           | 1,639.21                           | 1,590.29                           | 8.15                      | 6.91                   | -73.36                               | 433.37                        | 3,105.80              | 3,057.70                            | 3,042.53                             | 15.17                                  | 201.610                      |                                   |
| 2,100.00                                                   | 2,037.76                           | 1,711.42                           | 1,655.37                           | 8.83                      | 7.50                   | -73.36                               | 404.97                        | 3,118.93              | 3,054.35                            | 3,037.90                             | 16.45                                  | 185.676                      |                                   |
| 2,200.00                                                   | 2,127.36                           | 1,783.83                           | 1,720.34                           | 9.53                      | 8.10                   | -73.36                               | 376.23                        | 3,132.94              | 3,052.03                            | 3,034.28                             | 17.75                                  | 171.902                      |                                   |
| 2,300.00                                                   | 2,216.95                           | 1,921.86                           | 1,843.87                           | 10.25                     | 9.20                   | -73.33                               | 320.80                        | 3,159.78              | 3,049.88                            | 3,030.26                             | 19.62                                  | 155.441                      |                                   |
| 2,400.00                                                   | 2,306.54                           | 2,028.14                           | 1,938.47                           | 10.97                     | 10.02                  | -73.29                               | 276.51                        | 3,179.41              | 3,046.35                            | 3,025.16                             | 21.20                                  | 143.712                      |                                   |
| 2,500.00                                                   | 2,396.14                           | 2,090.36                           | 1,993.80                           | 11.71                     | 10.51                  | -73.26                               | 250.66                        | 3,191.30              | 3,043.52                            | 3,021.09                             | 22.44                                  | 135.659                      |                                   |
| 2,597.89                                                   | 2,483.84                           | 2,155.59                           | 2,051.45                           | 12.44                     | 11.07                  | -73.22                               | 223.26                        | 3,204.71              | 3,042.01                            | 3,018.29                             | 23.72                                  | 128.224                      |                                   |
| 2,600.00                                                   | 2,485.73                           | 2,157.31                           | 2,052.97                           | 12.45                     | 11.08                  | -73.22                               | 222.53                        | 3,205.07              | 3,041.99                            | 3,018.24                             | 23.76                                  | 128.051                      |                                   |
| 2,687.56                                                   | 2,564.18                           | 2,218.00                           | 2,106.28                           | 13.11                     | 11.64                  | -73.17                               | 196.58                        | 3,218.02              | 3,041.31                            | 3,016.34                             | 24.97                                  | 121.777                      |                                   |
| 2,700.00                                                   | 2,575.32                           | 2,235.40                           | 2,121.52                           | 13.21                     | 11.79                  | -73.16                               | 189.09                        | 3,221.81              | 3,041.24                            | 3,016.01                             | 25.23                                  | 120.551                      |                                   |
| 2,733.84                                                   | 2,605.64                           | 2,258.49                           | 2,141.76                           | 13.46                     | 12.00                  | -73.14                               | 179.20                        | 3,226.90              | 3,041.18                            | 3,015.49                             | 25.69                                  | 118.389                      |                                   |
| 2,800.00                                                   | 2,664.92                           | 2,308.00                           | 2,185.18                           | 13.96                     | 12.43                  | -73.10                               | 158.19                        | 3,238.04              | 3,041.42                            | 3,014.79                             | 26.63                                  | 114.215                      |                                   |
| 2,900.00                                                   | 2,754.51                           | 2,392.48                           | 2,258.56                           | 14.72                     | 13.20                  | -73.01                               | 121.25                        | 3,257.70              | 3,042.31                            | 3,014.14                             | 28.17                                  | 107.995                      |                                   |
| 3,000.00                                                   | 2,844.10                           | 2,580.35                           | 2,419.87                           | 15.49                     | 14.89                  | -72.72                               | 34.14                         | 3,298.71              | 3,040.89                            | 3,010.17                             | 30.72                                  | 98.986                       |                                   |
| 3,100.00                                                   | 2,933.70                           | 2,667.00                           | 2,495.30                           | 16.26                     | 15.59                  | -72.62                               | -4.42                         | 3,316.94              | 3,039.47                            | 3,007.26                             | 32.21                                  | 94.361                       |                                   |
| 3,113.69                                                   | 2,945.96                           | 2,667.00                           | 2,495.30                           | 16.37                     | 15.59                  | -72.62                               | -4.42                         | 3,316.94              | 3,039.31                            | 3,007.00                             | 32.31                                  | 94.065                       |                                   |
| 3,114.47                                                   | 2,946.66                           | 2,667.00                           | 2,495.30                           | 16.37                     | 15.59                  | -72.62                               | -4.42                         | 3,316.94              | 3,039.31                            | 3,006.99                             | 32.32                                  | 94.048                       |                                   |
| 3,167.83                                                   | 2,994.79                           | 2,719.13                           | 2,541.09                           | 16.77                     | 16.01                  | -72.56                               | -26.75                        | 3,328.00              | 3,039.03                            | 3,005.89                             | 33.14                                  | 91.696                       |                                   |
| 3,200.00                                                   | 3,024.12                           | 2,748.02                           | 2,566.55                           | 17.01                     | 16.24                  | -72.52                               | -38.92                        | 3,334.14              | 3,039.13                            | 3,005.51                             | 33.62                                  | 90.404                       |                                   |
| 3,300.00                                                   | 3,116.62                           | 3,050.23                           | 2,837.02                           | 17.69                     | 18.60                  | -72.01                               | -162.41                       | 3,387.62              | 3,037.07                            | 3,000.35                             | 36.73                                  | 82.696                       |                                   |
| 3,400.00                                                   | 3,210.99                           | 3,139.54                           | 2,917.36                           | 18.31                     | 19.29                  | -71.70                               | -199.21                       | 3,400.57              | 3,033.57                            | 2,995.53                             | 38.03                                  | 79.757                       |                                   |
| 3,491.89                                                   | 3,299.12                           | 3,208.00                           | 2,979.50                           | 18.82                     | 19.79                  | -71.47                               | -226.06                       | 3,410.77              | 3,032.47                            | 2,993.42                             | 39.04                                  | 77.670 CC                    |                                   |
| 3,500.00                                                   | 3,306.96                           | 3,208.00                           | 2,979.50                           | 18.86                     | 19.79                  | -71.47                               | -226.06                       | 3,410.77              | 3,032.48                            | 2,993.39                             | 39.09                                  | 77.584 ES                    |                                   |
| 3,600.00                                                   | 3,404.26                           | 3,298.00                           | 3,061.97                           | 19.35                     | 20.43                  | -71.20                               | -259.35                       | 3,424.56              | 3,033.87                            | 2,993.68                             | 40.19                                  | 75.480                       |                                   |
| 3,700.00                                                   | 3,502.64                           | 3,383.43                           | 3,140.97                           | 19.77                     | 21.01                  | -70.96                               | -289.07                       | 3,437.71              | 3,037.47                            | 2,996.30                             | 41.17                                  | 73.777                       |                                   |
| 3,800.00                                                   | 3,601.81                           | 3,462.98                           | 3,215.24                           | 20.14                     | 21.52                  | -70.78                               | -314.80                       | 3,449.94              | 3,043.28                            | 3,001.27                             | 42.01                                  | 72.446                       |                                   |
| 3,900.00                                                   | 3,701.52                           | 3,611.72                           | 3,355.18                           | 20.45                     | 22.43                  | -70.26                               | -360.20                       | 3,471.83              | 3,050.71                            | 3,007.52                             | 43.19                                  | 70.637                       |                                   |
| 3,993.52                                                   | 3,795.00                           | 3,720.85                           | 3,458.41                           | 20.68                     | 23.08                  | 81.18                                | -392.58                       | 3,486.07              | 3,057.96                            | 3,013.95                             | 44.01                                  | 69.479                       |                                   |
| 4,000.00                                                   | 3,801.48                           | 3,726.89                           | 3,464.14                           | 20.69                     | 23.12                  | 81.21                                | -394.37                       | 3,486.85              | 3,058.53                            | 3,014.47                             | 44.06                                  | 69.420                       |                                   |
| 4,100.00                                                   | 3,901.48                           | 3,814.00                           | 3,546.69                           | 20.91                     | 23.63                  | 81.71                                | -419.76                       | 3,498.14              | 3,067.45                            | 3,022.74                             | 44.72                                  | 68.598                       |                                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



## Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

| Offset Design: Calloway Pad - Lester 001B - OH - OH |                     |                     |                     |                 |             |                       |                        |                |                      |                       |                         |                   | Offset Site Error: | 0.00 ft |
|-----------------------------------------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|------------------------|----------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|
| Survey Program:                                     |                     | 265-MWD SDI         |                     |                 |             |                       |                        | Rule Assigned: |                      |                       |                         |                   | Offset Well Error: | 0.00 ft |
| Reference                                           |                     | Offset              |                     | Semi Major Axis |             | Highside Toolface (°) | Offset Wellbore Centre |                | Distance             |                       | Minimum Separation (ft) | Separation Factor | Warning            |         |
| Measured Depth (ft)                                 | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft)  | Offset (ft) |                       | +N/-S (ft)             | +E/-W (ft)     | Between Centres (ft) | Between Ellipses (ft) |                         |                   |                    |         |
| 4,200.00                                            | 4,001.48            | 3,912.50            | 3,640.64            | 21.13           | 24.17       | 82.24                 | -446.47                | 3,510.84       | 3,076.82             | 3,031.41              | 45.41                   | 67.752            |                    |         |
| 4,300.00                                            | 4,101.48            | 4,292.92            | 4,011.97            | 21.36           | 25.73       | 83.72                 | -523.00                | 3,537.04       | 3,079.94             | 3,032.92              | 47.02                   | 65.504            |                    |         |
| 4,400.00                                            | 4,201.48            | 4,395.00            | 4,113.62            | 21.59           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,080.41             | 3,032.98              | 47.44                   | 64.939            |                    |         |
| 4,500.00                                            | 4,301.48            | 4,395.00            | 4,113.62            | 21.82           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,082.55             | 3,034.85              | 47.70                   | 64.621            |                    |         |
| 4,600.00                                            | 4,401.48            | 4,395.00            | 4,113.62            | 22.05           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,087.92             | 3,040.00              | 47.93                   | 64.430            |                    |         |
| 4,700.00                                            | 4,501.48            | 4,395.00            | 4,113.62            | 22.29           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,096.52             | 3,048.41              | 48.11                   | 64.366 SF         |                    |         |
| 4,800.00                                            | 4,601.48            | 4,395.00            | 4,113.62            | 22.53           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,108.31             | 3,060.07              | 48.25                   | 64.426            |                    |         |
| 4,900.00                                            | 4,701.48            | 4,395.00            | 4,113.62            | 22.78           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,123.27             | 3,074.92              | 48.34                   | 64.607            |                    |         |
| 5,000.00                                            | 4,801.48            | 4,395.00            | 4,113.62            | 23.03           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,141.33             | 3,092.93              | 48.40                   | 64.907            |                    |         |
| 5,100.00                                            | 4,901.48            | 4,395.00            | 4,113.62            | 23.28           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,162.46             | 3,114.04              | 48.41                   | 65.322            |                    |         |
| 5,200.00                                            | 5,001.48            | 4,395.00            | 4,113.62            | 23.53           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,186.58             | 3,138.19              | 48.39                   | 65.851            |                    |         |
| 5,300.00                                            | 5,101.48            | 4,395.00            | 4,113.62            | 23.79           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,213.64             | 3,165.31              | 48.33                   | 66.490            |                    |         |
| 5,400.00                                            | 5,201.48            | 4,395.00            | 4,113.62            | 24.05           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,243.56             | 3,195.31              | 48.24                   | 67.236            |                    |         |
| 5,500.00                                            | 5,301.48            | 4,395.00            | 4,113.62            | 24.31           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,276.25             | 3,228.13              | 48.12                   | 68.087            |                    |         |
| 5,600.00                                            | 5,401.48            | 4,395.00            | 4,113.62            | 24.57           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,311.65             | 3,263.68              | 47.97                   | 69.039            |                    |         |
| 5,700.00                                            | 5,501.48            | 4,395.00            | 4,113.62            | 24.84           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,349.65             | 3,301.86              | 47.79                   | 70.090            |                    |         |
| 5,800.00                                            | 5,601.48            | 4,395.00            | 4,113.62            | 25.11           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,390.18             | 3,342.59              | 47.59                   | 71.236            |                    |         |
| 5,900.00                                            | 5,701.48            | 4,395.00            | 4,113.62            | 25.38           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,433.15             | 3,385.78              | 47.37                   | 72.474            |                    |         |
| 6,000.00                                            | 5,801.48            | 4,395.00            | 4,113.62            | 25.65           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,478.46             | 3,431.33              | 47.13                   | 73.802            |                    |         |
| 6,100.00                                            | 5,901.48            | 4,395.00            | 4,113.62            | 25.93           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,526.03             | 3,479.15              | 46.88                   | 75.215            |                    |         |
| 6,200.00                                            | 6,001.48            | 4,395.00            | 4,113.62            | 26.20           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,575.76             | 3,529.14              | 46.61                   | 76.711            |                    |         |
| 6,300.00                                            | 6,101.48            | 4,395.00            | 4,113.62            | 26.48           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,627.56             | 3,581.22              | 46.34                   | 78.286            |                    |         |
| 6,400.00                                            | 6,201.48            | 4,395.00            | 4,113.62            | 26.76           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,681.35             | 3,635.30              | 46.05                   | 79.937            |                    |         |
| 6,500.00                                            | 6,301.48            | 4,395.00            | 4,113.62            | 27.05           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,737.05             | 3,691.29              | 45.76                   | 81.661            |                    |         |
| 6,600.00                                            | 6,401.48            | 4,395.00            | 4,113.62            | 27.33           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,794.56             | 3,749.10              | 45.47                   | 83.455            |                    |         |
| 6,700.00                                            | 6,501.48            | 4,395.00            | 4,113.62            | 27.62           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,853.81             | 3,808.64              | 45.17                   | 85.314            |                    |         |
| 6,800.00                                            | 6,601.48            | 4,395.00            | 4,113.62            | 27.90           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,914.72             | 3,869.85              | 44.88                   | 87.236            |                    |         |
| 6,883.52                                            | 6,685.00            | 4,395.00            | 4,113.62            | 28.15           | 25.94       | 83.89                 | -531.87                | 3,538.49       | 3,966.81             | 3,922.18              | 44.63                   | 88.886            |                    |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                            |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                           |         |
|------------------------------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------|--------------------|------------------------------|-------------------|-------------------|-----------------------------|------------------------------|--------------------------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - Lester 100S - OH - OH |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 275-Standard Keeper                 |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                           | <b>Offset</b>              | <b>Semi Major Axis</b>     |                            | <b>Distance</b>       |                    | <b>Rule Assigned:</b>        |                   | <b>Warning</b>    |                             |                              |                                |                           |         |
| <b>Measured Depth (ft)</b>                                 | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b> | <b>Offset (ft)</b> | <b>Highside Toolface (°)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b>  |         |
| 0.00                                                       | 0.00                       | 37.32                      | 37.32                      | 0.00                  | 0.03               | 90.92                        | -97.78            | 6,112.21          | 6,113.00                    |                              |                                |                           |         |
| 100.00                                                     | 100.00                     | 115.07                     | 115.07                     | 0.30                  | 0.10               | 90.92                        | -97.91            | 6,112.48          | 6,113.35                    | 6,112.96                     | 0.40                           | N/A                       |         |
| 200.00                                                     | 200.00                     | 192.82                     | 192.82                     | 0.66                  | 0.17               | 90.92                        | -98.17            | 6,113.04          | 6,114.08                    | 6,113.25                     | 0.82                           | 7,433.246                 |         |
| 300.00                                                     | 300.00                     | 275.00                     | 274.99                     | 1.01                  | 0.25               | 90.92                        | -98.59            | 6,113.93          | 6,115.16                    | 6,113.91                     | 1.25                           | 4,885.218                 |         |
| 400.00                                                     | 400.00                     | 311.27                     | 311.25                     | 1.37                  | 0.28               | 90.92                        | -98.49            | 6,114.57          | 6,116.89                    | 6,115.24                     | 1.65                           | 3,704.507                 |         |
| 500.00                                                     | 500.00                     | 335.00                     | 334.97                     | 1.73                  | 0.31               | 90.92                        | -98.08            | 6,115.18          | 6,119.68                    | 6,117.64                     | 2.04                           | 3,005.028                 |         |
| 600.00                                                     | 600.00                     | 395.00                     | 394.88                     | 2.09                  | 0.37               | 90.90                        | -95.83            | 6,117.56          | 6,123.55                    | 6,121.09                     | 2.46                           | 2,492.056                 |         |
| 700.00                                                     | 700.00                     | 418.60                     | 418.40                     | 2.45                  | 0.39               | 90.88                        | -94.41            | 6,118.80          | 6,128.40                    | 6,125.56                     | 2.84                           | 2,159.706                 |         |
| 800.00                                                     | 800.00                     | 456.00                     | 455.61                     | 2.81                  | 0.43               | 90.85                        | -91.31            | 6,120.98          | 6,134.22                    | 6,130.99                     | 3.23                           | 1,898.821                 |         |
| 900.00                                                     | 900.00                     | 494.69                     | 493.98                     | 3.17                  | 0.46               | 90.82                        | -87.15            | 6,123.62          | 6,141.05                    | 6,137.42                     | 3.62                           | 1,695.288                 |         |
| 918.00                                                     | 918.00                     | 519.00                     | 518.02                     | 3.23                  | 0.49               | 90.79                        | -84.10            | 6,125.55          | 6,142.48                    | 6,138.78                     | 3.71                           | 1,656.081                 |         |
| 1,000.00                                                   | 999.97                     | 548.55                     | 547.18                     | 3.51                  | 0.52               | -60.17                       | -79.95            | 6,128.00          | 6,148.08                    | 6,144.07                     | 4.01                           | 1,532.080                 |         |
| 1,100.00                                                   | 1,099.72                   | 611.84                     | 609.39                     | 3.84                  | 0.59               | -60.17                       | -69.58            | 6,133.26          | 6,152.97                    | 6,148.57                     | 4.40                           | 1,399.312                 |         |
| 1,200.00                                                   | 1,198.98                   | 656.41                     | 652.91                     | 4.18                  | 0.64               | -60.21                       | -60.89            | 6,137.39          | 6,156.21                    | 6,151.44                     | 4.77                           | 1,289.581                 |         |
| 1,300.00                                                   | 1,297.46                   | 845.27                     | 837.04                     | 4.54                  | 0.85               | -60.81                       | -22.46            | 6,154.28          | 6,156.88                    | 6,151.56                     | 5.32                           | 1,156.284                 |         |
| 1,400.00                                                   | 1,394.90                   | 942.86                     | 932.36                     | 4.92                  | 0.96               | -61.23                       | -3.10             | 6,162.15          | 6,154.28                    | 6,148.48                     | 5.80                           | 1,060.297                 |         |
| 1,500.00                                                   | 1,491.03                   | 1,002.08                   | 990.21                     | 5.33                  | 1.03               | -61.59                       | 8.58              | 6,166.96          | 6,149.51                    | 6,143.24                     | 6.27                           | 980.751                   |         |
| 1,600.00                                                   | 1,585.60                   | 1,055.46                   | 1,042.44                   | 5.79                  | 1.09               | -61.99                       | 18.59             | 6,171.67          | 6,143.13                    | 6,136.36                     | 6.77                           | 907.790                   |         |
| 1,700.00                                                   | 1,678.33                   | 1,540.17                   | 1,520.40                   | 6.30                  | 1.67               | -64.41                       | 88.43             | 6,203.10          | 6,134.33                    | 6,126.54                     | 7.79                           | 787.420                   |         |
| 1,797.05                                                   | 1,766.34                   | 1,638.28                   | 1,618.34                   | 6.85                  | 1.79               | -65.23                       | 93.26             | 6,206.18          | 6,118.96                    | 6,110.56                     | 8.40                           | 728.119                   |         |
| 1,800.00                                                   | 1,768.98                   | 1,641.88                   | 1,621.93                   | 6.87                  | 1.80               | -65.24                       | 93.43             | 6,206.29          | 6,118.46                    | 6,110.04                     | 8.43                           | 726.206                   |         |
| 1,900.00                                                   | 1,858.58                   | 1,934.73                   | 1,914.61                   | 7.49                  | 2.03               | -66.41                       | 97.91             | 6,211.76          | 6,101.41                    | 6,092.17                     | 9.24                           | 660.355                   |         |
| 2,000.00                                                   | 1,948.17                   | 2,002.55                   | 1,982.43                   | 8.15                  | 2.03               | -66.67                       | 97.27             | 6,211.80          | 6,082.06                    | 6,072.17                     | 9.89                           | 615.073                   |         |
| 2,100.00                                                   | 2,037.76                   | 2,076.29                   | 2,056.16                   | 8.83                  | 2.06               | -66.95                       | 96.43             | 6,212.17          | 6,063.35                    | 6,052.77                     | 10.58                          | 573.257                   |         |
| 2,200.00                                                   | 2,127.36                   | 2,149.83                   | 2,129.68                   | 9.53                  | 2.09               | -67.23                       | 95.36             | 6,212.67          | 6,045.03                    | 6,033.74                     | 11.29                          | 535.424                   |         |
| 2,300.00                                                   | 2,216.95                   | 2,240.61                   | 2,220.45                   | 10.25                 | 2.14               | -67.58                       | 93.87             | 6,213.52          | 6,027.19                    | 6,015.15                     | 12.03                          | 500.824                   |         |
| 2,400.00                                                   | 2,306.54                   | 2,339.99                   | 2,319.82                   | 10.97                 | 2.21               | -67.96                       | 92.71             | 6,214.16          | 6,009.36                    | 5,996.56                     | 12.80                          | 469.483                   |         |
| 2,500.00                                                   | 2,396.14                   | 2,451.96                   | 2,431.78                   | 11.71                 | 2.28               | -68.40                       | 91.77             | 6,214.62          | 5,991.59                    | 5,978.02                     | 13.58                          | 441.220                   |         |
| 2,600.00                                                   | 2,485.73                   | 2,525.00                   | 2,504.82                   | 12.45                 | 2.32               | -68.69                       | 91.17             | 6,214.85          | 5,974.04                    | 5,959.70                     | 14.34                          | 416.488                   |         |
| 2,700.00                                                   | 2,575.32                   | 2,525.00                   | 2,504.82                   | 13.21                 | 2.32               | -68.69                       | 91.17             | 6,214.85          | 5,957.64                    | 5,942.57                     | 15.08                          | 395.166                   |         |
| 2,800.00                                                   | 2,664.92                   | 2,525.00                   | 2,504.82                   | 13.96                 | 2.32               | -68.69                       | 91.17             | 6,214.85          | 5,942.89                    | 5,927.07                     | 15.82                          | 375.771                   |         |
| 2,900.00                                                   | 2,754.51                   | 2,525.00                   | 2,504.82                   | 14.72                 | 2.32               | -68.69                       | 91.17             | 6,214.85          | 5,929.78                    | 5,913.22                     | 16.56                          | 358.100                   |         |
| 3,000.00                                                   | 2,844.10                   | 2,525.00                   | 2,504.82                   | 15.49                 | 2.32               | -68.69                       | 91.17             | 6,214.85          | 5,918.33                    | 5,901.03                     | 17.31                          | 341.976                   |         |
| 3,100.00                                                   | 2,933.70                   | 2,525.00                   | 2,504.82                   | 16.26                 | 2.32               | -68.69                       | 91.17             | 6,214.85          | 5,908.56                    | 5,890.50                     | 18.06                          | 327.238                   |         |
| 3,114.47                                                   | 2,946.66                   | 2,525.00                   | 2,504.82                   | 16.37                 | 2.32               | -68.69                       | 91.17             | 6,214.85          | 5,907.28                    | 5,889.12                     | 18.16                          | 325.211                   |         |
| 3,200.00                                                   | 3,024.12                   | 2,525.00                   | 2,504.82                   | 17.01                 | 2.32               | -68.52                       | 91.17             | 6,214.85          | 5,901.16                    | 5,882.37                     | 18.78                          | 314.172                   |         |
| 3,300.00                                                   | 3,116.62                   | 2,525.00                   | 2,504.82                   | 17.69                 | 2.32               | -68.41                       | 91.17             | 6,214.85          | 5,897.34                    | 5,877.89                     | 19.45                          | 303.260                   |         |
| 3,355.47                                                   | 3,168.76                   | 2,525.00                   | 2,504.82                   | 18.03                 | 2.32               | -68.40                       | 91.17             | 6,214.85          | 5,896.78                    | 5,877.00                     | 19.78                          | 298.148 CC, ES            |         |
| 3,400.00                                                   | 3,210.99                   | 2,525.00                   | 2,504.82                   | 18.31                 | 2.32               | -68.41                       | 91.17             | 6,214.85          | 5,897.14                    | 5,877.10                     | 20.04                          | 294.231                   |         |
| 3,500.00                                                   | 3,306.96                   | 2,525.00                   | 2,504.82                   | 18.86                 | 2.32               | -68.50                       | 91.17             | 6,214.85          | 5,900.56                    | 5,879.99                     | 20.57                          | 286.848                   |         |
| 3,600.00                                                   | 3,404.26                   | 2,525.00                   | 2,504.82                   | 19.35                 | 2.32               | -68.70                       | 91.17             | 6,214.85          | 5,907.59                    | 5,886.56                     | 21.03                          | 280.913                   |         |
| 3,700.00                                                   | 3,502.64                   | 2,525.00                   | 2,504.82                   | 19.77                 | 2.32               | -69.00                       | 91.17             | 6,214.85          | 5,918.19                    | 5,896.77                     | 21.42                          | 276.257                   |         |
| 3,800.00                                                   | 3,601.81                   | 2,525.00                   | 2,504.82                   | 20.14                 | 2.32               | -69.40                       | 91.17             | 6,214.85          | 5,932.31                    | 5,910.56                     | 21.75                          | 272.737                   |         |
| 3,900.00                                                   | 3,701.52                   | 2,525.00                   | 2,504.82                   | 20.45                 | 2.32               | -69.90                       | 91.17             | 6,214.85          | 5,949.90                    | 5,927.88                     | 22.02                          | 270.232                   |         |
| 3,993.52                                                   | 3,795.00                   | 2,525.00                   | 2,504.82                   | 20.68                 | 2.32               | 80.59                        | 91.17             | 6,214.85          | 5,969.41                    | 5,947.21                     | 22.21                          | 268.828                   |         |
| 4,000.00                                                   | 3,801.48                   | 2,525.00                   | 2,504.82                   | 20.69                 | 2.32               | 80.59                        | 91.17             | 6,214.85          | 5,970.87                    | 5,948.65                     | 22.22                          | 268.760                   |         |
| 4,100.00                                                   | 3,901.48                   | 2,525.00                   | 2,504.82                   | 20.91                 | 2.32               | 80.59                        | 91.17             | 6,214.85          | 5,994.18                    | 5,971.80                     | 22.38                          | 267.852                   |         |
| 4,200.00                                                   | 4,001.48                   | 2,525.00                   | 2,504.82                   | 21.13                 | 2.32               | 80.59                        | 91.17             | 6,214.85          | 6,019.06                    | 5,996.52                     | 22.54                          | 267.050                   |         |
| 4,300.00                                                   | 4,101.48                   | 2,525.00                   | 2,504.82                   | 21.36                 | 2.32               | 80.59                        | 91.17             | 6,214.85          | 6,045.50                    | 6,022.80                     | 22.70                          | 266.352                   |         |
| 4,400.00                                                   | 4,201.48                   | 2,525.00                   | 2,504.82                   | 21.59                 | 2.32               | 80.59                        | 91.17             | 6,214.85          | 6,073.46                    | 6,050.61                     | 22.85                          | 265.757                   |         |
| 4,500.00                                                   | 4,301.48                   | 2,525.00                   | 2,504.82                   | 21.82                 | 2.32               | 80.59                        | 91.17             | 6,214.85          | 6,102.94                    | 6,079.94                     | 23.01                          | 265.260                   |         |
| 4,600.00                                                   | 4,401.48                   | 2,525.00                   | 2,504.82                   | 22.05                 | 2.32               | 80.59                        | 91.17             | 6,214.85          | 6,133.91                    | 6,110.75                     | 23.16                          | 264.860                   |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                            |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                              |                           |         |
|------------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|---------------------------|------------------------|--------------------------------------|-------------------------------|-----------------------|-------------------------------------|--------------------------------------|------------------------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - Lester 100S - OH - OH |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                              | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 275-Standard Keeper                 |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                              | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                           |                                    | <b>Offset</b>                      |                                    | <b>Semi Major Axis</b>    |                        | <b>Highside<br/>Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                     |                                      | <b>Separation<br/>Factor</b> | <b>Warning</b>            |         |
| <b>Measured<br/>Depth<br/>(ft)</b>                         | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Measured<br/>Depth<br/>(ft)</b> | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                      | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between<br/>Centres<br/>(ft)</b> | <b>Between<br/>Ellipses<br/>(ft)</b> |                              |                           |         |
| 4,700.00                                                   | 4,501.48                           | 2,525.00                           | 2,504.82                           | 22.29                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,166.34                            | 6,143.03                             | 23.31                        | 264.555                   |         |
| 4,800.00                                                   | 4,601.48                           | 2,525.00                           | 2,504.82                           | 22.53                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,200.22                            | 6,176.76                             | 23.46                        | 264.341                   |         |
| 4,900.00                                                   | 4,701.48                           | 2,525.00                           | 2,504.82                           | 22.78                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,235.51                            | 6,211.91                             | 23.60                        | 264.216                   |         |
| 5,000.00                                                   | 4,801.48                           | 2,525.00                           | 2,504.82                           | 23.03                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,272.21                            | 6,248.46                             | 23.74                        | 264.177 SF                |         |
| 5,100.00                                                   | 4,901.48                           | 2,525.00                           | 2,504.82                           | 23.28                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,310.27                            | 6,286.39                             | 23.88                        | 264.220                   |         |
| 5,200.00                                                   | 5,001.48                           | 2,525.00                           | 2,504.82                           | 23.53                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,349.68                            | 6,325.66                             | 24.02                        | 264.344                   |         |
| 5,300.00                                                   | 5,101.48                           | 2,525.00                           | 2,504.82                           | 23.79                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,390.41                            | 6,366.26                             | 24.16                        | 264.546                   |         |
| 5,400.00                                                   | 5,201.48                           | 2,525.00                           | 2,504.82                           | 24.05                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,432.44                            | 6,408.15                             | 24.29                        | 264.821                   |         |
| 5,500.00                                                   | 5,301.48                           | 2,525.00                           | 2,504.82                           | 24.31                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,475.74                            | 6,451.32                             | 24.42                        | 265.168                   |         |
| 5,600.00                                                   | 5,401.48                           | 2,525.00                           | 2,504.82                           | 24.57                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,520.29                            | 6,495.74                             | 24.55                        | 265.583                   |         |
| 5,700.00                                                   | 5,501.48                           | 2,525.00                           | 2,504.82                           | 24.84                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,566.06                            | 6,541.38                             | 24.68                        | 266.063                   |         |
| 5,800.00                                                   | 5,601.48                           | 2,525.00                           | 2,504.82                           | 25.11                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,613.02                            | 6,588.21                             | 24.80                        | 266.606                   |         |
| 5,900.00                                                   | 5,701.48                           | 2,525.00                           | 2,504.82                           | 25.38                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,661.15                            | 6,636.22                             | 24.93                        | 267.208                   |         |
| 6,000.00                                                   | 5,801.48                           | 2,525.00                           | 2,504.82                           | 25.65                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,710.43                            | 6,685.38                             | 25.05                        | 267.866                   |         |
| 6,100.00                                                   | 5,901.48                           | 2,525.00                           | 2,504.82                           | 25.93                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,760.83                            | 6,735.66                             | 25.17                        | 268.577                   |         |
| 6,200.00                                                   | 6,001.48                           | 2,525.00                           | 2,504.82                           | 26.20                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,812.32                            | 6,787.03                             | 25.29                        | 269.339                   |         |
| 6,300.00                                                   | 6,101.48                           | 2,525.00                           | 2,504.82                           | 26.48                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,864.89                            | 6,839.48                             | 25.41                        | 270.149                   |         |
| 6,400.00                                                   | 6,201.48                           | 2,525.00                           | 2,504.82                           | 26.76                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,918.50                            | 6,892.97                             | 25.53                        | 271.002                   |         |
| 6,500.00                                                   | 6,301.48                           | 2,525.00                           | 2,504.82                           | 27.05                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 6,973.13                            | 6,947.48                             | 25.65                        | 271.898                   |         |
| 6,600.00                                                   | 6,401.48                           | 2,525.00                           | 2,504.82                           | 27.33                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 7,028.76                            | 7,003.00                             | 25.76                        | 272.832                   |         |
| 6,700.00                                                   | 6,501.48                           | 2,525.00                           | 2,504.82                           | 27.62                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 7,085.37                            | 7,059.49                             | 25.88                        | 273.803                   |         |
| 6,800.00                                                   | 6,601.48                           | 2,525.00                           | 2,504.82                           | 27.90                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 7,142.92                            | 7,116.93                             | 25.99                        | 274.807                   |         |
| 6,883.52                                                   | 6,685.00                           | 2,525.00                           | 2,504.82                           | 28.15                     | 2.32                   | 80.59                                | 91.17                         | 6,214.85              | 7,191.71                            | 7,165.62                             | 26.09                        | 275.668                   |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                  |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          |                                   |
|------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|------------------------|--------------------|------------------------------|-------------------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|-----------------------------------|
| <b>Offset Design:</b> Calloway Pad - Rhoda Abrams 002N - OH - OH |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          | <b>Offset Site Error:</b> 0.00 ft |
| <b>Survey Program:</b> 326-MWD                                   |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          | <b>Offset Well Error:</b> 0.00 ft |
| <b>Reference</b>                                                 |                            | <b>Offset</b>              |                            | <b>Semi Major Axis</b> |                    |                              | <b>Offset Wellbore Centre</b> |                   | <b>Distance</b>             |                              |                                |                          | <b>Warning</b>                    |
| <b>Measured Depth (ft)</b>                                       | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b>  | <b>Offset (ft)</b> | <b>Highside Toolface (°)</b> | <b>+N/-S (ft)</b>             | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> |                                   |
| 0.00                                                             | 0.00                       | 60.35                      | 60.35                      | 0.00                   | 0.07               | -87.65                       | 182.17                        | -4,447.90         | 4,451.63                    |                              |                                |                          |                                   |
| 100.00                                                           | 100.00                     | 166.22                     | 166.22                     | 0.30                   | 0.19               | -87.66                       | 181.65                        | -4,447.77         | 4,451.49                    | 4,451.00                     | 0.49                           | 9,152.476                |                                   |
| 200.00                                                           | 200.00                     | 272.09                     | 272.08                     | 0.66                   | 0.31               | -87.67                       | 180.65                        | -4,447.52         | 4,451.21                    | 4,450.25                     | 0.96                           | 4,612.769                |                                   |
| 299.99                                                           | 299.99                     | 357.00                     | 356.99                     | 1.01                   | 0.43               | -87.69                       | 179.52                        | -4,447.24         | 4,450.87                    | 4,449.42                     | 1.45                           | 3,076.775 CC             |                                   |
| 300.00                                                           | 300.00                     | 357.00                     | 356.99                     | 1.01                   | 0.43               | -87.69                       | 179.52                        | -4,447.24         | 4,450.87                    | 4,449.42                     | 1.45                           | 3,076.675 ES             |                                   |
| 400.00                                                           | 400.00                     | 388.00                     | 387.98                     | 1.37                   | 0.49               | -87.69                       | 179.15                        | -4,447.38         | 4,451.52                    | 4,449.66                     | 1.86                           | 2,387.503                |                                   |
| 500.00                                                           | 500.00                     | 418.00                     | 417.98                     | 1.73                   | 0.55               | -87.70                       | 178.97                        | -4,447.95         | 4,453.72                    | 4,451.44                     | 2.28                           | 1,950.470                |                                   |
| 600.00                                                           | 600.00                     | 448.00                     | 447.95                     | 2.09                   | 0.62               | -87.70                       | 178.96                        | -4,449.08         | 4,457.58                    | 4,454.88                     | 2.70                           | 1,648.811                |                                   |
| 700.00                                                           | 700.00                     | 479.00                     | 478.91                     | 2.45                   | 0.69               | -87.70                       | 179.05                        | -4,450.79         | 4,463.06                    | 4,459.93                     | 3.13                           | 1,427.577                |                                   |
| 800.00                                                           | 800.00                     | 510.00                     | 509.84                     | 2.81                   | 0.76               | -87.70                       | 179.16                        | -4,452.86         | 4,469.97                    | 4,466.42                     | 3.55                           | 1,259.419                |                                   |
| 900.00                                                           | 900.00                     | 541.00                     | 540.73                     | 3.17                   | 0.84               | -87.70                       | 179.15                        | -4,455.41         | 4,478.40                    | 4,474.43                     | 3.97                           | 1,127.288                |                                   |
| 918.00                                                           | 918.00                     | 553.23                     | 552.91                     | 3.23                   | 0.87               | -87.70                       | 179.12                        | -4,456.55         | 4,480.08                    | 4,476.01                     | 4.06                           | 1,102.412                |                                   |
| 1,000.00                                                         | 999.97                     | 588.23                     | 587.73                     | 3.51                   | 0.95               | 121.02                       | 179.02                        | -4,460.01         | 4,489.11                    | 4,484.69                     | 4.42                           | 1,015.767                |                                   |
| 1,100.00                                                         | 1,099.72                   | 622.45                     | 621.75                     | 3.84                   | 1.04               | 120.66                       | 178.99                        | -4,463.83         | 4,503.80                    | 4,498.98                     | 4.82                           | 933.964                  |                                   |
| 1,200.00                                                         | 1,198.98                   | 663.00                     | 661.96                     | 4.18                   | 1.15               | 120.22                       | 178.89                        | -4,469.04         | 4,522.61                    | 4,517.36                     | 5.25                           | 861.815                  |                                   |
| 1,300.00                                                         | 1,297.46                   | 694.00                     | 692.63                     | 4.54                   | 1.24               | 119.67                       | 178.69                        | -4,473.50         | 4,545.37                    | 4,539.71                     | 5.66                           | 802.910                  |                                   |
| 1,400.00                                                         | 1,394.90                   | 725.00                     | 723.26                     | 4.92                   | 1.33               | 119.03                       | 178.48                        | -4,478.26         | 4,571.91                    | 4,565.82                     | 6.09                           | 750.856                  |                                   |
| 1,500.00                                                         | 1,491.03                   | 756.00                     | 753.85                     | 5.33                   | 1.44               | 118.28                       | 178.25                        | -4,483.30         | 4,602.13                    | 4,595.59                     | 6.54                           | 703.984                  |                                   |
| 1,600.00                                                         | 1,585.60                   | 798.27                     | 795.46                     | 5.79                   | 1.59               | 117.48                       | 177.86                        | -4,490.72         | 4,635.91                    | 4,628.86                     | 7.04                           | 658.305                  |                                   |
| 1,700.00                                                         | 1,678.33                   | 828.60                     | 825.24                     | 6.30                   | 1.70               | 116.53                       | 177.63                        | -4,496.48         | 4,673.26                    | 4,665.71                     | 7.55                           | 619.093                  |                                   |
| 1,797.05                                                         | 1,766.34                   | 860.70                     | 856.68                     | 6.85                   | 1.82               | 115.52                       | 177.51                        | -4,502.93         | 4,712.74                    | 4,704.65                     | 8.08                           | 582.951                  |                                   |
| 1,800.00                                                         | 1,768.98                   | 861.69                     | 857.65                     | 6.87                   | 1.83               | 115.53                       | 177.50                        | -4,503.13         | 4,713.99                    | 4,705.88                     | 8.10                           | 581.649                  |                                   |
| 1,900.00                                                         | 1,858.58                   | 878.00                     | 873.60                     | 7.49                   | 1.89               | 115.62                       | 177.39                        | -4,506.54         | 4,756.92                    | 4,748.29                     | 8.63                           | 550.941                  |                                   |
| 2,000.00                                                         | 1,948.17                   | 908.00                     | 902.86                     | 8.15                   | 2.02               | 115.77                       | 177.25                        | -4,513.16         | 4,801.08                    | 4,791.85                     | 9.22                           | 520.664                  |                                   |
| 2,100.00                                                         | 2,037.76                   | 939.00                     | 932.99                     | 8.83                   | 2.16               | 115.93                       | 177.21                        | -4,520.47         | 4,846.53                    | 4,836.71                     | 9.82                           | 493.328                  |                                   |
| 2,200.00                                                         | 2,127.36                   | 960.94                     | 954.24                     | 9.53                   | 2.26               | 116.04                       | 177.16                        | -4,525.91         | 4,893.18                    | 4,882.77                     | 10.41                          | 470.130                  |                                   |
| 2,300.00                                                         | 2,216.95                   | 987.73                     | 980.12                     | 10.25                  | 2.39               | 116.18                       | 177.01                        | -4,532.85         | 4,941.00                    | 4,929.99                     | 11.01                          | 448.690                  |                                   |
| 2,400.00                                                         | 2,306.54                   | 1,005.00                   | 996.76                     | 10.97                  | 2.48               | 116.27                       | 176.95                        | -4,537.46         | 4,989.94                    | 4,978.36                     | 11.59                          | 430.713                  |                                   |
| 2,500.00                                                         | 2,396.14                   | 1,070.00                   | 1,059.19                   | 11.71                  | 2.82               | 116.59                       | 176.56                        | -4,555.56         | 5,039.83                    | 5,027.50                     | 12.33                          | 408.772                  |                                   |
| 2,600.00                                                         | 2,485.73                   | 1,099.55                   | 1,087.48                   | 12.45                  | 2.99               | 116.73                       | 176.22                        | -4,564.09         | 5,090.52                    | 5,077.57                     | 12.95                          | 393.087                  |                                   |
| 2,700.00                                                         | 2,575.32                   | 1,153.38                   | 1,138.93                   | 13.21                  | 3.29               | 116.98                       | 175.24                        | -4,579.85         | 5,141.89                    | 5,128.23                     | 13.66                          | 376.360                  |                                   |
| 2,800.00                                                         | 2,664.92                   | 1,207.22                   | 1,190.31                   | 13.96                  | 3.60               | 117.23                       | 174.24                        | -4,595.93         | 5,193.89                    | 5,179.51                     | 14.38                          | 361.291                  |                                   |
| 2,900.00                                                         | 2,754.51                   | 1,286.63                   | 1,266.06                   | 14.72                  | 4.04               | 117.59                       | 172.59                        | -4,619.71         | 5,246.14                    | 5,230.95                     | 15.19                          | 345.394                  |                                   |
| 3,000.00                                                         | 2,844.10                   | 1,326.00                   | 1,303.56                   | 15.49                  | 4.26               | 117.77                       | 171.61                        | -4,631.65         | 5,298.88                    | 5,283.04                     | 15.84                          | 334.443                  |                                   |
| 3,100.00                                                         | 2,933.70                   | 1,391.00                   | 1,365.32                   | 16.26                  | 4.67               | 118.05                       | 169.81                        | -4,651.85         | 5,352.31                    | 5,335.69                     | 16.62                          | 322.073                  |                                   |
| 3,114.47                                                         | 2,946.66                   | 1,391.00                   | 1,365.32                   | 16.37                  | 4.67               | 118.05                       | 169.81                        | -4,651.85         | 5,360.07                    | 5,343.38                     | 16.69                          | 321.170                  |                                   |
| 3,200.00                                                         | 3,024.12                   | 1,431.16                   | 1,403.39                   | 17.01                  | 4.91               | 119.62                       | 168.79                        | -4,664.59         | 5,405.57                    | 5,388.31                     | 17.26                          | 313.195                  |                                   |
| 3,300.00                                                         | 3,116.62                   | 1,481.88                   | 1,451.44                   | 17.69                  | 5.22               | 121.35                       | 167.87                        | -4,680.80         | 5,457.19                    | 5,439.29                     | 17.90                          | 304.836                  |                                   |
| 3,400.00                                                         | 3,210.99                   | 1,584.00                   | 1,548.07                   | 18.31                  | 5.84               | 123.07                       | 166.59                        | -4,713.81         | 5,506.96                    | 5,488.24                     | 18.72                          | 294.166                  |                                   |
| 3,500.00                                                         | 3,306.96                   | 1,649.00                   | 1,609.63                   | 18.86                  | 6.23               | 124.54                       | 165.69                        | -4,734.65         | 5,554.00                    | 5,534.67                     | 19.34                          | 287.246                  |                                   |
| 3,600.00                                                         | 3,404.26                   | 1,925.81                   | 1,873.46                   | 19.35                  | 7.78               | 126.13                       | 163.62                        | -4,818.36         | 5,596.19                    | 5,575.40                     | 20.79                          | 269.171                  |                                   |
| 3,700.00                                                         | 3,502.64                   | 2,065.86                   | 2,007.60                   | 19.77                  | 8.56               | 127.28                       | 163.56                        | -4,858.59         | 5,635.09                    | 5,613.45                     | 21.63                          | 260.480                  |                                   |
| 3,800.00                                                         | 3,601.81                   | 2,231.00                   | 2,166.45                   | 20.14                  | 9.43               | 128.24                       | 162.24                        | -4,903.69         | 5,669.27                    | 5,646.74                     | 22.53                          | 251.588                  |                                   |
| 3,900.00                                                         | 3,701.52                   | 2,273.61                   | 2,207.40                   | 20.45                  | 9.67               | 129.01                       | 161.34                        | -4,915.45         | 5,700.59                    | 5,677.68                     | 22.90                          | 248.881                  |                                   |
| 3,993.52                                                         | 3,795.00                   | 2,295.00                   | 2,227.91                   | 20.68                  | 9.79               | -79.29                       | 160.88                        | -4,921.49         | 5,727.88                    | 5,704.76                     | 23.13                          | 247.676                  |                                   |
| 4,000.00                                                         | 3,801.48                   | 2,295.00                   | 2,227.91                   | 20.69                  | 9.79               | -79.29                       | 160.88                        | -4,921.49         | 5,729.72                    | 5,706.59                     | 23.13                          | 247.692                  |                                   |
| 4,100.00                                                         | 3,901.48                   | 2,360.00                   | 2,290.00                   | 20.91                  | 10.18              | -79.34                       | 159.35                        | -4,940.65         | 5,758.37                    | 5,734.83                     | 23.54                          | 244.630                  |                                   |
| 4,200.00                                                         | 4,001.48                   | 2,384.43                   | 2,313.24                   | 21.13                  | 10.33              | -79.36                       | 158.76                        | -4,948.17         | 5,788.02                    | 5,764.25                     | 23.76                          | 243.554                  |                                   |
| 4,300.00                                                         | 4,101.48                   | 2,644.77                   | 2,561.77                   | 21.36                  | 11.84              | -79.56                       | 153.78                        | -5,025.42         | 5,817.10                    | 5,792.07                     | 25.03                          | 232.411                  |                                   |
| 4,400.00                                                         | 4,201.48                   | 2,770.01                   | 2,682.07                   | 21.59                  | 12.52              | -79.62                       | 153.83                        | -5,060.20         | 5,844.50                    | 5,818.83                     | 25.68                          | 227.622                  |                                   |
| 4,500.00                                                         | 4,301.48                   | 2,830.32                   | 2,739.99                   | 21.82                  | 12.85              | -79.66                       | 153.45                        | -5,077.02         | 5,871.83                    | 5,845.76                     | 26.06                          | 225.314                  |                                   |
| 4,600.00                                                         | 4,401.48                   | 3,023.24                   | 2,925.64                   | 22.05                  | 13.88              | -79.77                       | 151.43                        | -5,129.45         | 5,898.25                    | 5,871.25                     | 27.00                          | 218.469                  |                                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                  |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                           |                |
|------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|------------------------|--------------------|------------------------------|-------------------------------|-------------------|-----------------------------|------------------------------|--------------------------------|---------------------------|----------------|
| <b>Offset Design:</b> Calloway Pad - Rhoda Abrams 002N - OH - OH |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                | <b>Offset Site Error:</b> | 0.00 ft        |
| <b>Survey Program:</b> 326-MWD                                   |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                | <b>Offset Well Error:</b> | 0.00 ft        |
| <b>Reference</b>                                                 |                            | <b>Offset</b>              |                            | <b>Semi Major Axis</b> |                    |                              | <b>Offset Wellbore Centre</b> |                   | <b>Distance</b>             |                              |                                |                           | <b>Warning</b> |
| <b>Measured Depth (ft)</b>                                       | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b>  | <b>Offset (ft)</b> | <b>Highside Toolface (°)</b> | <b>+N/-S (ft)</b>             | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b>  |                |
| 4,700.00                                                         | 4,501.48                   | 3,069.00                   | 2,969.74                   | 22.29                  | 14.12              | -79.79                       | 151.51                        | -5,141.65         | 5,924.60                    | 5,897.28                     | 27.32                          | 216.837                   |                |
| 4,800.00                                                         | 4,601.48                   | 3,133.00                   | 3,031.32                   | 22.53                  | 14.47              | -79.82                       | 151.95                        | -5,159.07         | 5,951.59                    | 5,923.86                     | 27.73                          | 214.651                   |                |
| 4,900.00                                                         | 4,701.48                   | 3,208.74                   | 3,104.07                   | 22.78                  | 14.89              | -79.85                       | 152.56                        | -5,180.11         | 5,979.10                    | 5,950.91                     | 28.18                          | 212.138                   |                |
| 5,000.00                                                         | 4,801.48                   | 4,724.66                   | 4,593.82                   | 23.03                  | 20.08              | -80.29                       | 148.25                        | -5,417.78         | 5,984.87                    | 5,951.87                     | 33.01                          | 181.321                   |                |
| 5,100.00                                                         | 4,901.48                   | 4,824.55                   | 4,693.60                   | 23.28                  | 20.25              | -80.31                       | 147.39                        | -5,422.41         | 5,989.30                    | 5,955.83                     | 33.47                          | 178.972                   |                |
| 5,200.00                                                         | 5,001.48                   | 4,924.44                   | 4,793.38                   | 23.53                  | 20.42              | -80.32                       | 146.54                        | -5,427.03         | 5,993.72                    | 5,959.79                     | 33.93                          | 176.672                   |                |
| 5,300.00                                                         | 5,101.48                   | 5,024.33                   | 4,893.16                   | 23.79                  | 20.59              | -80.34                       | 145.68                        | -5,431.66         | 5,998.14                    | 5,963.75                     | 34.39                          | 174.421                   |                |
| 5,400.00                                                         | 5,201.48                   | 5,124.22                   | 4,992.94                   | 24.05                  | 20.76              | -80.35                       | 144.82                        | -5,436.29         | 6,002.57                    | 5,967.71                     | 34.86                          | 172.198                   |                |
| 5,500.00                                                         | 5,301.48                   | 5,224.11                   | 5,092.71                   | 24.31                  | 20.93              | -80.37                       | 143.97                        | -5,440.91         | 6,006.99                    | 5,971.66                     | 35.33                          | 170.023                   |                |
| 5,600.00                                                         | 5,401.48                   | 5,324.00                   | 5,192.49                   | 24.57                  | 21.11              | -80.39                       | 143.11                        | -5,445.54         | 6,011.42                    | 5,975.61                     | 35.80                          | 167.894                   |                |
| 5,700.00                                                         | 5,501.48                   | 5,423.89                   | 5,292.27                   | 24.84                  | 21.29              | -80.40                       | 142.26                        | -5,450.17         | 6,015.84                    | 5,979.56                     | 36.28                          | 165.799                   |                |
| 5,800.00                                                         | 5,601.48                   | 5,523.78                   | 5,392.05                   | 25.11                  | 21.46              | -80.42                       | 141.40                        | -5,454.80         | 6,020.27                    | 5,983.50                     | 36.77                          | 163.746                   |                |
| 5,900.00                                                         | 5,701.48                   | 5,623.67                   | 5,491.83                   | 25.38                  | 21.64              | -80.43                       | 140.55                        | -5,459.42         | 6,024.69                    | 5,987.44                     | 37.25                          | 161.737                   |                |
| 6,000.00                                                         | 5,801.48                   | 5,723.55                   | 5,591.60                   | 25.65                  | 21.82              | -80.45                       | 139.69                        | -5,464.05         | 6,029.12                    | 5,991.38                     | 37.74                          | 159.765                   |                |
| 6,100.00                                                         | 5,901.48                   | 5,823.44                   | 5,691.38                   | 25.93                  | 22.00              | -80.46                       | 138.84                        | -5,468.68         | 6,033.54                    | 5,995.32                     | 38.23                          | 157.829                   |                |
| 6,200.00                                                         | 6,001.48                   | 5,923.33                   | 5,791.16                   | 26.20                  | 22.19              | -80.48                       | 137.98                        | -5,473.30         | 6,037.97                    | 5,999.25                     | 38.72                          | 155.935                   |                |
| 6,300.00                                                         | 6,101.48                   | 6,023.22                   | 5,890.94                   | 26.48                  | 22.37              | -80.49                       | 137.13                        | -5,477.93         | 6,042.40                    | 6,003.18                     | 39.22                          | 154.080                   |                |
| 6,400.00                                                         | 6,201.48                   | 6,123.11                   | 5,990.72                   | 26.76                  | 22.55              | -80.51                       | 136.27                        | -5,482.56         | 6,046.83                    | 6,007.11                     | 39.71                          | 152.256                   |                |
| 6,500.00                                                         | 6,301.48                   | 6,223.00                   | 6,090.49                   | 27.05                  | 22.74              | -80.52                       | 135.42                        | -5,487.18         | 6,051.26                    | 6,011.04                     | 40.22                          | 150.472                   |                |
| 6,600.00                                                         | 6,401.48                   | 6,322.89                   | 6,190.27                   | 27.33                  | 22.93              | -80.54                       | 134.56                        | -5,491.81         | 6,055.68                    | 6,014.97                     | 40.72                          | 148.726                   |                |
| 6,700.00                                                         | 6,501.48                   | 6,422.78                   | 6,290.05                   | 27.62                  | 23.11              | -80.55                       | 133.71                        | -5,496.44         | 6,060.11                    | 6,018.89                     | 41.22                          | 147.009                   |                |
| 6,800.00                                                         | 6,601.48                   | 6,522.67                   | 6,389.83                   | 27.90                  | 23.30              | -80.57                       | 132.85                        | -5,501.07         | 6,064.54                    | 6,022.81                     | 41.73                          | 145.328                   |                |
| 6,883.52                                                         | 6,685.00                   | 6,606.09                   | 6,473.16                   | 28.15                  | 23.46              | -80.58                       | 132.14                        | -5,504.93         | 6,068.24                    | 6,026.09                     | 42.15                          | 143.951 SF                |                |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



## Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                 |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                          |                           |         |
|-----------------------------------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------|--------------------|------------------------------|-------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - Sexton 001 (P/A) - OH - OH |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                          | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 100-UNKNOWN                              |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                          | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                                | <b>Offset</b>              | <b>Semi Major Axis</b>     |                            | <b>Distance</b>       |                    | <b>Rule Assigned:</b>        |                   | <b>Warning</b>    |                             |                              |                                |                          |                           |         |
| <b>Measured Depth (ft)</b>                                      | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b> | <b>Offset (ft)</b> | <b>Highside Toolface (°)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> |                           |         |
| 0.00                                                            | 0.00                       | 0.00                       | 0.00                       | 0.00                  | 0.00               | 89.53                        | 21.83             | 2,641.86          | 2,642.73                    |                              |                                |                          |                           |         |
| 100.00                                                          | 100.00                     | 36.00                      | 36.00                      | 0.30                  | 1.44               | 89.53                        | 21.83             | 2,641.86          | 2,641.95                    | 2,640.21                     | 1.74                           | 1,520.407                |                           |         |
| 200.00                                                          | 200.00                     | 136.00                     | 136.00                     | 0.66                  | 5.44               | 89.53                        | 21.83             | 2,641.86          | 2,641.95                    | 2,635.85                     | 6.10                           | 433.391                  |                           |         |
| 300.00                                                          | 300.00                     | 236.00                     | 236.00                     | 1.01                  | 9.44               | 89.53                        | 21.83             | 2,641.86          | 2,641.95                    | 2,631.50                     | 10.45                          | 252.710                  |                           |         |
| 400.00                                                          | 400.00                     | 336.00                     | 336.00                     | 1.37                  | 13.44              | 89.53                        | 21.83             | 2,641.86          | 2,641.95                    | 2,627.14                     | 14.81                          | 178.354                  |                           |         |
| 500.00                                                          | 500.00                     | 436.00                     | 436.00                     | 1.73                  | 17.44              | 89.53                        | 21.83             | 2,641.86          | 2,641.95                    | 2,622.78                     | 19.17                          | 137.807                  |                           |         |
| 600.00                                                          | 600.00                     | 536.00                     | 536.00                     | 2.09                  | 21.44              | 89.53                        | 21.83             | 2,641.86          | 2,641.95                    | 2,618.42                     | 23.53                          | 112.281                  |                           |         |
| 700.00                                                          | 700.00                     | 636.00                     | 636.00                     | 2.45                  | 25.44              | 89.53                        | 21.83             | 2,641.86          | 2,641.95                    | 2,614.06                     | 27.89                          | 94.733                   |                           |         |
| 800.00                                                          | 800.00                     | 736.00                     | 736.00                     | 2.81                  | 29.44              | 89.53                        | 21.83             | 2,641.86          | 2,641.95                    | 2,609.70                     | 32.25                          | 81.929                   |                           |         |
| 900.00                                                          | 900.00                     | 836.00                     | 836.00                     | 3.17                  | 33.44              | 89.53                        | 21.83             | 2,641.86          | 2,641.95                    | 2,605.35                     | 36.61                          | 72.174                   |                           |         |
| 918.00                                                          | 918.00                     | 854.00                     | 854.00                     | 3.23                  | 34.16              | 89.53                        | 21.83             | 2,641.86          | 2,641.95                    | 2,604.56                     | 37.39                          | 70.660                   |                           |         |
| 1,000.00                                                        | 999.97                     | 935.97                     | 935.97                     | 3.51                  | 37.44              | -61.58                       | 21.83             | 2,641.86          | 2,641.11                    | 2,600.16                     | 40.95                          | 64.498                   |                           |         |
| 1,100.00                                                        | 1,099.72                   | 1,035.72                   | 1,035.72                   | 3.84                  | 41.43              | -61.80                       | 21.83             | 2,641.86          | 2,637.83                    | 2,592.56                     | 45.27                          | 58.271                   |                           |         |
| 1,200.00                                                        | 1,198.98                   | 1,134.98                   | 1,134.98                   | 4.18                  | 45.40              | -62.18                       | 21.83             | 2,641.86          | 2,632.11                    | 2,582.53                     | 49.58                          | 53.091                   |                           |         |
| 1,300.00                                                        | 1,297.46                   | 1,233.46                   | 1,233.46                   | 4.54                  | 49.34              | -62.73                       | 21.83             | 2,641.86          | 2,624.01                    | 2,570.14                     | 53.87                          | 48.711                   |                           |         |
| 1,400.00                                                        | 1,394.90                   | 1,330.90                   | 1,330.90                   | 4.92                  | 53.24              | -63.44                       | 21.83             | 2,641.86          | 2,613.65                    | 2,555.51                     | 58.14                          | 44.955                   |                           |         |
| 1,500.00                                                        | 1,491.03                   | 1,427.03                   | 1,427.03                   | 5.33                  | 57.08              | -64.30                       | 21.83             | 2,641.86          | 2,601.15                    | 2,538.76                     | 62.38                          | 41.695                   |                           |         |
| 1,600.00                                                        | 1,585.60                   | 1,521.60                   | 1,521.60                   | 5.79                  | 60.86              | -65.32                       | 21.83             | 2,641.86          | 2,586.68                    | 2,520.07                     | 66.61                          | 38.836                   |                           |         |
| 1,700.00                                                        | 1,678.33                   | 1,614.33                   | 1,614.33                   | 6.30                  | 64.57              | -66.48                       | 21.83             | 2,641.86          | 2,570.43                    | 2,499.63                     | 70.80                          | 36.306                   |                           |         |
| 1,797.05                                                        | 1,766.34                   | 1,702.34                   | 1,702.34                   | 6.85                  | 68.09              | -67.74                       | 21.83             | 2,641.86          | 2,553.18                    | 2,478.33                     | 74.85                          | 34.112                   |                           |         |
| 1,800.00                                                        | 1,768.98                   | 1,704.98                   | 1,704.98                   | 6.87                  | 68.20              | -67.77                       | 21.83             | 2,641.86          | 2,552.63                    | 2,477.66                     | 74.97                          | 34.049                   |                           |         |
| 1,900.00                                                        | 1,858.58                   | 1,794.58                   | 1,794.58                   | 7.49                  | 71.78              | -68.61                       | 21.83             | 2,641.86          | 2,534.52                    | 2,455.37                     | 79.15                          | 32.023                   |                           |         |
| 2,000.00                                                        | 1,948.17                   | 1,884.17                   | 1,884.17                   | 8.15                  | 75.37              | -69.47                       | 21.83             | 2,641.86          | 2,517.06                    | 2,433.70                     | 83.36                          | 30.196                   |                           |         |
| 2,100.00                                                        | 2,037.76                   | 1,973.76                   | 1,973.76                   | 8.83                  | 78.95              | -70.34                       | 21.83             | 2,641.86          | 2,500.26                    | 2,412.67                     | 87.60                          | 28.543                   |                           |         |
| 2,200.00                                                        | 2,127.36                   | 2,063.36                   | 2,063.36                   | 9.53                  | 82.53              | -71.21                       | 21.83             | 2,641.86          | 2,484.15                    | 2,392.29                     | 91.86                          | 27.043                   |                           |         |
| 2,300.00                                                        | 2,216.95                   | 2,152.95                   | 2,152.95                   | 10.25                 | 86.12              | -72.10                       | 21.83             | 2,641.86          | 2,468.73                    | 2,372.59                     | 96.15                          | 25.677                   |                           |         |
| 2,400.00                                                        | 2,306.54                   | 2,195.00                   | 2,195.00                   | 10.97                 | 87.80              | -72.51                       | 21.83             | 2,641.86          | 2,454.48                    | 2,355.94                     | 98.54                          | 24.910                   |                           |         |
| 2,500.00                                                        | 2,396.14                   | 2,195.00                   | 2,195.00                   | 11.71                 | 87.80              | -72.51                       | 21.83             | 2,641.86          | 2,443.88                    | 2,344.73                     | 99.15                          | 24.648                   |                           |         |
| 2,600.00                                                        | 2,485.73                   | 2,195.00                   | 2,195.00                   | 12.45                 | 87.80              | -72.51                       | 21.83             | 2,641.86          | 2,437.34                    | 2,337.70                     | 99.64                          | 24.461                   |                           |         |
| 2,691.18                                                        | 2,567.42                   | 2,195.00                   | 2,195.00                   | 13.14                 | 87.80              | -72.51                       | 21.83             | 2,641.86          | 2,434.94                    | 2,334.96                     | 99.98                          | 24.355                   |                           |         |
| 2,700.00                                                        | 2,575.32                   | 2,195.00                   | 2,195.00                   | 13.21                 | 87.80              | -72.51                       | 21.83             | 2,641.86          | 2,434.89                    | 2,334.88                     | 100.00                         | 24.348                   | CC, ES                    |         |
| 2,800.00                                                        | 2,664.92                   | 2,195.00                   | 2,195.00                   | 13.96                 | 87.80              | -72.51                       | 21.83             | 2,641.86          | 2,436.54                    | 2,336.31                     | 100.23                         | 24.309                   | SF                        |         |
| 2,900.00                                                        | 2,754.51                   | 2,195.00                   | 2,195.00                   | 14.72                 | 87.80              | -72.51                       | 21.83             | 2,641.86          | 2,442.30                    | 2,341.97                     | 100.33                         | 24.343                   |                           |         |
| 3,000.00                                                        | 2,844.10                   | 2,195.00                   | 2,195.00                   | 15.49                 | 87.80              | -72.51                       | 21.83             | 2,641.86          | 2,452.12                    | 2,351.83                     | 100.29                         | 24.450                   |                           |         |
| 3,100.00                                                        | 2,933.70                   | 2,195.00                   | 2,195.00                   | 16.26                 | 87.80              | -72.51                       | 21.83             | 2,641.86          | 2,465.96                    | 2,365.83                     | 100.13                         | 24.628                   |                           |         |
| 3,114.47                                                        | 2,946.66                   | 2,195.00                   | 2,195.00                   | 16.37                 | 87.80              | -72.51                       | 21.83             | 2,641.86          | 2,468.29                    | 2,368.20                     | 100.09                         | 24.660                   |                           |         |
| 3,200.00                                                        | 3,024.12                   | 2,195.00                   | 2,195.00                   | 17.01                 | 87.80              | -72.98                       | 21.83             | 2,641.86          | 2,484.31                    | 2,384.50                     | 99.81                          | 24.891                   |                           |         |
| 3,300.00                                                        | 3,116.62                   | 2,195.00                   | 2,195.00                   | 17.69                 | 87.80              | -73.68                       | 21.83             | 2,641.86          | 2,507.99                    | 2,408.71                     | 99.28                          | 25.261                   |                           |         |
| 3,400.00                                                        | 3,210.99                   | 2,195.00                   | 2,195.00                   | 18.31                 | 87.80              | -74.55                       | 21.83             | 2,641.86          | 2,536.79                    | 2,438.23                     | 98.56                          | 25.738                   |                           |         |
| 3,500.00                                                        | 3,306.96                   | 2,195.00                   | 2,195.00                   | 18.86                 | 87.80              | -75.59                       | 21.83             | 2,641.86          | 2,570.48                    | 2,472.82                     | 97.66                          | 26.321                   |                           |         |
| 3,600.00                                                        | 3,404.26                   | 2,195.00                   | 2,195.00                   | 19.35                 | 87.80              | -76.80                       | 21.83             | 2,641.86          | 2,608.76                    | 2,512.17                     | 96.59                          | 27.008                   |                           |         |
| 3,700.00                                                        | 3,502.64                   | 2,195.00                   | 2,195.00                   | 19.77                 | 87.80              | -78.17                       | 21.83             | 2,641.86          | 2,651.34                    | 2,555.96                     | 95.39                          | 27.796                   |                           |         |
| 3,800.00                                                        | 3,601.81                   | 2,195.00                   | 2,195.00                   | 20.14                 | 87.80              | -79.72                       | 21.83             | 2,641.86          | 2,697.90                    | 2,603.84                     | 94.06                          | 28.683                   |                           |         |
| 3,900.00                                                        | 3,701.52                   | 2,195.00                   | 2,195.00                   | 20.45                 | 87.80              | -81.44                       | 21.83             | 2,641.86          | 2,748.12                    | 2,655.48                     | 92.64                          | 29.665                   |                           |         |
| 3,993.52                                                        | 3,795.00                   | 2,195.00                   | 2,195.00                   | 20.68                 | 87.80              | 67.85                        | 21.83             | 2,641.86          | 2,798.09                    | 2,706.86                     | 91.23                          | 30.669                   |                           |         |
| 4,000.00                                                        | 3,801.48                   | 2,195.00                   | 2,195.00                   | 20.69                 | 87.80              | 67.85                        | 21.83             | 2,641.86          | 2,801.65                    | 2,710.52                     | 91.14                          | 30.742                   |                           |         |
| 4,100.00                                                        | 3,901.48                   | 2,195.00                   | 2,195.00                   | 20.91                 | 87.80              | 67.85                        | 21.83             | 2,641.86          | 2,857.93                    | 2,768.33                     | 89.60                          | 31.898                   |                           |         |
| 4,200.00                                                        | 4,001.48                   | 2,195.00                   | 2,195.00                   | 21.13                 | 87.80              | 67.85                        | 21.83             | 2,641.86          | 2,916.55                    | 2,828.50                     | 88.05                          | 33.123                   |                           |         |
| 4,300.00                                                        | 4,101.48                   | 2,195.00                   | 2,195.00                   | 21.36                 | 87.80              | 67.85                        | 21.83             | 2,641.86          | 2,977.37                    | 2,890.86                     | 86.52                          | 34.414                   |                           |         |
| 4,400.00                                                        | 4,201.48                   | 2,195.00                   | 2,195.00                   | 21.59                 | 87.80              | 67.85                        | 21.83             | 2,641.86          | 3,040.27                    | 2,955.28                     | 84.99                          | 35.772                   |                           |         |
| 4,500.00                                                        | 4,301.48                   | 2,195.00                   | 2,195.00                   | 21.82                 | 87.80              | 67.85                        | 21.83             | 2,641.86          | 3,105.12                    | 3,021.63                     | 83.48                          | 37.194                   |                           |         |
| 4,600.00                                                        | 4,401.48                   | 2,195.00                   | 2,195.00                   | 22.05                 | 87.80              | 67.85                        | 21.83             | 2,641.86          | 3,171.79                    | 3,089.79                     | 82.00                          | 38.680                   |                           |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                 |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |
|-----------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|------------------------------------|--------------------------|
| <b>Offset Design:</b> Calloway Pad - Sexton 001 (P/A) - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  | <b>Offset Site Error:</b>          | 0.00 ft                  |
| <b>Survey Program:</b> 100-UNKNOWN                              |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  | <b>Offset Well Error:</b>          | 0.00 ft                  |
| <b>Reference</b>                                                |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Rule Assigned:</b>              |                          |
| <b>Measured Depth<br/>(ft)</b>                                  | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> | <b>Minimum Separation<br/>(ft)</b> | <b>Separation Factor</b> |
| 4,700.00                                                        | 4,501.48                       | 2,195.00                       | 2,195.00                       | 22.29                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 3,240.18                        | 3,159.63                         | 80.55                              | 40.228                   |
| 4,800.00                                                        | 4,601.48                       | 2,195.00                       | 2,195.00                       | 22.53                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 3,310.17                        | 3,231.05                         | 79.12                              | 41.837                   |
| 4,900.00                                                        | 4,701.48                       | 2,195.00                       | 2,195.00                       | 22.78                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 3,381.68                        | 3,303.95                         | 77.73                              | 43.506                   |
| 5,000.00                                                        | 4,801.48                       | 2,195.00                       | 2,195.00                       | 23.03                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 3,454.59                        | 3,378.22                         | 76.37                              | 45.234                   |
| 5,100.00                                                        | 4,901.48                       | 2,195.00                       | 2,195.00                       | 23.28                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 3,528.84                        | 3,453.79                         | 75.05                              | 47.018                   |
| 5,200.00                                                        | 5,001.48                       | 2,195.00                       | 2,195.00                       | 23.53                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 3,604.33                        | 3,530.56                         | 73.77                              | 48.859                   |
| 5,300.00                                                        | 5,101.48                       | 2,195.00                       | 2,195.00                       | 23.79                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 3,680.99                        | 3,608.47                         | 72.53                              | 50.753                   |
| 5,400.00                                                        | 5,201.48                       | 2,195.00                       | 2,195.00                       | 24.05                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 3,758.75                        | 3,687.43                         | 71.32                              | 52.700                   |
| 5,500.00                                                        | 5,301.48                       | 2,195.00                       | 2,195.00                       | 24.31                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 3,837.54                        | 3,767.38                         | 70.16                              | 54.697                   |
| 5,600.00                                                        | 5,401.48                       | 2,195.00                       | 2,195.00                       | 24.57                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 3,917.30                        | 3,848.26                         | 69.03                              | 56.745                   |
| 5,700.00                                                        | 5,501.48                       | 2,195.00                       | 2,195.00                       | 24.84                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 3,997.96                        | 3,930.01                         | 67.95                              | 58.839                   |
| 5,800.00                                                        | 5,601.48                       | 2,195.00                       | 2,195.00                       | 25.11                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 4,079.48                        | 4,012.59                         | 66.90                              | 60.980                   |
| 5,900.00                                                        | 5,701.48                       | 2,195.00                       | 2,195.00                       | 25.38                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 4,161.81                        | 4,095.92                         | 65.89                              | 63.164                   |
| 6,000.00                                                        | 5,801.48                       | 2,195.00                       | 2,195.00                       | 25.65                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 4,244.90                        | 4,179.99                         | 64.92                              | 65.391                   |
| 6,100.00                                                        | 5,901.48                       | 2,195.00                       | 2,195.00                       | 25.93                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 4,328.70                        | 4,264.73                         | 63.98                              | 67.658                   |
| 6,200.00                                                        | 6,001.48                       | 2,195.00                       | 2,195.00                       | 26.20                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 4,413.18                        | 4,350.10                         | 63.08                              | 69.964                   |
| 6,300.00                                                        | 6,101.48                       | 2,195.00                       | 2,195.00                       | 26.48                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 4,498.30                        | 4,436.08                         | 62.21                              | 72.306                   |
| 6,400.00                                                        | 6,201.48                       | 2,195.00                       | 2,195.00                       | 26.76                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 4,584.01                        | 4,522.63                         | 61.38                              | 74.683                   |
| 6,500.00                                                        | 6,301.48                       | 2,195.00                       | 2,195.00                       | 27.05                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 4,670.30                        | 4,609.72                         | 60.58                              | 77.092                   |
| 6,600.00                                                        | 6,401.48                       | 2,195.00                       | 2,195.00                       | 27.33                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 4,757.12                        | 4,697.30                         | 59.81                              | 79.532                   |
| 6,700.00                                                        | 6,501.48                       | 2,195.00                       | 2,195.00                       | 27.62                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 4,844.45                        | 4,785.37                         | 59.08                              | 82.000                   |
| 6,800.00                                                        | 6,601.48                       | 2,195.00                       | 2,195.00                       | 27.90                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 4,932.26                        | 4,873.88                         | 58.37                              | 84.495                   |
| 6,883.52                                                        | 6,685.00                       | 2,195.00                       | 2,195.00                       | 28.15                     | 87.80                  | 67.85                            | 21.83                         | 2,641.86              | 5,005.95                        | 4,948.14                         | 57.81                              | 86.597                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |                                   |
|----------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|------------------------------------|--------------------------|-----------------------------------|
| <b>Offset Design:</b> Calloway Pad - Sloane Com 001F - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          | <b>Offset Site Error:</b> 0.00 ft |
| <b>Survey Program:</b> 413-MWD SDI                             |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          | <b>Offset Well Error:</b> 0.00 ft |
| <b>Reference</b>                                               |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Minimum Separation<br/>(ft)</b> | <b>Separation Factor</b> | <b>Warning</b>                    |
| <b>Measured Depth<br/>(ft)</b>                                 | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> |                                    |                          |                                   |
| 0.00                                                           | 0.00                           | 0.00                           | 0.00                           | 0.00                      | 0.00                   | 74.36                            | 833.70                        | 2,978.27              | 3,093.55                        |                                  |                                    |                          |                                   |
| 100.00                                                         | 100.00                         | 33.03                          | 33.03                          | 0.30                      | 0.04                   | 74.36                            | 833.70                        | 2,978.25              | 3,092.74                        | 3,092.41                         | 0.33                               | 9,235.939                |                                   |
| 200.00                                                         | 200.00                         | 143.12                         | 143.12                         | 0.66                      | 0.16                   | 74.36                            | 833.70                        | 2,977.95              | 3,092.48                        | 3,091.66                         | 0.82                               | 3,784.630                |                                   |
| 300.00                                                         | 300.00                         | 253.22                         | 253.21                         | 1.01                      | 0.29                   | 74.36                            | 833.71                        | 2,977.28              | 3,091.89                        | 3,090.59                         | 1.30                               | 2,379.534                |                                   |
| 400.00                                                         | 400.00                         | 363.30                         | 363.29                         | 1.37                      | 0.41                   | 74.35                            | 833.72                        | 2,976.23              | 3,090.98                        | 3,089.20                         | 1.78                               | 1,734.933                |                                   |
| 500.00                                                         | 500.00                         | 466.83                         | 466.81                         | 1.73                      | 0.58                   | 74.34                            | 833.80                        | 2,974.94              | 3,089.80                        | 3,087.49                         | 2.31                               | 1,336.956                |                                   |
| 600.00                                                         | 600.00                         | 576.21                         | 576.18                         | 2.09                      | 0.81                   | 74.33                            | 834.08                        | 2,973.25              | 3,088.37                        | 3,085.47                         | 2.90                               | 1,065.148                |                                   |
| 700.00                                                         | 700.00                         | 682.06                         | 682.02                         | 2.45                      | 1.02                   | 74.32                            | 834.23                        | 2,971.59              | 3,086.90                        | 3,083.43                         | 3.47                               | 890.146                  |                                   |
| 800.00                                                         | 800.00                         | 764.61                         | 764.55                         | 2.81                      | 1.20                   | 74.31                            | 834.39                        | 2,970.05              | 3,085.22                        | 3,081.22                         | 4.00                               | 771.481                  |                                   |
| 883.94                                                         | 883.94                         | 814.00                         | 813.94                         | 3.11                      | 1.30                   | 74.30                            | 834.83                        | 2,969.63              | 3,084.74                        | 3,080.34                         | 4.40                               | 700.633 CC               |                                   |
| 900.00                                                         | 900.00                         | 814.00                         | 813.94                         | 3.17                      | 1.30                   | 74.30                            | 834.83                        | 2,969.63              | 3,084.78                        | 3,080.32                         | 4.46                               | 691.611 ES               |                                   |
| 918.00                                                         | 918.00                         | 814.00                         | 813.94                         | 3.23                      | 1.30                   | 74.30                            | 834.83                        | 2,969.63              | 3,084.93                        | 3,080.41                         | 4.52                               | 681.800                  |                                   |
| 1,000.00                                                       | 999.97                         | 865.97                         | 865.90                         | 3.51                      | 1.40                   | -76.76                           | 835.81                        | 2,969.90              | 3,085.54                        | 3,080.63                         | 4.91                               | 628.603                  |                                   |
| 1,100.00                                                       | 1,099.72                       | 903.00                         | 902.90                         | 3.84                      | 1.48                   | -76.78                           | 836.96                        | 2,970.67              | 3,086.96                        | 3,081.65                         | 5.31                               | 581.368                  |                                   |
| 1,200.00                                                       | 1,198.98                       | 955.21                         | 955.03                         | 4.18                      | 1.59                   | -76.87                           | 839.32                        | 2,972.49              | 3,088.94                        | 3,083.19                         | 5.76                               | 536.702                  |                                   |
| 1,300.00                                                       | 1,297.46                       | 994.00                         | 993.70                         | 4.54                      | 1.67                   | -76.94                           | 841.68                        | 2,974.38              | 3,091.59                        | 3,085.41                         | 6.19                               | 499.800                  |                                   |
| 1,400.00                                                       | 1,394.90                       | 1,044.70                       | 1,044.15                       | 4.92                      | 1.78                   | -77.10                           | 845.53                        | 2,977.52              | 3,094.86                        | 3,088.19                         | 6.67                               | 463.992                  |                                   |
| 1,500.00                                                       | 1,491.03                       | 1,084.00                       | 1,083.18                       | 5.33                      | 1.87                   | -77.22                           | 849.08                        | 2,980.45              | 3,098.84                        | 3,091.68                         | 7.16                               | 433.003                  |                                   |
| 1,600.00                                                       | 1,585.60                       | 1,129.96                       | 1,128.72                       | 5.79                      | 1.99                   | -77.41                           | 853.74                        | 2,984.50              | 3,103.59                        | 3,095.88                         | 7.71                               | 402.774                  |                                   |
| 1,700.00                                                       | 1,678.33                       | 1,174.00                       | 1,172.26                       | 6.30                      | 2.10                   | -77.59                           | 858.58                        | 2,989.08              | 3,109.22                        | 3,100.92                         | 8.30                               | 374.718                  |                                   |
| 1,797.05                                                       | 1,766.34                       | 1,209.65                       | 1,207.41                       | 6.85                      | 2.20                   | -77.73                           | 862.78                        | 2,993.26              | 3,115.57                        | 3,106.65                         | 8.92                               | 349.432                  |                                   |
| 1,800.00                                                       | 1,768.98                       | 1,210.83                       | 1,208.57                       | 6.87                      | 2.21                   | -77.74                           | 862.93                        | 2,993.40              | 3,115.77                        | 3,106.84                         | 8.94                               | 348.683                  |                                   |
| 1,900.00                                                       | 1,858.58                       | 1,264.00                       | 1,260.84                       | 7.49                      | 2.36                   | -78.23                           | 869.68                        | 3,000.39              | 3,123.94                        | 3,114.27                         | 9.67                               | 323.183                  |                                   |
| 2,000.00                                                       | 1,948.17                       | 1,264.00                       | 1,260.84                       | 8.15                      | 2.36                   | -78.23                           | 869.68                        | 3,000.39              | 3,134.31                        | 3,124.03                         | 10.27                              | 305.111                  |                                   |
| 2,100.00                                                       | 2,037.76                       | 1,325.02                       | 1,320.55                       | 8.83                      | 2.57                   | -78.81                           | 878.36                        | 3,009.52              | 3,146.43                        | 3,135.35                         | 11.08                              | 283.956                  |                                   |
| 2,200.00                                                       | 2,127.36                       | 1,355.00                       | 1,349.75                       | 9.53                      | 2.68                   | -79.09                           | 883.06                        | 3,014.43              | 3,160.94                        | 3,149.13                         | 11.80                              | 267.772                  |                                   |
| 2,300.00                                                       | 2,216.95                       | 1,417.85                       | 1,410.79                       | 10.25                     | 2.92                   | -79.69                           | 893.27                        | 3,025.39              | 3,177.22                        | 3,164.57                         | 12.65                              | 251.195                  |                                   |
| 2,400.00                                                       | 2,306.54                       | 1,476.51                       | 1,467.63                       | 10.97                     | 3.16                   | -80.24                           | 902.90                        | 3,036.22              | 3,195.11                        | 3,181.62                         | 13.49                              | 236.912                  |                                   |
| 2,500.00                                                       | 2,396.14                       | 1,535.00                       | 1,524.21                       | 11.71                     | 3.41                   | -80.78                           | 912.69                        | 3,047.33              | 3,214.38                        | 3,200.06                         | 14.33                              | 224.332                  |                                   |
| 2,600.00                                                       | 2,485.73                       | 1,594.06                       | 1,581.20                       | 12.45                     | 3.68                   | -81.34                           | 923.12                        | 3,058.77              | 3,235.11                        | 3,219.93                         | 15.18                              | 213.074                  |                                   |
| 2,700.00                                                       | 2,575.32                       | 1,657.83                       | 1,642.54                       | 13.21                     | 3.98                   | -81.95                           | 935.33                        | 3,071.25              | 3,257.33                        | 3,241.27                         | 16.06                              | 202.855                  |                                   |
| 2,800.00                                                       | 2,664.92                       | 1,733.76                       | 1,715.44                       | 13.96                     | 4.34                   | -82.68                           | 950.74                        | 3,085.86              | 3,280.62                        | 3,263.64                         | 16.98                              | 193.165                  |                                   |
| 2,900.00                                                       | 2,754.51                       | 1,808.61                       | 1,787.19                       | 14.72                     | 4.71                   | -83.40                           | 966.71                        | 3,099.98              | 3,304.91                        | 3,287.00                         | 17.91                              | 184.537                  |                                   |
| 3,000.00                                                       | 2,844.10                       | 1,890.27                       | 1,865.32                       | 15.49                     | 5.13                   | -84.20                           | 985.25                        | 3,114.79              | 3,330.10                        | 3,311.23                         | 18.87                              | 176.483                  |                                   |
| 3,100.00                                                       | 2,933.70                       | 1,957.63                       | 1,929.59                       | 16.26                     | 5.48                   | -84.88                           | 1,001.80                      | 3,126.33              | 3,356.30                        | 3,336.53                         | 19.77                              | 169.730                  |                                   |
| 3,114.47                                                       | 2,946.66                       | 1,967.08                       | 1,938.59                       | 16.37                     | 5.53                   | -84.98                           | 1,004.23                      | 3,127.90              | 3,360.19                        | 3,340.29                         | 19.90                              | 168.825                  |                                   |
| 3,200.00                                                       | 3,024.12                       | 2,011.42                       | 1,980.71                       | 17.01                     | 5.78                   | -86.16                           | 1,016.01                      | 3,135.17              | 3,383.94                        | 3,363.34                         | 20.59                              | 164.321                  |                                   |
| 3,300.00                                                       | 3,116.62                       | 2,075.00                       | 2,040.81                       | 17.69                     | 6.15                   | -87.66                           | 1,033.77                      | 3,145.85              | 3,413.57                        | 3,392.18                         | 21.39                              | 159.572                  |                                   |
| 3,400.00                                                       | 3,210.99                       | 2,105.02                       | 2,069.07                       | 18.31                     | 6.33                   | -88.90                           | 1,042.48                      | 3,151.04              | 3,444.79                        | 3,422.83                         | 21.96                              | 156.866                  |                                   |
| 3,500.00                                                       | 3,306.96                       | 2,165.00                       | 2,125.33                       | 18.86                     | 6.70                   | -90.39                           | 1,060.28                      | 3,161.77              | 3,477.64                        | 3,455.04                         | 22.61                              | 153.832                  |                                   |
| 3,600.00                                                       | 3,404.26                       | 2,196.24                       | 2,154.51                       | 19.35                     | 6.91                   | -91.68                           | 1,069.83                      | 3,167.59              | 3,511.81                        | 3,488.77                         | 23.04                              | 152.402                  |                                   |
| 3,700.00                                                       | 3,502.64                       | 2,255.00                       | 2,209.05                       | 19.77                     | 7.30                   | -93.15                           | 1,088.46                      | 3,179.04              | 3,547.44                        | 3,523.88                         | 23.56                              | 150.563                  |                                   |
| 3,800.00                                                       | 3,601.81                       | 2,255.00                       | 2,209.05                       | 20.14                     | 7.30                   | -94.34                           | 1,088.46                      | 3,179.04              | 3,584.21                        | 3,560.51                         | 23.70                              | 151.240                  |                                   |
| 3,900.00                                                       | 3,701.52                       | 2,304.11                       | 2,254.20                       | 20.45                     | 7.65                   | -95.76                           | 1,104.82                      | 3,189.28              | 3,622.04                        | 3,597.98                         | 24.06                              | 150.540                  |                                   |
| 3,993.52                                                       | 3,795.00                       | 2,345.00                       | 2,291.41                       | 20.68                     | 7.95                   | 53.99                            | 1,119.10                      | 3,198.41              | 3,658.58                        | 3,634.26                         | 24.32                              | 150.453                  |                                   |
| 4,000.00                                                       | 3,801.48                       | 2,345.00                       | 2,291.41                       | 20.69                     | 7.95                   | 53.99                            | 1,119.10                      | 3,198.41              | 3,661.12                        | 3,636.81                         | 24.32                              | 150.563                  |                                   |
| 4,100.00                                                       | 3,901.48                       | 2,417.29                       | 2,356.93                       | 20.91                     | 8.46                   | 53.80                            | 1,144.70                      | 3,215.07              | 3,700.98                        | 3,676.25                         | 24.73                              | 149.655                  |                                   |
| 4,200.00                                                       | 4,001.48                       | 2,535.28                       | 2,464.30                       | 21.13                     | 9.25                   | 53.54                            | 1,184.87                      | 3,242.96              | 3,740.56                        | 3,715.16                         | 25.40                              | 147.264                  |                                   |
| 4,300.00                                                       | 4,101.48                       | 2,678.62                       | 2,595.90                       | 21.36                     | 10.21                  | 53.31                            | 1,228.85                      | 3,278.92              | 3,779.18                        | 3,752.98                         | 26.20                              | 144.225                  |                                   |
| 4,400.00                                                       | 4,201.48                       | 2,743.78                       | 2,655.97                       | 21.59                     | 10.66                  | 53.23                            | 1,247.67                      | 3,295.74              | 3,817.33                        | 3,790.76                         | 26.57                              | 143.649                  |                                   |
| 4,500.00                                                       | 4,301.48                       | 2,794.00                       | 2,702.06                       | 21.82                     | 11.01                  | 53.17                            | 1,262.19                      | 3,309.42              | 3,856.52                        | 3,829.66                         | 26.86                              | 143.556                  |                                   |
| 4,600.00                                                       | 4,401.48                       | 3,264.82                       | 3,141.78                       | 22.05                     | 14.01                  | 52.88                            | 1,377.04                      | 3,430.81              | 3,892.61                        | 3,863.29                         | 29.32                              | 132.784                  |                                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                                        |                              |                |
|----------------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|---------------------------|------------------------|--------------------------------------|-------------------------------|-----------------------|-------------------------------------|--------------------------------------|----------------------------------------|------------------------------|----------------|
| <b>Offset Design:</b> Calloway Pad - Sloane Com 001F - OH - OH |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                                        | <b>Offset Site Error:</b>    | 0.00 ft        |
| <b>Survey Program:</b> 413-MWD SDI                             |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                                        | <b>Offset Well Error:</b>    | 0.00 ft        |
| <b>Reference</b>                                               |                                    | <b>Offset</b>                      |                                    | <b>Semi Major Axis</b>    |                        | <b>Highside<br/>Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                     |                                      | <b>Minimum<br/>Separation<br/>(ft)</b> | <b>Separation<br/>Factor</b> | <b>Warning</b> |
| <b>Measured<br/>Depth<br/>(ft)</b>                             | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Measured<br/>Depth<br/>(ft)</b> | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                      | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between<br/>Centres<br/>(ft)</b> | <b>Between<br/>Ellipses<br/>(ft)</b> |                                        |                              |                |
| 4,700.00                                                       | 4,501.48                           | 3,370.03                           | 3,242.08                           | 22.29                     | 14.60                  | 52.84                                | 1,398.00                      | 3,454.66              | 3,922.68                            | 3,892.82                             | 29.87                                  | 131.339                      |                |
| 4,800.00                                                       | 4,601.48                           | 3,430.66                           | 3,299.75                           | 22.53                     | 14.94                  | 52.82                                | 1,410.36                      | 3,468.73              | 3,953.47                            | 3,923.25                             | 30.22                                  | 130.825                      |                |
| 4,900.00                                                       | 4,701.48                           | 4,211.00                           | 4,058.44                           | 22.78                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 3,972.41                            | 3,939.18                             | 33.23                                  | 119.543                      |                |
| 5,000.00                                                       | 4,801.48                           | 4,211.00                           | 4,058.44                           | 23.03                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 3,988.06                            | 3,954.65                             | 33.41                                  | 119.350                      |                |
| 5,100.00                                                       | 4,901.48                           | 4,211.00                           | 4,058.44                           | 23.28                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,006.15                            | 3,972.57                             | 33.58                                  | 119.288 SF                   |                |
| 5,200.00                                                       | 5,001.48                           | 4,211.00                           | 4,058.44                           | 23.53                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,026.64                            | 3,992.91                             | 33.74                                  | 119.354                      |                |
| 5,300.00                                                       | 5,101.48                           | 4,211.00                           | 4,058.44                           | 23.79                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,049.50                            | 4,015.63                             | 33.87                                  | 119.544                      |                |
| 5,400.00                                                       | 5,201.48                           | 4,211.00                           | 4,058.44                           | 24.05                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,074.69                            | 4,040.69                             | 34.00                                  | 119.853                      |                |
| 5,500.00                                                       | 5,301.48                           | 4,211.00                           | 4,058.44                           | 24.31                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,102.16                            | 4,068.05                             | 34.11                                  | 120.278                      |                |
| 5,600.00                                                       | 5,401.48                           | 4,211.00                           | 4,058.44                           | 24.57                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,131.86                            | 4,097.66                             | 34.20                                  | 120.815                      |                |
| 5,700.00                                                       | 5,501.48                           | 4,211.00                           | 4,058.44                           | 24.84                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,163.76                            | 4,129.48                             | 34.28                                  | 121.459                      |                |
| 5,800.00                                                       | 5,601.48                           | 4,211.00                           | 4,058.44                           | 25.11                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,197.80                            | 4,163.45                             | 34.35                                  | 122.208                      |                |
| 5,900.00                                                       | 5,701.48                           | 4,211.00                           | 4,058.44                           | 25.38                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,233.92                            | 4,199.52                             | 34.41                                  | 123.056                      |                |
| 6,000.00                                                       | 5,801.48                           | 4,211.00                           | 4,058.44                           | 25.65                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,272.09                            | 4,237.63                             | 34.45                                  | 124.000                      |                |
| 6,100.00                                                       | 5,901.48                           | 4,211.00                           | 4,058.44                           | 25.93                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,312.23                            | 4,277.74                             | 34.49                                  | 125.037                      |                |
| 6,200.00                                                       | 6,001.48                           | 4,211.00                           | 4,058.44                           | 26.20                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,354.30                            | 4,319.79                             | 34.51                                  | 126.161                      |                |
| 6,300.00                                                       | 6,101.48                           | 4,211.00                           | 4,058.44                           | 26.48                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,398.24                            | 4,363.71                             | 34.53                                  | 127.369                      |                |
| 6,400.00                                                       | 6,201.48                           | 4,211.00                           | 4,058.44                           | 26.76                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,444.00                            | 4,409.46                             | 34.54                                  | 128.657                      |                |
| 6,500.00                                                       | 6,301.48                           | 4,211.00                           | 4,058.44                           | 27.05                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,491.52                            | 4,456.98                             | 34.54                                  | 130.021                      |                |
| 6,600.00                                                       | 6,401.48                           | 4,211.00                           | 4,058.44                           | 27.33                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,540.75                            | 4,506.20                             | 34.54                                  | 131.458                      |                |
| 6,700.00                                                       | 6,501.48                           | 4,211.00                           | 4,058.44                           | 27.62                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,591.62                            | 4,557.09                             | 34.53                                  | 132.963                      |                |
| 6,800.00                                                       | 6,601.48                           | 4,211.00                           | 4,058.44                           | 27.90                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,644.09                            | 4,609.57                             | 34.52                                  | 134.533                      |                |
| 6,883.52                                                       | 6,685.00                           | 4,211.00                           | 4,058.44                           | 28.15                     | 18.32                  | 52.63                                | 1,525.71                      | 3,599.81              | 4,689.10                            | 4,654.59                             | 34.51                                  | 135.890                      |                |



## Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                          |                            |                            |                            |                       |                               |                              |                   |                   |                             |                              |                                |                          |                           |                |
|----------------------------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------|-------------------------------|------------------------------|-------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|---------------------------|----------------|
| <b>Offset Design:</b> Calloway Pad - Titt 002B - OH - OH |                            |                            |                            |                       |                               |                              |                   |                   |                             |                              |                                |                          | <b>Offset Site Error:</b> | 0.00 ft        |
| <b>Survey Program:</b> 12-INCLINOMETER                   |                            |                            |                            |                       |                               |                              |                   |                   |                             |                              |                                |                          | <b>Offset Well Error:</b> | 0.00 ft        |
| <b>Reference</b>                                         | <b>Offset</b>              | <b>Semi Major Axis</b>     |                            |                       | <b>Offset Wellbore Centre</b> |                              |                   | <b>Distance</b>   |                             |                              | <b>Rule Assigned:</b>          |                          |                           | <b>Warning</b> |
| <b>Measured Depth (ft)</b>                               | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b> | <b>Offset (ft)</b>            | <b>Highside Toolface (°)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> |                           |                |
| 0.00                                                     | 0.00                       | 95.00                      | 95.00                      | 0.00                  | 2.89                          | 73.97                        | 2,716.27          | 9,456.93          | 9,839.30                    |                              |                                |                          |                           |                |
| 100.00                                                   | 100.00                     | 195.01                     | 195.00                     | 0.30                  | 5.92                          | 73.97                        | 2,716.27          | 9,456.93          | 9,839.30                    | 9,833.08                     | 6.22                           | 1,581.897                |                           |                |
| 200.00                                                   | 200.00                     | 295.01                     | 295.00                     | 0.66                  | 8.96                          | 73.97                        | 2,716.27          | 9,456.93          | 9,839.30                    | 9,829.68                     | 9.62                           | 1,023.298                |                           |                |
| 300.00                                                   | 300.00                     | 395.01                     | 395.00                     | 1.01                  | 12.00                         | 73.97                        | 2,716.27          | 9,456.93          | 9,839.30                    | 9,826.28                     | 13.01                          | 756.251                  |                           |                |
| 400.00                                                   | 400.00                     | 504.74                     | 504.72                     | 1.37                  | 15.33                         | 73.97                        | 2,717.17          | 9,456.93          | 9,839.55                    | 9,822.85                     | 16.70                          | 589.135                  |                           |                |
| 500.00                                                   | 500.00                     | 615.33                     | 615.30                     | 1.73                  | 18.69                         | 73.97                        | 2,716.56          | 9,456.93          | 9,839.40                    | 9,818.98                     | 20.42                          | 481.885                  |                           |                |
| 600.00                                                   | 600.00                     | 695.08                     | 695.00                     | 2.09                  | 21.11                         | 73.97                        | 2,716.27          | 9,456.93          | 9,839.30                    | 9,816.10                     | 23.20                          | 424.127                  |                           |                |
| 700.00                                                   | 700.00                     | 795.08                     | 795.00                     | 2.45                  | 24.15                         | 73.97                        | 2,716.27          | 9,456.93          | 9,839.30                    | 9,812.70                     | 26.59                          | 369.978                  |                           |                |
| 800.00                                                   | 800.00                     | 895.59                     | 895.50                     | 2.81                  | 27.20                         | 73.97                        | 2,717.32          | 9,456.93          | 9,839.58                    | 9,809.58                     | 30.01                          | 327.931                  |                           |                |
| 900.00                                                   | 900.00                     | 1,006.59                   | 1,006.49                   | 3.17                  | 30.57                         | 73.97                        | 2,717.07          | 9,456.93          | 9,839.52                    | 9,805.79                     | 33.73                          | 291.677                  |                           |                |
| 918.00                                                   | 918.00                     | 1,026.57                   | 1,026.47                   | 3.23                  | 31.18                         | 73.97                        | 2,716.98          | 9,456.93          | 9,839.50                    | 9,805.09                     | 34.41                          | 285.985                  |                           |                |
| 1,000.00                                                 | 999.97                     | 1,117.58                   | 1,117.47                   | 3.51                  | 33.94                         | -77.11                       | 2,716.38          | 9,456.93          | 9,838.96                    | 9,801.51                     | 37.45                          | 262.727                  |                           |                |
| 1,100.00                                                 | 1,099.72                   | 1,194.88                   | 1,194.72                   | 3.84                  | 36.29                         | -77.18                       | 2,716.27          | 9,456.93          | 9,837.36                    | 9,797.23                     | 40.13                          | 245.159                  |                           |                |
| 1,200.00                                                 | 1,198.98                   | 1,294.13                   | 1,293.98                   | 4.18                  | 39.30                         | -77.33                       | 2,716.27          | 9,456.93          | 9,834.67                    | 9,791.19                     | 43.48                          | 226.188                  |                           |                |
| 1,300.00                                                 | 1,297.46                   | 1,392.88                   | 1,392.72                   | 4.54                  | 42.30                         | -77.55                       | 2,717.41          | 9,456.93          | 9,831.17                    | 9,784.33                     | 46.83                          | 209.915                  |                           |                |
| 1,400.00                                                 | 1,394.90                   | 1,500.32                   | 1,500.15                   | 4.92                  | 45.56                         | -77.83                       | 2,717.20          | 9,456.93          | 9,826.21                    | 9,775.73                     | 50.47                          | 194.675                  |                           |                |
| 1,500.00                                                 | 1,491.03                   | 1,606.52                   | 1,606.34                   | 5.33                  | 48.79                         | -78.17                       | 2,716.62          | 9,456.93          | 9,820.11                    | 9,766.00                     | 54.11                          | 181.484                  |                           |                |
| 1,600.00                                                 | 1,585.60                   | 1,680.81                   | 1,680.60                   | 5.79                  | 51.04                         | -78.51                       | 2,716.27          | 9,456.93          | 9,813.05                    | 9,756.24                     | 56.82                          | 172.709                  |                           |                |
| 1,700.00                                                 | 1,678.33                   | 1,773.55                   | 1,773.33                   | 6.30                  | 53.86                         | -78.95                       | 2,716.27          | 9,456.93          | 9,805.20                    | 9,745.06                     | 60.14                          | 163.043                  |                           |                |
| 1,797.05                                                 | 1,766.34                   | 1,861.55                   | 1,861.34                   | 6.85                  | 56.53                         | -79.41                       | 2,716.27          | 9,456.93          | 9,796.76                    | 9,733.40                     | 63.36                          | 154.622                  |                           |                |
| 1,800.00                                                 | 1,768.98                   | 1,864.20                   | 1,863.98                   | 6.87                  | 56.61                         | -79.42                       | 2,716.27          | 9,456.93          | 9,796.50                    | 9,733.04                     | 63.46                          | 154.378                  |                           |                |
| 1,900.00                                                 | 1,858.58                   | 1,960.21                   | 1,959.98                   | 7.49                  | 59.53                         | -79.66                       | 2,716.95          | 9,456.93          | 9,787.73                    | 9,720.74                     | 66.99                          | 146.107                  |                           |                |
| 2,000.00                                                 | 1,948.17                   | 2,058.07                   | 2,057.84                   | 8.15                  | 62.50                         | -79.91                       | 2,716.60          | 9,456.93          | 9,778.85                    | 9,708.24                     | 70.61                          | 138.491                  |                           |                |
| 2,100.00                                                 | 2,037.76                   | 2,133.01                   | 2,132.76                   | 8.83                  | 64.78                         | -80.11                       | 2,716.27          | 9,456.93          | 9,770.16                    | 9,696.60                     | 73.56                          | 132.820                  |                           |                |
| 2,200.00                                                 | 2,127.36                   | 2,222.60                   | 2,222.36                   | 9.53                  | 67.50                         | -80.34                       | 2,716.27          | 9,456.93          | 9,761.77                    | 9,684.79                     | 76.97                          | 126.821                  |                           |                |
| 2,300.00                                                 | 2,216.95                   | 2,312.19                   | 2,311.95                   | 10.25                 | 70.22                         | -80.57                       | 2,716.27          | 9,456.93          | 9,753.57                    | 9,673.17                     | 80.40                          | 121.310                  |                           |                |
| 2,400.00                                                 | 2,306.54                   | 2,404.86                   | 2,404.62                   | 10.97                 | 73.03                         | -80.81                       | 2,716.76          | 9,456.93          | 9,745.73                    | 9,661.79                     | 83.94                          | 116.106                  |                           |                |
| 2,500.00                                                 | 2,396.14                   | 2,500.05                   | 2,499.80                   | 11.71                 | 75.92                         | -81.06                       | 2,716.59          | 9,456.93          | 9,737.87                    | 9,650.31                     | 87.56                          | 111.213                  |                           |                |
| 2,600.00                                                 | 2,485.73                   | 2,595.39                   | 2,595.14                   | 12.45                 | 78.82                         | -81.30                       | 2,716.24          | 9,456.93          | 9,730.16                    | 9,638.96                     | 91.20                          | 106.695                  |                           |                |
| 2,700.00                                                 | 2,575.32                   | 2,670.60                   | 2,670.32                   | 13.21                 | 81.10                         | -81.50                       | 2,716.27          | 9,456.93          | 9,722.75                    | 9,628.52                     | 94.23                          | 103.182                  |                           |                |
| 2,800.00                                                 | 2,664.92                   | 2,760.19                   | 2,759.92                   | 13.96                 | 83.82                         | -81.73                       | 2,716.27          | 9,456.93          | 9,715.53                    | 9,617.83                     | 97.70                          | 99.438                   |                           |                |
| 2,900.00                                                 | 2,754.51                   | 2,852.29                   | 2,852.01                   | 14.72                 | 86.62                         | -81.97                       | 2,717.04          | 9,456.93          | 9,708.78                    | 9,607.52                     | 101.26                         | 95.878                   |                           |                |
| 3,000.00                                                 | 2,844.10                   | 2,951.07                   | 2,950.79                   | 15.49                 | 89.62                         | -82.23                       | 2,716.83          | 9,456.93          | 9,701.90                    | 9,596.87                     | 105.03                         | 92.376                   |                           |                |
| 3,100.00                                                 | 2,933.70                   | 3,050.10                   | 3,049.81                   | 16.26                 | 92.63                         | -82.48                       | 2,716.35          | 9,456.93          | 9,695.13                    | 9,586.33                     | 108.80                         | 89.108                   |                           |                |
| 3,114.47                                                 | 2,946.66                   | 3,064.45                   | 3,064.16                   | 16.37                 | 93.06                         | -82.52                       | 2,716.26          | 9,456.93          | 9,694.16                    | 9,584.81                     | 109.35                         | 88.653                   |                           |                |
| 3,200.00                                                 | 3,024.12                   | 3,119.42                   | 3,119.12                   | 17.01                 | 94.73                         | -82.50                       | 2,716.27          | 9,456.93          | 9,688.91                    | 9,577.25                     | 111.66                         | 86.774                   |                           |                |
| 3,300.00                                                 | 3,116.62                   | 3,211.92                   | 3,211.62                   | 17.69                 | 97.54                         | -82.55                       | 2,716.27          | 9,456.93          | 9,683.58                    | 9,568.43                     | 115.15                         | 84.095                   |                           |                |
| 3,400.00                                                 | 3,210.99                   | 3,307.23                   | 3,306.93                   | 18.31                 | 100.44                        | -82.60                       | 2,716.78          | 9,456.93          | 9,679.23                    | 9,560.57                     | 118.66                         | 81.569                   |                           |                |
| 3,500.00                                                 | 3,306.96                   | 3,410.04                   | 3,409.73                   | 18.86                 | 103.56                        | -82.65                       | 2,716.65          | 9,456.93          | 9,675.43                    | 9,553.09                     | 122.34                         | 79.088                   |                           |                |
| 3,600.00                                                 | 3,404.26                   | 3,514.37                   | 3,514.06                   | 19.35                 | 106.73                        | -82.70                       | 2,716.32          | 9,456.93          | 9,672.30                    | 9,546.31                     | 125.99                         | 76.767                   |                           |                |
| 3,700.00                                                 | 3,502.64                   | 3,597.95                   | 3,597.64                   | 19.77                 | 109.26                        | -82.72                       | 2,716.27          | 9,456.93          | 9,669.96                    | 9,541.00                     | 128.96                         | 74.984                   |                           |                |
| 3,800.00                                                 | 3,601.81                   | 3,697.13                   | 3,696.81                   | 20.14                 | 112.28                        | -82.74                       | 2,716.27          | 9,456.93          | 9,668.34                    | 9,536.00                     | 132.34                         | 73.057                   |                           |                |
| 3,900.00                                                 | 3,701.52                   | 3,797.17                   | 3,796.85                   | 20.45                 | 115.31                        | -82.76                       | 2,716.86          | 9,456.93          | 9,667.61                    | 9,531.92                     | 135.69                         | 71.249                   |                           |                |
| 3,993.52                                                 | 3,795.00                   | 3,896.44                   | 3,896.12                   | 20.68                 | 118.33                        | 68.29                        | 2,716.77          | 9,456.93          | 9,667.29                    | 9,528.35                     | 138.93                         | 69.582                   |                           |                |
| 4,000.00                                                 | 3,801.48                   | 3,903.33                   | 3,903.00                   | 20.69                 | 118.54                        | 68.29                        | 2,716.76          | 9,456.93          | 9,667.28                    | 9,528.12                     | 139.16                         | 69.470                   |                           |                |
| 4,100.00                                                 | 3,901.48                   | 4,009.52                   | 4,009.20                   | 20.91                 | 121.76                        | 68.29                        | 2,716.47          | 9,456.93          | 9,667.18                    | 9,524.58                     | 142.60                         | 67.793                   |                           |                |
| 4,200.00                                                 | 4,001.48                   | 4,096.89                   | 4,096.48                   | 21.13                 | 124.42                        | 68.29                        | 2,716.27          | 9,456.93          | 9,667.10                    | 9,521.63                     | 145.47                         | 66.452                   |                           |                |
| 4,300.00                                                 | 4,101.48                   | 4,207.96                   | 4,207.54                   | 21.36                 | 127.79                        | 68.28                        | 2,717.02          | 9,456.93          | 9,667.38                    | 9,518.31                     | 149.07                         | 64.851                   |                           |                |
| 4,400.00                                                 | 4,201.48                   | 4,296.92                   | 4,296.48                   | 21.59                 | 130.49                        | 68.29                        | 2,716.27          | 9,456.93          | 9,667.10                    | 9,515.10                     | 152.00                         | 63.598                   |                           |                |
| 4,500.00                                                 | 4,301.48                   | 4,396.95                   | 4,396.48                   | 21.82                 | 133.53                        | 68.29                        | 2,716.27          | 9,456.93          | 9,667.10                    | 9,511.83                     | 155.27                         | 62.259                   |                           |                |
| 4,600.00                                                 | 4,401.48                   | 4,496.95                   | 4,496.48                   | 22.05                 | 136.56                        | 68.29                        | 2,716.27          | 9,456.93          | 9,667.10                    | 9,508.56                     | 158.54                         | 60.974                   |                           |                |
| 4,700.00                                                 | 4,501.48                   | 4,596.95                   | 4,596.48                   | 22.29                 | 139.60                        | 68.29                        | 2,716.27          | 9,456.93          | 9,667.10                    | 9,505.28                     | 161.82                         | 59.740                   |                           |                |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                          |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                                        |                              |
|----------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|---------------------------|------------------------|--------------------------------------|-------------------------------|-----------------------|-------------------------------------|--------------------------------------|----------------------------------------|------------------------------|
| <b>Offset Design:</b> Calloway Pad - Titt 002B - OH - OH |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      | <b>Offset Site Error:</b>              | 0.00 ft                      |
| <b>Survey Program:</b> 12-INCLINOMETER                   |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      | <b>Offset Well Error:</b>              | 0.00 ft                      |
| <b>Reference</b>                                         |                                    | <b>Offset</b>                      |                                    | <b>Semi Major Axis</b>    |                        | <b>Highside<br/>Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                     |                                      | <b>Rule Assigned:</b>                  |                              |
| <b>Measured<br/>Depth<br/>(ft)</b>                       | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Measured<br/>Depth<br/>(ft)</b> | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                      | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between<br/>Centres<br/>(ft)</b> | <b>Between<br/>Ellipses<br/>(ft)</b> | <b>Minimum<br/>Separation<br/>(ft)</b> | <b>Separation<br/>Factor</b> |
| 4,800.00                                                 | 4,601.48                           | 4,696.95                           | 4,696.48                           | 22.53                     | 142.64                 | 68.29                                | 2,716.27                      | 9,456.93              | 9,667.10                            | 9,502.00                             | 165.10                                 | 58.553                       |
| 4,900.00                                                 | 4,701.48                           | 4,796.95                           | 4,796.48                           | 22.78                     | 145.68                 | 68.29                                | 2,716.27                      | 9,456.93              | 9,667.10                            | 9,498.72                             | 168.38                                 | 57.412                       |
| 5,000.00                                                 | 4,801.48                           | 4,896.95                           | 4,896.48                           | 23.03                     | 148.71                 | 68.29                                | 2,716.27                      | 9,456.93              | 9,667.10                            | 9,495.44                             | 171.67                                 | 56.314                       |
| 5,100.00                                                 | 4,901.48                           | 4,996.95                           | 4,996.48                           | 23.28                     | 151.75                 | 68.29                                | 2,716.27                      | 9,456.93              | 9,667.10                            | 9,492.15                             | 174.95                                 | 55.255                       |
| 5,200.00                                                 | 5,001.48                           | 5,096.95                           | 5,096.48                           | 23.53                     | 154.79                 | 68.29                                | 2,716.27                      | 9,456.93              | 9,667.10                            | 9,488.86                             | 178.24                                 | 54.235                       |
| 5,300.00                                                 | 5,101.48                           | 5,196.95                           | 5,196.48                           | 23.79                     | 157.82                 | 68.29                                | 2,716.27                      | 9,456.93              | 9,667.10                            | 9,485.56                             | 181.54                                 | 53.251                       |
| 5,400.00                                                 | 5,201.48                           | 5,296.95                           | 5,296.48                           | 24.05                     | 160.86                 | 68.29                                | 2,716.27                      | 9,456.93              | 9,667.10                            | 9,482.27                             | 184.83                                 | 52.302                       |
| 5,500.00                                                 | 5,301.48                           | 5,396.95                           | 5,396.48                           | 24.31                     | 163.90                 | 68.29                                | 2,716.27                      | 9,456.93              | 9,667.10                            | 9,478.97                             | 188.13                                 | 51.385                       |
| 5,600.00                                                 | 5,401.48                           | 5,496.95                           | 5,496.48                           | 24.57                     | 166.93                 | 68.29                                | 2,716.27                      | 9,456.93              | 9,667.10                            | 9,475.67                             | 191.43                                 | 50.499                       |
| 5,700.00                                                 | 5,501.48                           | 5,596.95                           | 5,596.48                           | 24.84                     | 169.97                 | 68.29                                | 2,716.27                      | 9,456.93              | 9,667.10                            | 9,472.37                             | 194.74                                 | 49.642 CC                    |
| 5,800.00                                                 | 5,601.48                           | 5,697.59                           | 5,697.07                           | 25.11                     | 173.03                 | 68.26                                | 2,722.25                      | 9,456.93              | 9,669.31                            | 9,471.25                             | 198.06                                 | 48.820                       |
| 5,900.00                                                 | 5,701.48                           | 5,799.93                           | 5,799.41                           | 25.38                     | 176.13                 | 68.26                                | 2,722.20                      | 9,456.93              | 9,669.29                            | 9,467.85                             | 201.44                                 | 48.001                       |
| 6,000.00                                                 | 5,801.48                           | 5,902.28                           | 5,901.75                           | 25.65                     | 179.24                 | 68.26                                | 2,722.08                      | 9,456.93              | 9,669.25                            | 9,464.43                             | 204.82                                 | 47.208                       |
| 6,100.00                                                 | 5,901.48                           | 6,004.63                           | 6,004.10                           | 25.93                     | 182.35                 | 68.26                                | 2,721.89                      | 9,456.93              | 9,669.18                            | 9,460.98                             | 208.20                                 | 46.441                       |
| 6,200.00                                                 | 6,001.48                           | 6,106.98                           | 6,106.45                           | 26.20                     | 185.46                 | 68.26                                | 2,721.64                      | 9,456.93              | 9,669.09                            | 9,457.50                             | 211.59                                 | 45.697                       |
| 6,300.00                                                 | 6,101.48                           | 6,209.34                           | 6,208.80                           | 26.48                     | 188.57                 | 68.26                                | 2,721.32                      | 9,456.93              | 9,668.98                            | 9,454.00                             | 214.98                                 | 44.977                       |
| 6,400.00                                                 | 6,201.48                           | 6,311.69                           | 6,311.15                           | 26.76                     | 191.68                 | 68.26                                | 2,720.94                      | 9,456.93              | 9,668.84                            | 9,450.47                             | 218.37                                 | 44.278                       |
| 6,500.00                                                 | 6,301.48                           | 6,414.05                           | 6,413.50                           | 27.05                     | 194.78                 | 68.27                                | 2,720.49                      | 9,456.93              | 9,668.67                            | 9,446.92                             | 221.76                                 | 43.600                       |
| 6,600.00                                                 | 6,401.48                           | 6,516.41                           | 6,515.85                           | 27.33                     | 197.89                 | 68.27                                | 2,719.97                      | 9,456.93              | 9,668.49                            | 9,443.34                             | 225.15                                 | 42.943                       |
| 6,700.00                                                 | 6,501.48                           | 6,618.77                           | 6,618.20                           | 27.62                     | 201.00                 | 68.27                                | 2,719.38                      | 9,456.93              | 9,668.28                            | 9,439.73                             | 228.54                                 | 42.304                       |
| 6,800.00                                                 | 6,601.48                           | 6,721.13                           | 6,720.55                           | 27.90                     | 204.11                 | 68.27                                | 2,718.73                      | 9,456.93              | 9,668.04                            | 9,436.10                             | 231.94                                 | 41.683                       |
| 6,883.52                                                 | 6,685.00                           | 6,806.62                           | 6,806.03                           | 28.15                     | 206.70                 | 68.28                                | 2,718.13                      | 9,456.93              | 9,667.82                            | 9,433.05                             | 234.78                                 | 41.179 ES, SF                |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



## Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                         |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                                        |                              |                           |         |
|---------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|---------------------------|------------------------|--------------------------------------|-------------------------------|-----------------------|-------------------------------------|--------------------------------------|----------------------------------------|------------------------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - Titt 100 - OH - OH |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                                        |                              | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 12-INCLINOMETER                  |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                                        |                              | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                        |                                    | <b>Offset</b>                      |                                    | <b>Semi Major Axis</b>    |                        | <b>Highside<br/>Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                     |                                      | <b>Minimum<br/>Separation<br/>(ft)</b> | <b>Separation<br/>Factor</b> | <b>Warning</b>            |         |
| <b>Measured<br/>Depth<br/>(ft)</b>                      | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Measured<br/>Depth<br/>(ft)</b> | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                      | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between<br/>Centres<br/>(ft)</b> | <b>Between<br/>Ellipses<br/>(ft)</b> |                                        |                              |                           |         |
| 0.00                                                    | 0.00                               | 62.00                              | 62.00                              | 0.00                      | 1.88                   | 77.69                                | 1,850.54                      | 8,481.69              | 8,681.22                            |                                      |                                        |                              |                           |         |
| 100.00                                                  | 100.00                             | 162.00                             | 162.00                             | 0.30                      | 4.92                   | 77.69                                | 1,850.54                      | 8,481.69              | 8,681.22                            | 8,676.00                             | 5.22                                   | 1,663.884                    |                           |         |
| 200.00                                                  | 200.00                             | 262.01                             | 262.00                             | 0.66                      | 7.96                   | 77.69                                | 1,850.54                      | 8,481.69              | 8,681.22                            | 8,672.60                             | 8.61                                   | 1,007.915                    |                           |         |
| 300.00                                                  | 300.00                             | 362.01                             | 362.00                             | 1.01                      | 10.99                  | 77.69                                | 1,850.54                      | 8,481.69              | 8,681.22                            | 8,669.21                             | 12.01                                  | 722.930                      |                           |         |
| 400.00                                                  | 400.00                             | 462.01                             | 462.00                             | 1.37                      | 14.03                  | 77.69                                | 1,850.54                      | 8,481.69              | 8,681.22                            | 8,665.81                             | 15.40                                  | 563.579                      |                           |         |
| 500.00                                                  | 500.00                             | 565.44                             | 565.43                             | 1.73                      | 17.17                  | 77.69                                | 1,851.33                      | 8,481.69              | 8,681.39                            | 8,662.48                             | 18.90                                  | 459.253                      |                           |         |
| 600.00                                                  | 600.00                             | 670.28                             | 670.26                             | 2.09                      | 20.36                  | 77.69                                | 1,851.00                      | 8,481.69              | 8,681.32                            | 8,658.87                             | 22.45                                  | 386.773                      |                           |         |
| 700.00                                                  | 700.00                             | 762.07                             | 762.00                             | 2.45                      | 23.14                  | 77.69                                | 1,850.54                      | 8,481.69              | 8,681.22                            | 8,655.62                             | 25.59                                  | 339.221                      |                           |         |
| 800.00                                                  | 800.00                             | 862.07                             | 862.00                             | 2.81                      | 26.18                  | 77.69                                | 1,850.54                      | 8,481.69              | 8,681.22                            | 8,652.23                             | 28.99                                  | 299.487                      |                           |         |
| 900.00                                                  | 900.00                             | 962.07                             | 962.00                             | 3.17                      | 29.22                  | 77.69                                | 1,850.54                      | 8,481.69              | 8,681.22                            | 8,648.83                             | 32.38                                  | 268.086                      |                           |         |
| 918.00                                                  | 918.00                             | 980.07                             | 980.00                             | 3.23                      | 29.76                  | 77.69                                | 1,850.54                      | 8,481.69              | 8,681.22                            | 8,648.22                             | 32.99                                  | 263.120                      |                           |         |
| 1,000.00                                                | 999.97                             | 1,065.93                           | 1,065.85                           | 3.51                      | 32.37                  | -73.39                               | 1,851.57                      | 8,481.69              | 8,680.93                            | 8,645.05                             | 35.88                                  | 241.937                      |                           |         |
| 1,100.00                                                | 1,099.72                           | 1,172.59                           | 1,172.50                           | 3.84                      | 35.61                  | -73.50                               | 1,851.15                      | 8,481.69              | 8,678.88                            | 8,639.43                             | 39.45                                  | 220.000                      |                           |         |
| 1,200.00                                                | 1,198.98                           | 1,261.10                           | 1,260.98                           | 4.18                      | 38.30                  | -73.66                               | 1,850.54                      | 8,481.69              | 8,675.29                            | 8,632.81                             | 42.48                                  | 204.236                      |                           |         |
| 1,300.00                                                | 1,297.46                           | 1,359.59                           | 1,359.46                           | 4.54                      | 41.29                  | -73.91                               | 1,850.54                      | 8,481.69              | 8,670.39                            | 8,624.57                             | 45.82                                  | 189.219                      |                           |         |
| 1,400.00                                                | 1,394.90                           | 1,457.03                           | 1,456.90                           | 4.92                      | 44.25                  | -74.23                               | 1,850.54                      | 8,481.69              | 8,664.09                            | 8,614.93                             | 49.16                                  | 176.250                      |                           |         |
| 1,500.00                                                | 1,491.03                           | 1,555.71                           | 1,555.58                           | 5.33                      | 47.25                  | -74.63                               | 1,851.32                      | 8,481.69              | 8,656.60                            | 8,604.04                             | 52.56                                  | 164.689                      |                           |         |
| 1,600.00                                                | 1,585.60                           | 1,655.46                           | 1,655.32                           | 5.79                      | 50.27                  | -75.10                               | 1,851.05                      | 8,481.69              | 8,647.61                            | 8,591.57                             | 56.04                                  | 154.307                      |                           |         |
| 1,700.00                                                | 1,678.33                           | 1,753.47                           | 1,753.32                           | 6.30                      | 53.25                  | -75.63                               | 1,850.54                      | 8,481.69              | 8,637.34                            | 8,577.83                             | 59.52                                  | 145.123                      |                           |         |
| 1,797.05                                                | 1,766.34                           | 1,828.49                           | 1,828.34                           | 6.85                      | 55.53                  | -76.16                               | 1,850.54                      | 8,481.69              | 8,626.41                            | 8,564.07                             | 62.34                                  | 138.379                      |                           |         |
| 1,800.00                                                | 1,768.98                           | 1,831.14                           | 1,830.98                           | 6.87                      | 55.61                  | -76.17                               | 1,850.54                      | 8,481.69              | 8,626.06                            | 8,563.62                             | 62.44                                  | 138.155                      |                           |         |
| 1,900.00                                                | 1,858.58                           | 1,920.73                           | 1,920.58                           | 7.49                      | 58.33                  | -76.43                               | 1,850.54                      | 8,481.69              | 8,614.39                            | 8,548.62                             | 65.77                                  | 130.980                      |                           |         |
| 2,000.00                                                | 1,948.17                           | 2,010.55                           | 2,010.39                           | 8.15                      | 61.06                  | -76.69                               | 1,851.08                      | 8,481.69              | 8,603.08                            | 8,533.94                             | 69.14                                  | 124.433                      |                           |         |
| 2,100.00                                                | 2,037.76                           | 2,103.62                           | 2,103.46                           | 8.83                      | 63.88                  | -76.96                               | 1,851.00                      | 8,481.69              | 8,591.82                            | 8,519.19                             | 72.63                                  | 118.294                      |                           |         |
| 2,200.00                                                | 2,127.36                           | 2,196.82                           | 2,196.66                           | 9.53                      | 66.71                  | -77.23                               | 1,850.76                      | 8,481.69              | 8,580.75                            | 8,504.60                             | 76.15                                  | 112.684                      |                           |         |
| 2,300.00                                                | 2,216.95                           | 2,279.14                           | 2,278.95                           | 10.25                     | 69.21                  | -77.47                               | 1,850.54                      | 8,481.69              | 8,569.88                            | 8,490.53                             | 79.35                                  | 107.999                      |                           |         |
| 2,400.00                                                | 2,306.54                           | 2,368.73                           | 2,368.54                           | 10.97                     | 71.94                  | -77.73                               | 1,850.54                      | 8,481.69              | 8,559.29                            | 8,476.50                             | 82.79                                  | 103.388                      |                           |         |
| 2,500.00                                                | 2,396.14                           | 2,465.95                           | 2,465.75                           | 11.71                     | 74.89                  | -78.01                               | 1,850.88                      | 8,481.69              | 8,549.02                            | 8,462.55                             | 86.47                                  | 98.870                       |                           |         |
| 2,600.00                                                | 2,485.73                           | 2,547.95                           | 2,547.73                           | 12.45                     | 77.38                  | -78.25                               | 1,850.54                      | 8,481.69              | 8,538.77                            | 8,449.08                             | 89.69                                  | 95.198                       |                           |         |
| 2,700.00                                                | 2,575.32                           | 2,575.00                           | 2,574.77                           | 13.21                     | 78.20                  | -78.33                               | 1,850.54                      | 8,481.69              | 8,529.07                            | 8,437.81                             | 91.26                                  | 93.458                       |                           |         |
| 2,800.00                                                | 2,664.92                           | 2,575.00                           | 2,574.77                           | 13.96                     | 78.20                  | -78.33                               | 1,850.54                      | 8,481.69              | 8,520.48                            | 8,428.48                             | 92.00                                  | 92.609                       |                           |         |
| 2,900.00                                                | 2,754.51                           | 2,575.00                           | 2,574.77                           | 14.72                     | 78.20                  | -78.33                               | 1,850.54                      | 8,481.69              | 8,513.07                            | 8,420.32                             | 92.74                                  | 91.791                       |                           |         |
| 3,000.00                                                | 2,844.10                           | 2,575.00                           | 2,574.77                           | 15.49                     | 78.20                  | -78.33                               | 1,850.54                      | 8,481.69              | 8,506.82                            | 8,413.34                             | 93.48                                  | 91.003                       |                           |         |
| 3,100.00                                                | 2,933.70                           | 2,575.00                           | 2,574.77                           | 16.26                     | 78.20                  | -78.33                               | 1,850.54                      | 8,481.69              | 8,501.74                            | 8,407.53                             | 94.21                                  | 90.245                       |                           |         |
| 3,114.47                                                | 2,946.66                           | 2,575.00                           | 2,574.77                           | 16.37                     | 78.20                  | -78.33                               | 1,850.54                      | 8,481.69              | 8,501.10                            | 8,406.79                             | 94.31                                  | 90.138                       |                           |         |
| 3,200.00                                                | 3,024.12                           | 2,575.00                           | 2,574.77                           | 17.01                     | 78.20                  | -78.25                               | 1,850.54                      | 8,481.69              | 8,498.23                            | 8,403.32                             | 94.90                                  | 89.546                       |                           |         |
| 3,293.89                                                | 3,110.91                           | 2,575.00                           | 2,574.77                           | 17.65                     | 78.20                  | -78.21                               | 1,850.54                      | 8,481.69              | 8,496.96                            | 8,401.47                             | 95.49                                  | 88.985                       |                           |         |
| 3,300.00                                                | 3,116.62                           | 2,575.00                           | 2,574.77                           | 17.69                     | 78.20                  | -78.21                               | 1,850.54                      | 8,481.69              | 8,496.94                            | 8,401.42                             | 95.53                                  | 88.950 CC, ES                |                           |         |
| 3,400.00                                                | 3,210.99                           | 2,575.00                           | 2,574.77                           | 18.31                     | 78.20                  | -78.24                               | 1,850.54                      | 8,481.69              | 8,497.90                            | 8,401.84                             | 96.07                                  | 88.457                       |                           |         |
| 3,500.00                                                | 3,306.96                           | 2,575.00                           | 2,574.77                           | 18.86                     | 78.20                  | -78.33                               | 1,850.54                      | 8,481.69              | 8,501.11                            | 8,404.58                             | 96.53                                  | 88.065                       |                           |         |
| 3,600.00                                                | 3,404.26                           | 2,575.00                           | 2,574.77                           | 19.35                     | 78.20                  | -78.49                               | 1,850.54                      | 8,481.69              | 8,506.54                            | 8,409.63                             | 96.92                                  | 87.770                       |                           |         |
| 3,700.00                                                | 3,502.64                           | 2,575.00                           | 2,574.77                           | 19.77                     | 78.20                  | -78.72                               | 1,850.54                      | 8,481.69              | 8,514.19                            | 8,416.96                             | 97.23                                  | 87.569                       |                           |         |
| 3,800.00                                                | 3,601.81                           | 2,575.00                           | 2,574.77                           | 20.14                     | 78.20                  | -79.01                               | 1,850.54                      | 8,481.69              | 8,524.03                            | 8,426.56                             | 97.47                                  | 87.457                       |                           |         |
| 3,900.00                                                | 3,701.52                           | 2,575.00                           | 2,574.77                           | 20.45                     | 78.20                  | -79.36                               | 1,850.54                      | 8,481.69              | 8,536.01                            | 8,438.38                             | 97.63                                  | 87.430 SF                    |                           |         |
| 3,993.52                                                | 3,795.00                           | 2,575.00                           | 2,574.77                           | 20.68                     | 78.20                  | 71.30                                | 1,850.54                      | 8,481.69              | 8,549.13                            | 8,451.41                             | 97.72                                  | 87.486                       |                           |         |
| 4,000.00                                                | 3,801.48                           | 2,575.00                           | 2,574.77                           | 20.69                     | 78.20                  | 71.30                                | 1,850.54                      | 8,481.69              | 8,550.10                            | 8,452.38                             | 97.72                                  | 87.493                       |                           |         |
| 4,100.00                                                | 3,901.48                           | 2,575.00                           | 2,574.77                           | 20.91                     | 78.20                  | 71.30                                | 1,850.54                      | 8,481.69              | 8,565.74                            | 8,467.97                             | 97.77                                  | 87.609                       |                           |         |
| 4,200.00                                                | 4,001.48                           | 2,575.00                           | 2,574.77                           | 21.13                     | 78.20                  | 71.30                                | 1,850.54                      | 8,481.69              | 8,582.52                            | 8,484.71                             | 97.81                                  | 87.745                       |                           |         |
| 4,300.00                                                | 4,101.48                           | 2,575.00                           | 2,574.77                           | 21.36                     | 78.20                  | 71.30                                | 1,850.54                      | 8,481.69              | 8,600.43                            | 8,502.59                             | 97.84                                  | 87.900                       |                           |         |
| 4,400.00                                                | 4,201.48                           | 2,575.00                           | 2,574.77                           | 21.59                     | 78.20                  | 71.30                                | 1,850.54                      | 8,481.69              | 8,619.47                            | 8,521.60                             | 97.87                                  | 88.075                       |                           |         |
| 4,500.00                                                | 4,301.48                           | 2,575.00                           | 2,574.77                           | 21.82                     | 78.20                  | 71.30                                | 1,850.54                      | 8,481.69              | 8,639.61                            | 8,541.73                             | 97.88                                  | 88.268                       |                           |         |
| 4,600.00                                                | 4,401.48                           | 2,575.00                           | 2,574.77                           | 22.05                     | 78.20                  | 71.30                                | 1,850.54                      | 8,481.69              | 8,660.87                            | 8,562.99                             | 97.88                                  | 88.481                       |                           |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                         |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          |
|---------------------------------------------------------|----------------------------|----------------------------|----------------------------|------------------------|--------------------|------------------------------|-------------------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|
| <b>Offset Design:</b> Calloway Pad - Titt 100 - OH - OH |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              | <b>Offset Site Error:</b>      | 0.00 ft                  |
| <b>Survey Program:</b> 12-INCLINOMETER                  |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              | <b>Offset Well Error:</b>      | 0.00 ft                  |
| <b>Reference</b>                                        |                            | <b>Offset</b>              |                            | <b>Semi Major Axis</b> |                    | <b>Highside Toolface (°)</b> | <b>Offset Wellbore Centre</b> |                   | <b>Distance</b>             |                              | <b>Rule Assigned:</b>          |                          |
| <b>Measured Depth (ft)</b>                              | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b>  | <b>Offset (ft)</b> |                              | <b>+N/-S (ft)</b>             | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> |
| 4,700.00                                                | 4,501.48                   | 2,575.00                   | 2,574.77                   | 22.29                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 8,683.23                    | 8,585.34                     | 97.88                          | 88.712                   |
| 4,800.00                                                | 4,601.48                   | 2,575.00                   | 2,574.77                   | 22.53                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 8,706.67                    | 8,608.80                     | 97.87                          | 88.962                   |
| 4,900.00                                                | 4,701.48                   | 2,575.00                   | 2,574.77                   | 22.78                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 8,731.20                    | 8,633.35                     | 97.85                          | 89.231                   |
| 5,000.00                                                | 4,801.48                   | 2,575.00                   | 2,574.77                   | 23.03                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 8,756.81                    | 8,658.98                     | 97.82                          | 89.518                   |
| 5,100.00                                                | 4,901.48                   | 2,575.00                   | 2,574.77                   | 23.28                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 8,783.47                    | 8,685.69                     | 97.79                          | 89.824                   |
| 5,200.00                                                | 5,001.48                   | 2,575.00                   | 2,574.77                   | 23.53                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 8,811.19                    | 8,713.45                     | 97.74                          | 90.148                   |
| 5,300.00                                                | 5,101.48                   | 2,575.00                   | 2,574.77                   | 23.79                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 8,839.96                    | 8,742.27                     | 97.69                          | 90.490                   |
| 5,400.00                                                | 5,201.48                   | 2,575.00                   | 2,574.77                   | 24.05                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 8,869.76                    | 8,772.13                     | 97.63                          | 90.851                   |
| 5,500.00                                                | 5,301.48                   | 2,575.00                   | 2,574.77                   | 24.31                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 8,900.58                    | 8,803.02                     | 97.56                          | 91.228                   |
| 5,600.00                                                | 5,401.48                   | 2,575.00                   | 2,574.77                   | 24.57                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 8,932.42                    | 8,834.93                     | 97.49                          | 91.624                   |
| 5,700.00                                                | 5,501.48                   | 2,575.00                   | 2,574.77                   | 24.84                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 8,965.26                    | 8,867.85                     | 97.41                          | 92.037                   |
| 5,800.00                                                | 5,601.48                   | 2,575.00                   | 2,574.77                   | 25.11                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 8,999.09                    | 8,901.77                     | 97.32                          | 92.468                   |
| 5,900.00                                                | 5,701.48                   | 2,575.00                   | 2,574.77                   | 25.38                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 9,033.90                    | 8,936.67                     | 97.23                          | 92.915                   |
| 6,000.00                                                | 5,801.48                   | 2,575.00                   | 2,574.77                   | 25.65                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 9,069.68                    | 8,972.55                     | 97.13                          | 93.379                   |
| 6,100.00                                                | 5,901.48                   | 2,575.00                   | 2,574.77                   | 25.93                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 9,106.41                    | 9,009.39                     | 97.02                          | 93.861                   |
| 6,200.00                                                | 6,001.48                   | 2,575.00                   | 2,574.77                   | 26.20                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 9,144.10                    | 9,047.19                     | 96.91                          | 94.358                   |
| 6,300.00                                                | 6,101.48                   | 2,575.00                   | 2,574.77                   | 26.48                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 9,182.72                    | 9,085.93                     | 96.79                          | 94.872                   |
| 6,400.00                                                | 6,201.48                   | 2,575.00                   | 2,574.77                   | 26.76                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 9,222.26                    | 9,125.59                     | 96.67                          | 95.402                   |
| 6,500.00                                                | 6,301.48                   | 2,575.00                   | 2,574.77                   | 27.05                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 9,262.71                    | 9,166.17                     | 96.54                          | 95.948                   |
| 6,600.00                                                | 6,401.48                   | 2,575.00                   | 2,574.77                   | 27.33                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 9,304.06                    | 9,207.65                     | 96.41                          | 96.510                   |
| 6,700.00                                                | 6,501.48                   | 2,575.00                   | 2,574.77                   | 27.62                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 9,346.30                    | 9,250.03                     | 96.27                          | 97.087                   |
| 6,800.00                                                | 6,601.48                   | 2,575.00                   | 2,574.77                   | 27.90                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 9,389.41                    | 9,293.28                     | 96.12                          | 97.679                   |
| 6,883.52                                                | 6,685.00                   | 2,575.00                   | 2,574.77                   | 28.15                  | 78.20              | 71.30                        | 1,850.54                      | 8,481.69          | 9,426.08                    | 9,330.07                     | 96.00                          | 98.185                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                             |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          |                                   |
|-------------------------------------------------------------|----------------------------|----------------------------|----------------------------|------------------------|--------------------|------------------------------|-------------------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|-----------------------------------|
| <b>Offset Design:</b> Calloway Pad - Turner A 001 - OH - OH |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          | <b>Offset Site Error:</b> 0.00 ft |
| <b>Survey Program:</b> 100-UNKNOWN                          |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          | <b>Offset Well Error:</b> 0.00 ft |
| <b>Reference</b>                                            |                            | <b>Offset</b>              |                            | <b>Semi Major Axis</b> |                    | <b>Highside Toolface (°)</b> | <b>Offset Wellbore Centre</b> |                   | <b>Distance</b>             |                              | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> | <b>Warning</b>                    |
| <b>Measured Depth (ft)</b>                                  | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b>  | <b>Offset (ft)</b> |                              | <b>+N/-S (ft)</b>             | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> |                                |                          |                                   |
| 0.00                                                        | 0.00                       | 0.00                       | 0.00                       | 0.00                   | 0.00               | 50.92                        | 2,654.00                      | 3,267.73          | 4,210.04                    |                              |                                |                          |                                   |
| 100.00                                                      | 100.00                     | 48.00                      | 48.00                      | 0.30                   | 1.92               | 50.92                        | 2,654.00                      | 3,267.73          | 4,209.72                    | 4,207.50                     | 2.22                           | 1,898.291                |                                   |
| 200.00                                                      | 200.00                     | 148.00                     | 148.00                     | 0.66                   | 5.92               | 50.92                        | 2,654.00                      | 3,267.73          | 4,209.72                    | 4,203.14                     | 6.58                           | 640.164                  |                                   |
| 300.00                                                      | 300.00                     | 248.00                     | 248.00                     | 1.01                   | 9.92               | 50.92                        | 2,654.00                      | 3,267.73          | 4,209.72                    | 4,198.78                     | 10.93                          | 384.995                  |                                   |
| 400.00                                                      | 400.00                     | 348.00                     | 348.00                     | 1.37                   | 13.92              | 50.92                        | 2,654.00                      | 3,267.73          | 4,209.72                    | 4,194.43                     | 15.29                          | 275.272                  |                                   |
| 500.00                                                      | 500.00                     | 448.00                     | 448.00                     | 1.73                   | 17.92              | 50.92                        | 2,654.00                      | 3,267.73          | 4,209.72                    | 4,190.07                     | 19.65                          | 214.220                  |                                   |
| 600.00                                                      | 600.00                     | 548.00                     | 548.00                     | 2.09                   | 21.92              | 50.92                        | 2,654.00                      | 3,267.73          | 4,209.72                    | 4,185.71                     | 24.01                          | 175.333                  |                                   |
| 700.00                                                      | 700.00                     | 648.00                     | 648.00                     | 2.45                   | 25.92              | 50.92                        | 2,654.00                      | 3,267.73          | 4,209.72                    | 4,181.35                     | 28.37                          | 148.395                  |                                   |
| 800.00                                                      | 800.00                     | 748.00                     | 748.00                     | 2.81                   | 29.92              | 50.92                        | 2,654.00                      | 3,267.73          | 4,209.72                    | 4,176.99                     | 32.73                          | 128.632                  |                                   |
| 900.00                                                      | 900.00                     | 848.00                     | 848.00                     | 3.17                   | 33.92              | 50.92                        | 2,654.00                      | 3,267.73          | 4,209.72                    | 4,172.63                     | 37.09                          | 113.514                  |                                   |
| 918.00                                                      | 918.00                     | 866.00                     | 866.00                     | 3.23                   | 34.64              | 50.92                        | 2,654.00                      | 3,267.73          | 4,209.72                    | 4,171.85                     | 37.87                          | 111.163 CC               |                                   |
| 1,000.00                                                    | 999.97                     | 947.97                     | 947.97                     | 3.51                   | 37.92              | -100.15                      | 2,654.00                      | 3,267.73          | 4,210.03                    | 4,168.60                     | 41.43                          | 101.621                  |                                   |
| 1,100.00                                                    | 1,099.72                   | 1,047.72                   | 1,047.72                   | 3.84                   | 41.91              | -100.21                      | 2,654.00                      | 3,267.73          | 4,211.25                    | 4,165.50                     | 45.75                          | 92.051                   |                                   |
| 1,200.00                                                    | 1,198.98                   | 1,146.98                   | 1,146.98                   | 4.18                   | 45.88              | -100.30                      | 2,654.00                      | 3,267.73          | 4,213.43                    | 4,163.37                     | 50.06                          | 84.168                   |                                   |
| 1,300.00                                                    | 1,297.46                   | 1,245.46                   | 1,245.46                   | 4.54                   | 49.82              | -100.44                      | 2,654.00                      | 3,267.73          | 4,216.59                    | 4,162.23                     | 54.35                          | 77.575                   |                                   |
| 1,400.00                                                    | 1,394.90                   | 1,342.90                   | 1,342.90                   | 4.92                   | 53.72              | -100.61                      | 2,654.00                      | 3,267.73          | 4,220.79                    | 4,162.15                     | 58.63                          | 71.988 ES                |                                   |
| 1,500.00                                                    | 1,491.03                   | 1,439.03                   | 1,439.03                   | 5.33                   | 57.56              | -100.80                      | 2,654.00                      | 3,267.73          | 4,226.09                    | 4,163.20                     | 62.89                          | 67.199                   |                                   |
| 1,600.00                                                    | 1,585.60                   | 1,533.60                   | 1,533.60                   | 5.79                   | 61.34              | -101.02                      | 2,654.00                      | 3,267.73          | 4,232.58                    | 4,165.46                     | 67.12                          | 63.056                   |                                   |
| 1,700.00                                                    | 1,678.33                   | 1,626.33                   | 1,626.33                   | 6.30                   | 65.05              | -101.25                      | 2,654.00                      | 3,267.73          | 4,240.35                    | 4,169.01                     | 71.34                          | 59.442                   |                                   |
| 1,797.05                                                    | 1,766.34                   | 1,714.34                   | 1,714.34                   | 6.85                   | 68.57              | -101.48                      | 2,654.00                      | 3,267.73          | 4,249.20                    | 4,173.80                     | 75.40                          | 56.355                   |                                   |
| 1,800.00                                                    | 1,768.98                   | 1,716.98                   | 1,716.98                   | 6.87                   | 68.68              | -101.50                      | 2,654.00                      | 3,267.73          | 4,249.49                    | 4,173.97                     | 75.52                          | 56.266                   |                                   |
| 1,900.00                                                    | 1,858.58                   | 1,806.58                   | 1,806.58                   | 7.49                   | 72.26              | -102.03                      | 2,654.00                      | 3,267.73          | 4,259.55                    | 4,179.83                     | 79.72                          | 53.433                   |                                   |
| 2,000.00                                                    | 1,948.17                   | 1,896.17                   | 1,896.17                   | 8.15                   | 75.85              | -102.55                      | 2,654.00                      | 3,267.73          | 4,270.04                    | 4,186.10                     | 83.94                          | 50.871                   |                                   |
| 2,100.00                                                    | 2,037.76                   | 1,985.76                   | 1,985.76                   | 8.83                   | 79.43              | -103.07                      | 2,654.00                      | 3,267.73          | 4,280.97                    | 4,192.79                     | 88.18                          | 48.548                   |                                   |
| 2,200.00                                                    | 2,127.36                   | 2,075.36                   | 2,075.36                   | 9.53                   | 83.01              | -103.59                      | 2,654.00                      | 3,267.73          | 4,292.33                    | 4,199.89                     | 92.44                          | 46.436                   |                                   |
| 2,300.00                                                    | 2,216.95                   | 2,164.95                   | 2,164.95                   | 10.25                  | 86.60              | -104.11                      | 2,654.00                      | 3,267.73          | 4,304.12                    | 4,207.41                     | 96.70                          | 44.508                   |                                   |
| 2,400.00                                                    | 2,306.54                   | 2,254.54                   | 2,254.54                   | 10.97                  | 90.18              | -104.63                      | 2,654.00                      | 3,267.73          | 4,316.33                    | 4,215.35                     | 100.98                         | 42.744                   |                                   |
| 2,500.00                                                    | 2,396.14                   | 2,344.14                   | 2,344.14                   | 11.71                  | 93.77              | -105.14                      | 2,654.00                      | 3,267.73          | 4,328.96                    | 4,223.70                     | 105.26                         | 41.125                   |                                   |
| 2,600.00                                                    | 2,485.73                   | 2,433.73                   | 2,433.73                   | 12.45                  | 97.35              | -105.65                      | 2,654.00                      | 3,267.73          | 4,342.02                    | 4,232.47                     | 109.55                         | 39.635                   |                                   |
| 2,700.00                                                    | 2,575.32                   | 2,523.32                   | 2,523.32                   | 13.21                  | 100.93             | -106.16                      | 2,654.00                      | 3,267.73          | 4,355.48                    | 4,241.64                     | 113.84                         | 38.260                   |                                   |
| 2,800.00                                                    | 2,664.92                   | 2,612.92                   | 2,612.92                   | 13.96                  | 104.52             | -106.67                      | 2,654.00                      | 3,267.73          | 4,369.36                    | 4,251.23                     | 118.13                         | 36.987                   |                                   |
| 2,900.00                                                    | 2,754.51                   | 2,702.51                   | 2,702.51                   | 14.72                  | 108.10             | -107.17                      | 2,654.00                      | 3,267.73          | 4,383.64                    | 4,261.22                     | 122.42                         | 35.807                   |                                   |
| 3,000.00                                                    | 2,844.10                   | 2,792.10                   | 2,792.10                   | 15.49                  | 111.68             | -107.67                      | 2,654.00                      | 3,267.73          | 4,398.33                    | 4,271.61                     | 126.72                         | 34.710                   |                                   |
| 3,100.00                                                    | 2,933.70                   | 2,881.70                   | 2,881.70                   | 16.26                  | 115.27             | -108.17                      | 2,654.00                      | 3,267.73          | 4,413.41                    | 4,282.40                     | 131.01                         | 33.688                   |                                   |
| 3,114.47                                                    | 2,946.66                   | 2,894.66                   | 2,894.66                   | 16.37                  | 115.79             | -108.24                      | 2,654.00                      | 3,267.73          | 4,415.63                    | 4,284.00                     | 131.63                         | 33.546                   |                                   |
| 3,200.00                                                    | 3,024.12                   | 2,972.12                   | 2,972.12                   | 17.01                  | 118.88             | -109.02                      | 2,654.00                      | 3,267.73          | 4,428.28                    | 4,292.97                     | 135.31                         | 32.727                   |                                   |
| 3,300.00                                                    | 3,116.62                   | 3,064.62                   | 3,064.62                   | 17.69                  | 122.58             | -109.83                      | 2,654.00                      | 3,267.73          | 4,441.80                    | 4,302.16                     | 139.64                         | 31.810                   |                                   |
| 3,400.00                                                    | 3,210.99                   | 3,158.99                   | 3,158.99                   | 18.31                  | 126.36             | -110.55                      | 2,654.00                      | 3,267.73          | 4,453.80                    | 4,309.83                     | 143.98                         | 30.934                   |                                   |
| 3,500.00                                                    | 3,306.96                   | 3,254.96                   | 3,254.96                   | 18.86                  | 130.20             | -111.17                      | 2,654.00                      | 3,267.73          | 4,464.17                    | 4,315.84                     | 148.33                         | 30.097                   |                                   |
| 3,600.00                                                    | 3,404.26                   | 3,352.26                   | 3,352.26                   | 19.35                  | 134.09             | -111.68                      | 2,654.00                      | 3,267.73          | 4,472.78                    | 4,320.10                     | 152.67                         | 29.297                   |                                   |
| 3,700.00                                                    | 3,502.64                   | 3,450.64                   | 3,450.64                   | 19.77                  | 138.03             | -112.08                      | 2,654.00                      | 3,267.73          | 4,479.54                    | 4,322.53                     | 157.01                         | 28.531                   |                                   |
| 3,800.00                                                    | 3,601.81                   | 3,549.81                   | 3,549.81                   | 20.14                  | 141.99             | -112.36                      | 2,654.00                      | 3,267.73          | 4,484.38                    | 4,323.06                     | 161.32                         | 27.797                   |                                   |
| 3,900.00                                                    | 3,701.52                   | 3,649.52                   | 3,649.52                   | 20.45                  | 145.98             | -112.53                      | 2,654.00                      | 3,267.73          | 4,487.25                    | 4,321.64                     | 165.61                         | 27.095                   |                                   |
| 3,993.52                                                    | 3,795.00                   | 3,743.00                   | 3,743.00                   | 20.68                  | 149.72             | 38.47                        | 2,654.00                      | 3,267.73          | 4,488.13                    | 4,318.54                     | 169.59                         | 26.465                   |                                   |
| 4,000.00                                                    | 3,801.48                   | 3,749.48                   | 3,749.48                   | 20.69                  | 149.98             | 38.47                        | 2,654.00                      | 3,267.73          | 4,488.13                    | 4,318.27                     | 169.86                         | 26.422                   |                                   |
| 4,100.00                                                    | 3,901.48                   | 3,849.48                   | 3,849.48                   | 20.91                  | 153.98             | 38.47                        | 2,654.00                      | 3,267.73          | 4,488.13                    | 4,314.04                     | 174.09                         | 25.780                   |                                   |
| 4,200.00                                                    | 4,001.48                   | 3,949.48                   | 3,949.48                   | 21.13                  | 157.98             | 38.47                        | 2,654.00                      | 3,267.73          | 4,488.13                    | 4,309.81                     | 178.32                         | 25.169                   |                                   |
| 4,300.00                                                    | 4,101.48                   | 4,049.48                   | 4,049.48                   | 21.36                  | 161.98             | 38.47                        | 2,654.00                      | 3,267.73          | 4,488.13                    | 4,305.58                     | 182.56                         | 24.585                   |                                   |
| 4,400.00                                                    | 4,201.48                   | 4,149.48                   | 4,149.48                   | 21.59                  | 165.98             | 38.47                        | 2,654.00                      | 3,267.73          | 4,488.13                    | 4,301.34                     | 186.79                         | 24.027                   |                                   |
| 4,500.00                                                    | 4,301.48                   | 4,249.48                   | 4,249.48                   | 21.82                  | 169.98             | 38.47                        | 2,654.00                      | 3,267.73          | 4,488.13                    | 4,297.10                     | 191.04                         | 23.494                   |                                   |
| 4,600.00                                                    | 4,401.48                   | 4,349.48                   | 4,349.48                   | 22.05                  | 173.98             | 38.47                        | 2,654.00                      | 3,267.73          | 4,488.13                    | 4,292.85                     | 195.28                         | 22.983                   |                                   |
| 4,700.00                                                    | 4,501.48                   | 4,449.48                   | 4,449.48                   | 22.29                  | 177.98             | 38.47                        | 2,654.00                      | 3,267.73          | 4,488.13                    | 4,288.60                     | 199.53                         | 22.494                   |                                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                             |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                          |                           |         |
|-------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|--------------------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - Turner A 001 - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                          | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 100-UNKNOWN                          |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                          | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                            |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Separation Factor</b> | <b>Warning</b>            |         |
| <b>Measured Depth<br/>(ft)</b>                              | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> |                          |                           |         |
| 4,800.00                                                    | 4,601.48                       | 4,549.48                       | 4,549.48                       | 22.53                     | 181.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,284.35                         | 203.78                   | 22.024                    |         |
| 4,900.00                                                    | 4,701.48                       | 4,649.48                       | 4,649.48                       | 22.78                     | 185.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,280.10                         | 208.03                   | 21.574                    |         |
| 5,000.00                                                    | 4,801.48                       | 4,749.48                       | 4,749.48                       | 23.03                     | 189.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,275.84                         | 212.29                   | 21.141                    |         |
| 5,100.00                                                    | 4,901.48                       | 4,849.48                       | 4,849.48                       | 23.28                     | 193.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,271.58                         | 216.55                   | 20.726                    |         |
| 5,200.00                                                    | 5,001.48                       | 4,949.48                       | 4,949.48                       | 23.53                     | 197.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,267.32                         | 220.81                   | 20.325                    |         |
| 5,300.00                                                    | 5,101.48                       | 5,049.48                       | 5,049.48                       | 23.79                     | 201.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,263.06                         | 225.08                   | 19.940                    |         |
| 5,400.00                                                    | 5,201.48                       | 5,149.48                       | 5,149.48                       | 24.05                     | 205.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,258.79                         | 229.35                   | 19.569                    |         |
| 5,500.00                                                    | 5,301.48                       | 5,249.48                       | 5,249.48                       | 24.31                     | 209.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,254.52                         | 233.62                   | 19.212                    |         |
| 5,600.00                                                    | 5,401.48                       | 5,349.48                       | 5,349.48                       | 24.57                     | 213.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,250.25                         | 237.89                   | 18.867                    |         |
| 5,700.00                                                    | 5,501.48                       | 5,449.48                       | 5,449.48                       | 24.84                     | 217.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,245.97                         | 242.16                   | 18.534                    |         |
| 5,800.00                                                    | 5,601.48                       | 5,549.48                       | 5,549.48                       | 25.11                     | 221.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,241.69                         | 246.44                   | 18.212                    |         |
| 5,900.00                                                    | 5,701.48                       | 5,649.48                       | 5,649.48                       | 25.38                     | 225.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,237.42                         | 250.72                   | 17.901                    |         |
| 6,000.00                                                    | 5,801.48                       | 5,749.48                       | 5,749.48                       | 25.65                     | 229.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,233.14                         | 255.00                   | 17.601                    |         |
| 6,100.00                                                    | 5,901.48                       | 5,849.48                       | 5,849.48                       | 25.93                     | 233.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,228.85                         | 259.28                   | 17.310                    |         |
| 6,200.00                                                    | 6,001.48                       | 5,949.48                       | 5,949.48                       | 26.20                     | 237.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,224.57                         | 263.57                   | 17.029                    |         |
| 6,300.00                                                    | 6,101.48                       | 6,049.48                       | 6,049.48                       | 26.48                     | 241.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,220.28                         | 267.85                   | 16.756                    |         |
| 6,400.00                                                    | 6,201.48                       | 6,149.48                       | 6,149.48                       | 26.76                     | 245.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,215.99                         | 272.14                   | 16.492                    |         |
| 6,500.00                                                    | 6,301.48                       | 6,249.48                       | 6,249.48                       | 27.05                     | 249.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,211.70                         | 276.43                   | 16.236                    |         |
| 6,600.00                                                    | 6,401.48                       | 6,349.48                       | 6,349.48                       | 27.33                     | 253.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,207.41                         | 280.72                   | 15.988                    |         |
| 6,700.00                                                    | 6,501.48                       | 6,449.48                       | 6,449.48                       | 27.62                     | 257.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,203.12                         | 285.02                   | 15.747                    |         |
| 6,800.00                                                    | 6,601.48                       | 6,549.48                       | 6,549.48                       | 27.90                     | 261.98                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,198.82                         | 289.31                   | 15.513                    |         |
| 6,883.52                                                    | 6,685.00                       | 6,633.00                       | 6,633.00                       | 28.15                     | 265.32                 | 38.47                            | 2,654.00                      | 3,267.73              | 4,488.13                        | 4,195.24                         | 292.90                   | 15.323 SF                 |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

| Offset Design: Calloway Pad - Turner A 001A - OH - OH |                     |                          |                     |                 |             |                       |                        |            |                         |                       |                         |                   | Offset Site Error: | 0.00 ft |
|-------------------------------------------------------|---------------------|--------------------------|---------------------|-----------------|-------------|-----------------------|------------------------|------------|-------------------------|-----------------------|-------------------------|-------------------|--------------------|---------|
| Survey Program: Reference                             |                     | 1093-INCLINOMETER Offset |                     | Semi Major Axis |             | Highside Toolface (°) | Offset Wellbore Centre |            | Rule Assigned: Distance |                       |                         |                   | Offset Well Error: | 0.00 ft |
| Measured Depth (ft)                                   | Vertical Depth (ft) | Measured Depth (ft)      | Vertical Depth (ft) | Reference (ft)  | Offset (ft) |                       | +N/-S (ft)             | +E/-W (ft) | Between Centres (ft)    | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | Warning            |         |
| 0.00                                                  | 0.00                | 7.00                     | 7.00                | 0.00            | 0.21        | 31.72                 | 4,983.91               | 3,080.22   | 5,858.94                |                       |                         |                   |                    |         |
| 100.00                                                | 100.00              | 107.00                   | 107.00              | 0.30            | 3.25        | 31.72                 | 4,983.91               | 3,080.22   | 5,858.94                | 5,855.39              | 3.55                    | 1,651.724         |                    |         |
| 200.00                                                | 200.00              | 207.00                   | 207.00              | 0.66            | 6.29        | 31.72                 | 4,983.91               | 3,080.22   | 5,858.94                | 5,852.00              | 6.94                    | 843.924           |                    |         |
| 300.00                                                | 300.00              | 307.00                   | 307.00              | 1.01            | 9.32        | 31.72                 | 4,983.91               | 3,080.22   | 5,858.94                | 5,848.60              | 10.34                   | 566.748           |                    |         |
| 400.00                                                | 400.00              | 407.00                   | 407.00              | 1.37            | 12.36       | 31.72                 | 4,983.91               | 3,080.22   | 5,858.94                | 5,845.21              | 13.73                   | 426.628           |                    |         |
| 500.00                                                | 500.00              | 507.00                   | 507.00              | 1.73            | 15.40       | 31.72                 | 4,983.91               | 3,080.22   | 5,858.94                | 5,841.81              | 17.13                   | 342.058           |                    |         |
| 600.00                                                | 600.00              | 607.00                   | 607.00              | 2.09            | 18.43       | 31.72                 | 4,983.91               | 3,080.22   | 5,858.94                | 5,838.42              | 20.52                   | 285.470           |                    |         |
| 700.00                                                | 700.00              | 707.00                   | 707.00              | 2.45            | 21.47       | 31.72                 | 4,983.91               | 3,080.22   | 5,858.94                | 5,835.02              | 23.92                   | 244.948           |                    |         |
| 800.00                                                | 800.00              | 807.00                   | 807.00              | 2.81            | 24.51       | 31.72                 | 4,983.91               | 3,080.22   | 5,858.94                | 5,831.62              | 27.31                   | 214.500           |                    |         |
| 900.00                                                | 900.00              | 907.00                   | 907.00              | 3.17            | 27.54       | 31.72                 | 4,983.91               | 3,080.22   | 5,858.94                | 5,828.23              | 30.71                   | 190.784           |                    |         |
| 918.00                                                | 918.00              | 925.00                   | 925.00              | 3.23            | 28.09       | 31.72                 | 4,983.91               | 3,080.22   | 5,858.94                | 5,827.62              | 31.32                   | 187.061           | CC                 |         |
| 1,000.00                                              | 999.97              | 1,006.97                 | 1,006.97            | 3.51            | 30.58       | -119.33               | 4,983.91               | 3,080.22   | 5,859.80                | 5,825.71              | 34.09                   | 171.888           | ES                 |         |
| 1,100.00                                              | 1,099.72            | 1,106.74                 | 1,106.72            | 3.84            | 33.61       | -119.30               | 4,983.91               | 3,080.22   | 5,863.19                | 5,825.74              | 37.45                   | 156.554           |                    |         |
| 1,200.00                                              | 1,198.98            | 1,205.99                 | 1,205.98            | 4.18            | 36.62       | -119.24               | 4,983.91               | 3,080.22   | 5,869.15                | 5,828.34              | 40.81                   | 143.828           |                    |         |
| 1,300.00                                              | 1,297.46            | 1,304.47                 | 1,304.46            | 4.54            | 39.62       | -119.16               | 4,983.91               | 3,080.22   | 5,877.69                | 5,833.53              | 44.15                   | 133.125           |                    |         |
| 1,400.00                                              | 1,394.90            | 1,404.43                 | 1,404.41            | 4.92            | 42.65       | -119.07               | 4,984.52               | 3,080.22   | 5,889.33                | 5,841.77              | 47.56                   | 123.829           |                    |         |
| 1,500.00                                              | 1,491.03            | 1,508.83                 | 1,508.81            | 5.33            | 45.82       | -118.95               | 4,984.38               | 3,080.22   | 5,902.95                | 5,851.83              | 51.13                   | 115.452           |                    |         |
| 1,600.00                                              | 1,585.60            | 1,611.63                 | 1,611.61            | 5.79            | 48.94       | -118.81               | 4,984.08               | 3,080.22   | 5,919.07                | 5,864.38              | 54.68                   | 108.245           |                    |         |
| 1,700.00                                              | 1,678.33            | 1,685.38                 | 1,685.33            | 6.30            | 51.18       | -118.54               | 4,983.91               | 3,080.22   | 5,937.88                | 5,880.48              | 57.39                   | 103.460           |                    |         |
| 1,797.05                                              | 1,766.34            | 1,773.38                 | 1,773.34            | 6.85            | 53.86       | -118.30               | 4,983.91               | 3,080.22   | 5,958.83                | 5,898.26              | 60.57                   | 98.384            |                    |         |
| 1,800.00                                              | 1,768.98            | 1,776.03                 | 1,775.98            | 6.87            | 53.94       | -118.31               | 4,983.91               | 3,080.22   | 5,959.51                | 5,898.84              | 60.67                   | 98.236            |                    |         |
| 1,900.00                                              | 1,858.58            | 1,865.62                 | 1,865.58            | 7.49            | 56.66       | -118.65               | 4,983.91               | 3,080.22   | 5,982.51                | 5,918.57              | 63.94                   | 93.568            |                    |         |
| 2,000.00                                              | 1,948.17            | 1,955.22                 | 1,955.17            | 8.15            | 59.38       | -118.99               | 4,983.91               | 3,080.22   | 6,005.76                | 5,938.52              | 67.23                   | 89.326            |                    |         |
| 2,100.00                                              | 2,037.76            | 2,049.63                 | 2,049.57            | 8.83            | 62.24       | -119.36               | 4,985.03               | 3,080.22   | 6,030.22                | 5,959.53              | 70.69                   | 85.300            |                    |         |
| 2,200.00                                              | 2,127.36            | 2,149.19                 | 2,149.13            | 9.53            | 65.27       | -119.73               | 4,984.85               | 3,080.22   | 6,053.80                | 5,979.48              | 74.32                   | 81.451            |                    |         |
| 2,300.00                                              | 2,216.95            | 2,248.92                 | 2,248.86            | 10.25           | 68.30       | -120.10               | 4,984.48               | 3,080.22   | 6,077.46                | 5,999.49              | 77.97                   | 77.946            |                    |         |
| 2,400.00                                              | 2,306.54            | 2,348.81                 | 2,348.74            | 10.97           | 71.33       | -120.47               | 4,983.92               | 3,080.22   | 6,101.20                | 6,019.57              | 81.63                   | 74.744            |                    |         |
| 2,500.00                                              | 2,396.14            | 2,403.24                 | 2,403.14            | 11.71           | 72.98       | -120.67               | 4,983.91               | 3,080.22   | 6,125.50                | 6,041.59              | 83.91                   | 73.003            |                    |         |
| 2,600.00                                              | 2,485.73            | 2,492.84                 | 2,492.73            | 12.45           | 75.70       | -121.00               | 4,983.91               | 3,080.22   | 6,150.13                | 6,062.87              | 87.26                   | 70.479            |                    |         |
| 2,700.00                                              | 2,575.32            | 2,582.43                 | 2,582.32            | 13.21           | 78.42       | -121.33               | 4,983.91               | 3,080.22   | 6,174.98                | 6,084.37              | 90.62                   | 68.142            |                    |         |
| 2,800.00                                              | 2,664.92            | 2,684.28                 | 2,684.16            | 13.96           | 81.52       | -121.70               | 4,984.64               | 3,080.22   | 6,200.72                | 6,106.37              | 94.35                   | 65.720            |                    |         |
| 2,900.00                                              | 2,754.51            | 2,789.34                 | 2,789.22            | 14.72           | 84.71       | -122.08               | 4,984.26               | 3,080.22   | 6,225.72                | 6,127.53              | 98.18                   | 63.410            |                    |         |
| 3,000.00                                              | 2,844.10            | 2,851.25                 | 2,851.10            | 15.49           | 86.59       | -122.30               | 4,983.91               | 3,080.22   | 6,250.84                | 6,150.14              | 100.70                  | 62.075            |                    |         |
| 3,100.00                                              | 2,933.70            | 2,940.85                 | 2,940.70            | 16.26           | 89.31       | -122.61               | 4,983.91               | 3,080.22   | 6,276.55                | 6,172.50              | 104.06                  | 60.318            |                    |         |
| 3,114.47                                              | 2,946.66            | 2,953.81                 | 2,953.66            | 16.37           | 89.70       | -122.66               | 4,983.91               | 3,080.22   | 6,280.29                | 6,175.75              | 104.54                  | 60.073            |                    |         |
| 3,200.00                                              | 3,024.12            | 3,031.27                 | 3,031.12            | 17.01           | 92.06       | -123.47               | 4,983.91               | 3,080.22   | 6,301.46                | 6,194.04              | 107.43                  | 58.659            |                    |         |
| 3,300.00                                              | 3,116.62            | 3,127.59                 | 3,127.43            | 17.69           | 94.98       | -124.32               | 4,984.73               | 3,080.22   | 6,324.50                | 6,213.58              | 110.92                  | 57.017            |                    |         |
| 3,400.00                                              | 3,210.99            | 3,238.61                 | 3,238.45            | 18.31           | 98.35       | -125.09               | 4,984.50               | 3,080.22   | 6,343.87                | 6,229.05              | 114.82                  | 55.249            |                    |         |
| 3,500.00                                              | 3,306.96            | 3,351.68                 | 3,351.52            | 18.86           | 101.79      | -125.72               | 4,983.93               | 3,080.22   | 6,360.12                | 6,241.38              | 118.74                  | 53.564            |                    |         |
| 3,600.00                                              | 3,404.26            | 3,411.47                 | 3,411.26            | 19.35           | 103.60      | -126.15               | 4,983.91               | 3,080.22   | 6,373.74                | 6,252.76              | 120.98                  | 52.684            |                    |         |
| 3,700.00                                              | 3,502.64            | 3,509.84                 | 3,509.64            | 19.77           | 106.59      | -126.54               | 4,983.91               | 3,080.22   | 6,384.45                | 6,260.10              | 124.35                  | 51.341            |                    |         |
| 3,800.00                                              | 3,601.81            | 3,610.85                 | 3,610.63            | 20.14           | 109.66      | -126.82               | 4,985.00               | 3,080.22   | 6,393.07                | 6,265.31              | 127.77                  | 50.037            |                    |         |
| 3,900.00                                              | 3,701.52            | 3,736.39                 | 3,736.16            | 20.45           | 113.47      | -126.99               | 4,984.68               | 3,080.22   | 6,397.36                | 6,265.47              | 131.89                  | 48.505            |                    |         |
| 3,993.52                                              | 3,795.00            | 3,854.12                 | 3,853.89            | 20.68           | 117.04      | 24.02                 | 4,983.88               | 3,080.22   | 6,398.16                | 6,262.45              | 135.71                  | 47.144            |                    |         |
| 4,000.00                                              | 3,801.48            | 3,862.28                 | 3,862.05            | 20.69           | 117.29      | 24.02                 | 4,983.80               | 3,080.22   | 6,398.11                | 6,262.13              | 135.98                  | 47.053            |                    |         |
| 4,041.23                                              | 3,842.71            | 3,914.21                 | 3,913.96            | 20.78           | 118.87      | 24.02                 | 4,983.28               | 3,080.22   | 6,397.73                | 6,260.07              | 137.65                  | 46.477            |                    |         |
| 4,100.00                                              | 3,901.48            | 3,908.77                 | 3,908.48            | 20.91           | 118.70      | 24.02                 | 4,983.91               | 3,080.22   | 6,397.98                | 6,260.36              | 137.62                  | 46.490            |                    |         |
| 4,200.00                                              | 4,001.48            | 4,008.77                 | 4,008.48            | 21.13           | 121.74      | 24.02                 | 4,983.91               | 3,080.22   | 6,397.98                | 6,257.08              | 140.90                  | 45.407            |                    |         |
| 4,300.00                                              | 4,101.48            | 4,123.60                 | 4,123.31            | 21.36           | 125.23      | 24.02                 | 4,984.76               | 3,080.22   | 6,398.77                | 6,254.13              | 144.64                  | 44.239            |                    |         |
| 4,400.00                                              | 4,201.48            | 4,255.32                 | 4,255.02            | 21.59           | 129.23      | 24.02                 | 4,984.07               | 3,080.22   | 6,398.29                | 6,249.40              | 148.90                  | 42.971            |                    |         |
| 4,500.00                                              | 4,301.48            | 4,308.83                 | 4,308.48            | 21.82           | 130.85      | 24.02                 | 4,983.91               | 3,080.22   | 6,397.98                | 6,247.21              | 150.77                  | 42.436            |                    |         |
| 4,600.00                                              | 4,401.48            | 4,408.83                 | 4,408.48            | 22.05           | 133.89      | 24.02                 | 4,983.91               | 3,080.22   | 6,397.98                | 6,243.92              | 154.06                  | 41.528            |                    |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                              |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          |
|--------------------------------------------------------------|----------------------------|----------------------------|----------------------------|------------------------|--------------------|------------------------------|-------------------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|
| <b>Offset Design:</b> Calloway Pad - Turner A 001A - OH - OH |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              | <b>Offset Site Error:</b>      | 0.00 ft                  |
| <b>Survey Program:</b> 1093-INCLINOMETER                     |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              | <b>Offset Well Error:</b>      | 0.00 ft                  |
| <b>Reference</b>                                             |                            | <b>Offset</b>              |                            | <b>Semi Major Axis</b> |                    | <b>Highside Toolface (°)</b> | <b>Offset Wellbore Centre</b> |                   | <b>Distance</b>             |                              | <b>Rule Assigned:</b>          |                          |
| <b>Measured Depth (ft)</b>                                   | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b>  | <b>Offset (ft)</b> |                              | <b>+N/-S (ft)</b>             | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> |
| 4,700.00                                                     | 4,501.48                   | 4,508.83                   | 4,508.48                   | 22.29                  | 136.93             | 24.02                        | 4,983.91                      | 3,080.22          | 6,397.98                    | 6,240.62                     | 157.36                         | 40.658                   |
| 4,800.00                                                     | 4,601.48                   | 4,630.61                   | 4,630.24                   | 22.53                  | 140.62             | 24.02                        | 4,984.81                      | 3,080.22          | 6,398.83                    | 6,237.51                     | 161.33                         | 39.664                   |
| 4,900.00                                                     | 4,701.48                   | 4,756.27                   | 4,755.90                   | 22.78                  | 144.44             | 24.02                        | 4,984.06                      | 3,080.22          | 6,398.29                    | 6,232.88                     | 165.41                         | 38.681                   |
| 5,000.00                                                     | 4,801.48                   | 4,808.91                   | 4,808.48                   | 23.03                  | 146.04             | 24.02                        | 4,983.91                      | 3,080.22          | 6,397.98                    | 6,230.71                     | 167.27                         | 38.249                   |
| 5,100.00                                                     | 4,901.48                   | 4,921.80                   | 4,921.37                   | 23.28                  | 149.47             | 24.02                        | 4,984.40                      | 3,080.22          | 6,398.44                    | 6,227.46                     | 170.98                         | 37.423                   |
| 5,200.00                                                     | 5,001.48                   | 5,008.92                   | 5,008.48                   | 23.53                  | 152.11             | 24.02                        | 4,983.91                      | 3,080.22          | 6,397.98                    | 6,224.09                     | 173.89                         | 36.793                   |
| 5,300.00                                                     | 5,101.48                   | 5,020.00                   | 5,019.54                   | 23.79                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,398.60                    | 6,224.14                     | 174.47                         | 36.675                   |
| 5,400.00                                                     | 5,201.48                   | 5,020.00                   | 5,019.54                   | 24.05                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,400.77                    | 6,226.11                     | 174.66                         | 36.647                   |
| 5,500.00                                                     | 5,301.48                   | 5,020.00                   | 5,019.54                   | 24.31                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,404.50                    | 6,229.69                     | 174.81                         | 36.636 SF                |
| 5,600.00                                                     | 5,401.48                   | 5,020.00                   | 5,019.54                   | 24.57                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,409.79                    | 6,234.87                     | 174.93                         | 36.643                   |
| 5,700.00                                                     | 5,501.48                   | 5,020.00                   | 5,019.54                   | 24.84                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,416.64                    | 6,241.64                     | 175.00                         | 36.666                   |
| 5,800.00                                                     | 5,601.48                   | 5,020.00                   | 5,019.54                   | 25.11                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,425.03                    | 6,249.99                     | 175.04                         | 36.706                   |
| 5,900.00                                                     | 5,701.48                   | 5,020.00                   | 5,019.54                   | 25.38                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,434.97                    | 6,259.93                     | 175.04                         | 36.764                   |
| 6,000.00                                                     | 5,801.48                   | 5,020.00                   | 5,019.54                   | 25.65                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,446.44                    | 6,271.45                     | 174.99                         | 36.838                   |
| 6,100.00                                                     | 5,901.48                   | 5,020.00                   | 5,019.54                   | 25.93                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,459.44                    | 6,284.53                     | 174.92                         | 36.929                   |
| 6,200.00                                                     | 6,001.48                   | 5,020.00                   | 5,019.54                   | 26.20                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,473.96                    | 6,299.16                     | 174.80                         | 37.037                   |
| 6,300.00                                                     | 6,101.48                   | 5,020.00                   | 5,019.54                   | 26.48                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,489.99                    | 6,315.35                     | 174.65                         | 37.161                   |
| 6,400.00                                                     | 6,201.48                   | 5,020.00                   | 5,019.54                   | 26.76                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,507.52                    | 6,333.06                     | 174.46                         | 37.302                   |
| 6,500.00                                                     | 6,301.48                   | 5,020.00                   | 5,019.54                   | 27.05                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,526.53                    | 6,352.30                     | 174.23                         | 37.459                   |
| 6,600.00                                                     | 6,401.48                   | 5,020.00                   | 5,019.54                   | 27.33                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,547.01                    | 6,373.04                     | 173.97                         | 37.633                   |
| 6,700.00                                                     | 6,501.48                   | 5,020.00                   | 5,019.54                   | 27.62                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,568.95                    | 6,395.27                     | 173.68                         | 37.822                   |
| 6,800.00                                                     | 6,601.48                   | 5,020.00                   | 5,019.54                   | 27.90                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,592.34                    | 6,418.98                     | 173.35                         | 38.028                   |
| 6,883.52                                                     | 6,685.00                   | 5,020.00                   | 5,019.54                   | 28.15                  | 152.45             | 24.02                        | 4,983.91                      | 3,080.22          | 6,612.97                    | 6,439.91                     | 173.06                         | 38.213                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



## Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                             |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |                |                           |         |
|-------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|------------------------------------|--------------------------|----------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - Turner A 100 - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |                | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 65-INCLINOMETER                      |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |                | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                            |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Minimum Separation<br/>(ft)</b> | <b>Separation Factor</b> | <b>Warning</b> |                           |         |
| <b>Measured Depth<br/>(ft)</b>                              | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> |                                    |                          |                |                           |         |
| 0.00                                                        | 0.00                           | 30.00                          | 30.00                          | 0.00                      | 0.91                   | 31.14                            | 5,282.45                      | 3,191.36              | 6,171.63                        |                                  |                                    |                          |                |                           |         |
| 100.00                                                      | 100.00                         | 130.00                         | 130.00                         | 0.30                      | 3.95                   | 31.14                            | 5,282.45                      | 3,191.36              | 6,171.63                        | 6,167.39                         | 4.25                               | 1,453.659                |                |                           |         |
| 200.00                                                      | 200.00                         | 230.02                         | 230.00                         | 0.66                      | 6.99                   | 31.14                            | 5,282.45                      | 3,191.36              | 6,171.63                        | 6,163.99                         | 7.64                               | 807.673                  |                |                           |         |
| 300.00                                                      | 300.00                         | 330.02                         | 330.00                         | 1.01                      | 10.02                  | 31.14                            | 5,282.45                      | 3,191.36              | 6,171.63                        | 6,160.60                         | 11.04                              | 559.199                  |                |                           |         |
| 400.00                                                      | 400.00                         | 464.42                         | 464.40                         | 1.37                      | 14.10                  | 31.14                            | 5,282.72                      | 3,191.36              | 6,171.96                        | 6,156.48                         | 15.48                              | 398.793                  |                |                           |         |
| 500.00                                                      | 500.00                         | 530.04                         | 530.00                         | 1.73                      | 16.10                  | 31.14                            | 5,282.45                      | 3,191.36              | 6,171.63                        | 6,153.80                         | 17.83                              | 346.177                  |                |                           |         |
| 600.00                                                      | 600.00                         | 630.04                         | 630.00                         | 2.09                      | 19.13                  | 31.14                            | 5,282.45                      | 3,191.36              | 6,171.63                        | 6,150.41                         | 21.22                              | 290.795                  |                |                           |         |
| 700.00                                                      | 700.00                         | 730.04                         | 730.00                         | 2.45                      | 22.17                  | 31.14                            | 5,282.45                      | 3,191.36              | 6,171.63                        | 6,147.01                         | 24.62                              | 250.690                  | CC             |                           |         |
| 800.00                                                      | 800.00                         | 838.17                         | 838.13                         | 2.81                      | 25.45                  | 31.14                            | 5,282.93                      | 3,191.36              | 6,172.05                        | 6,143.79                         | 28.26                              | 218.395                  |                |                           |         |
| 900.00                                                      | 900.00                         | 948.34                         | 948.29                         | 3.17                      | 28.80                  | 31.14                            | 5,282.65                      | 3,191.36              | 6,171.83                        | 6,139.87                         | 31.96                              | 193.082                  |                |                           |         |
| 918.00                                                      | 918.00                         | 968.17                         | 968.12                         | 3.23                      | 29.40                  | 31.14                            | 5,282.58                      | 3,191.36              | 6,171.78                        | 6,139.14                         | 32.63                              | 189.135                  |                |                           |         |
| 931.28                                                      | 931.28                         | 982.80                         | 982.76                         | 3.28                      | 29.85                  | -119.92                          | 5,282.52                      | 3,191.36              | 6,171.75                        | 6,138.63                         | 33.12                              | 186.338                  |                |                           |         |
| 1,000.00                                                    | 999.97                         | 1,030.03                       | 1,029.97                       | 3.51                      | 31.28                  | -119.91                          | 5,282.45                      | 3,191.36              | 6,172.51                        | 6,137.72                         | 34.79                              | 177.417                  | ES             |                           |         |
| 1,100.00                                                    | 1,099.72                       | 1,129.78                       | 1,129.72                       | 3.84                      | 34.31                  | -119.87                          | 5,282.45                      | 3,191.36              | 6,175.96                        | 6,137.81                         | 38.15                              | 161.880                  |                |                           |         |
| 1,200.00                                                    | 1,198.98                       | 1,229.04                       | 1,228.98                       | 4.18                      | 37.32                  | -119.81                          | 5,282.45                      | 3,191.36              | 6,182.02                        | 6,140.52                         | 41.51                              | 148.942                  |                |                           |         |
| 1,300.00                                                    | 1,297.46                       | 1,335.45                       | 1,335.39                       | 4.54                      | 40.56                  | -119.74                          | 5,282.93                      | 3,191.36              | 6,191.13                        | 6,146.04                         | 45.09                              | 137.300                  |                |                           |         |
| 1,400.00                                                    | 1,394.90                       | 1,442.94                       | 1,442.87                       | 4.92                      | 43.82                  | -119.64                          | 5,282.67                      | 3,191.36              | 6,202.24                        | 6,153.51                         | 48.73                              | 127.281                  |                |                           |         |
| 1,500.00                                                    | 1,491.03                       | 1,521.11                       | 1,521.03                       | 5.33                      | 46.19                  | -119.45                          | 5,282.45                      | 3,191.36              | 6,215.98                        | 6,164.48                         | 51.50                              | 120.695                  |                |                           |         |
| 1,600.00                                                    | 1,585.60                       | 1,615.68                       | 1,615.60                       | 5.79                      | 49.07                  | -119.26                          | 5,282.45                      | 3,191.36              | 6,232.59                        | 6,177.79                         | 54.80                              | 113.726                  |                |                           |         |
| 1,700.00                                                    | 1,678.33                       | 1,708.41                       | 1,708.33                       | 6.30                      | 51.88                  | -119.02                          | 5,282.45                      | 3,191.36              | 6,251.86                        | 6,193.77                         | 58.09                              | 107.625                  |                |                           |         |
| 1,797.05                                                    | 1,766.34                       | 1,801.30                       | 1,801.22                       | 6.85                      | 54.70                  | -118.78                          | 5,282.97                      | 3,191.36              | 6,273.57                        | 6,212.16                         | 61.41                              | 102.158                  |                |                           |         |
| 1,800.00                                                    | 1,768.98                       | 1,804.23                       | 1,804.15                       | 6.87                      | 54.79                  | -118.79                          | 5,282.97                      | 3,191.36              | 6,274.26                        | 6,212.74                         | 61.52                              | 101.991                  |                |                           |         |
| 1,900.00                                                    | 1,858.58                       | 1,903.38                       | 1,903.29                       | 7.49                      | 57.80                  | -119.15                          | 5,282.79                      | 3,191.36              | 6,297.44                        | 6,232.36                         | 65.08                              | 96.766                   |                |                           |         |
| 2,000.00                                                    | 1,948.17                       | 2,002.67                       | 2,002.59                       | 8.15                      | 60.82                  | -119.51                          | 5,282.44                      | 3,191.36              | 6,320.71                        | 6,252.04                         | 68.67                              | 92.047                   |                |                           |         |
| 2,100.00                                                    | 2,037.76                       | 2,067.86                       | 2,067.76                       | 8.83                      | 62.80                  | -119.74                          | 5,282.45                      | 3,191.36              | 6,344.44                        | 6,273.20                         | 71.24                              | 89.060                   |                |                           |         |
| 2,200.00                                                    | 2,127.36                       | 2,157.45                       | 2,157.36                       | 9.53                      | 65.52                  | -120.06                          | 5,282.45                      | 3,191.36              | 6,368.43                        | 6,293.87                         | 74.56                              | 85.410                   |                |                           |         |
| 2,300.00                                                    | 2,216.95                       | 2,247.05                       | 2,246.95                       | 10.25                     | 68.24                  | -120.38                          | 5,282.45                      | 3,191.36              | 6,392.64                        | 6,314.75                         | 77.90                              | 82.063                   |                |                           |         |
| 2,400.00                                                    | 2,306.54                       | 2,345.45                       | 2,345.35                       | 10.97                     | 71.23                  | -120.73                          | 5,282.94                      | 3,191.36              | 6,417.51                        | 6,336.00                         | 81.51                              | 78.732                   |                |                           |         |
| 2,500.00                                                    | 2,396.14                       | 2,444.86                       | 2,444.76                       | 11.71                     | 74.25                  | -121.07                          | 5,282.70                      | 3,191.36              | 6,441.96                        | 6,356.80                         | 85.16                              | 75.647                   |                |                           |         |
| 2,600.00                                                    | 2,485.73                       | 2,515.84                       | 2,515.73                       | 12.45                     | 76.40                  | -121.32                          | 5,282.45                      | 3,191.36              | 6,466.56                        | 6,378.62                         | 87.94                              | 73.530                   |                |                           |         |
| 2,700.00                                                    | 2,575.32                       | 2,546.00                       | 2,545.89                       | 13.21                     | 77.32                  | -121.43                          | 5,282.45                      | 3,191.36              | 6,491.90                        | 6,402.41                         | 89.48                              | 72.549                   |                |                           |         |
| 2,800.00                                                    | 2,664.92                       | 2,546.00                       | 2,545.89                       | 13.96                     | 77.32                  | -121.43                          | 5,282.45                      | 3,191.36              | 6,518.59                        | 6,428.51                         | 90.09                              | 72.359                   |                |                           |         |
| 2,900.00                                                    | 2,754.51                       | 2,546.00                       | 2,545.89                       | 14.72                     | 77.32                  | -121.43                          | 5,282.45                      | 3,191.36              | 6,546.71                        | 6,456.04                         | 90.67                              | 72.202                   |                |                           |         |
| 3,000.00                                                    | 2,844.10                       | 2,546.00                       | 2,545.89                       | 15.49                     | 77.32                  | -121.43                          | 5,282.45                      | 3,191.36              | 6,576.23                        | 6,484.99                         | 91.24                              | 72.076                   |                |                           |         |
| 3,100.00                                                    | 2,933.70                       | 2,546.00                       | 2,545.89                       | 16.26                     | 77.32                  | -121.43                          | 5,282.45                      | 3,191.36              | 6,607.13                        | 6,515.34                         | 91.79                              | 71.982                   |                |                           |         |
| 3,114.47                                                    | 2,946.66                       | 2,546.00                       | 2,545.89                       | 16.37                     | 77.32                  | -121.43                          | 5,282.45                      | 3,191.36              | 6,611.71                        | 6,519.85                         | 91.87                              | 71.971                   |                |                           |         |
| 3,200.00                                                    | 3,024.12                       | 2,546.00                       | 2,545.89                       | 17.01                     | 77.32                  | -122.14                          | 5,282.45                      | 3,191.36              | 6,638.44                        | 6,546.14                         | 92.30                              | 71.922                   |                |                           |         |
| 3,300.00                                                    | 3,116.62                       | 2,546.00                       | 2,545.89                       | 17.69                     | 77.32                  | -122.94                          | 5,282.45                      | 3,191.36              | 6,668.49                        | 6,575.75                         | 92.74                              | 71.902                   | SF             |                           |         |
| 3,400.00                                                    | 3,210.99                       | 2,546.00                       | 2,545.89                       | 18.31                     | 77.32                  | -123.69                          | 5,282.45                      | 3,191.36              | 6,697.19                        | 6,604.07                         | 93.12                              | 71.922                   |                |                           |         |
| 3,500.00                                                    | 3,306.96                       | 2,546.00                       | 2,545.89                       | 18.86                     | 77.32                  | -124.40                          | 5,282.45                      | 3,191.36              | 6,724.48                        | 6,631.06                         | 93.42                              | 71.978                   |                |                           |         |
| 3,600.00                                                    | 3,404.26                       | 2,546.00                       | 2,545.89                       | 19.35                     | 77.32                  | -125.05                          | 5,282.45                      | 3,191.36              | 6,750.30                        | 6,656.64                         | 93.66                              | 72.070                   |                |                           |         |
| 3,700.00                                                    | 3,502.64                       | 2,546.00                       | 2,545.89                       | 19.77                     | 77.32                  | -125.67                          | 5,282.45                      | 3,191.36              | 6,774.59                        | 6,680.76                         | 93.84                              | 72.196                   |                |                           |         |
| 3,800.00                                                    | 3,601.81                       | 2,546.00                       | 2,545.89                       | 20.14                     | 77.32                  | -126.23                          | 5,282.45                      | 3,191.36              | 6,797.32                        | 6,703.37                         | 93.95                              | 72.353                   |                |                           |         |
| 3,900.00                                                    | 3,701.52                       | 2,546.00                       | 2,545.89                       | 20.45                     | 77.32                  | -126.75                          | 5,282.45                      | 3,191.36              | 6,818.42                        | 6,724.43                         | 94.00                              | 72.539                   |                |                           |         |
| 3,993.52                                                    | 3,795.00                       | 2,546.00                       | 2,545.89                       | 20.68                     | 77.32                  | 23.85                            | 5,282.45                      | 3,191.36              | 6,836.66                        | 6,742.67                         | 93.99                              | 72.741                   |                |                           |         |
| 4,000.00                                                    | 3,801.48                       | 2,546.00                       | 2,545.89                       | 20.69                     | 77.32                  | 23.85                            | 5,282.45                      | 3,191.36              | 6,837.87                        | 6,743.89                         | 93.98                              | 72.757                   |                |                           |         |
| 4,100.00                                                    | 3,901.48                       | 2,546.00                       | 2,545.89                       | 20.91                     | 77.32                  | 23.85                            | 5,282.45                      | 3,191.36              | 6,857.38                        | 6,763.44                         | 93.93                              | 73.002                   |                |                           |         |
| 4,200.00                                                    | 4,001.48                       | 2,546.00                       | 2,545.89                       | 21.13                     | 77.32                  | 23.85                            | 5,282.45                      | 3,191.36              | 6,878.28                        | 6,784.41                         | 93.87                              | 73.274                   |                |                           |         |
| 4,300.00                                                    | 4,101.48                       | 2,546.00                       | 2,545.89                       | 21.36                     | 77.32                  | 23.85                            | 5,282.45                      | 3,191.36              | 6,900.57                        | 6,806.78                         | 93.79                              | 73.572                   |                |                           |         |
| 4,400.00                                                    | 4,201.48                       | 2,546.00                       | 2,545.89                       | 21.59                     | 77.32                  | 23.85                            | 5,282.45                      | 3,191.36              | 6,924.23                        | 6,830.53                         | 93.70                              | 73.896                   |                |                           |         |
| 4,500.00                                                    | 4,301.48                       | 2,546.00                       | 2,545.89                       | 21.82                     | 77.32                  | 23.85                            | 5,282.45                      | 3,191.36              | 6,949.25                        | 6,855.65                         | 93.60                              | 74.246                   |                |                           |         |
| 4,600.00                                                    | 4,401.48                       | 2,546.00                       | 2,545.89                       | 22.05                     | 77.32                  | 23.85                            | 5,282.45                      | 3,191.36              | 6,975.62                        | 6,882.14                         | 93.48                              | 74.621                   |                |                           |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                             |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      |                                        |                              |
|-------------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|---------------------------|------------------------|--------------------------------------|-------------------------------|-----------------------|-------------------------------------|--------------------------------------|----------------------------------------|------------------------------|
| <b>Offset Design:</b> Calloway Pad - Turner A 100 - OH - OH |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      | <b>Offset Site Error:</b>              | 0.00 ft                      |
| <b>Survey Program:</b> 65-INCLINOMETER                      |                                    |                                    |                                    |                           |                        |                                      |                               |                       |                                     |                                      | <b>Offset Well Error:</b>              | 0.00 ft                      |
| <b>Reference</b>                                            |                                    | <b>Offset</b>                      |                                    | <b>Semi Major Axis</b>    |                        | <b>Highside<br/>Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                     |                                      | <b>Rule Assigned:</b>                  |                              |
| <b>Measured<br/>Depth<br/>(ft)</b>                          | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Measured<br/>Depth<br/>(ft)</b> | <b>Vertical<br/>Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                      | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between<br/>Centres<br/>(ft)</b> | <b>Between<br/>Ellipses<br/>(ft)</b> | <b>Minimum<br/>Separation<br/>(ft)</b> | <b>Separation<br/>Factor</b> |
| 4,700.00                                                    | 4,501.48                           | 2,546.00                           | 2,545.89                           | 22.29                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,003.31                            | 6,909.96                             | 93.35                                  | 75.022                       |
| 4,800.00                                                    | 4,601.48                           | 2,546.00                           | 2,545.89                           | 22.53                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,032.32                            | 6,939.11                             | 93.21                                  | 75.447                       |
| 4,900.00                                                    | 4,701.48                           | 2,546.00                           | 2,545.89                           | 22.78                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,062.62                            | 6,969.56                             | 93.05                                  | 75.898                       |
| 5,000.00                                                    | 4,801.48                           | 2,546.00                           | 2,545.89                           | 23.03                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,094.20                            | 7,001.31                             | 92.89                                  | 76.373                       |
| 5,100.00                                                    | 4,901.48                           | 2,546.00                           | 2,545.89                           | 23.28                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,127.05                            | 7,034.34                             | 92.71                                  | 76.873                       |
| 5,200.00                                                    | 5,001.48                           | 2,546.00                           | 2,545.89                           | 23.53                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,161.14                            | 7,068.61                             | 92.53                                  | 77.396                       |
| 5,300.00                                                    | 5,101.48                           | 2,546.00                           | 2,545.89                           | 23.79                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,196.46                            | 7,104.13                             | 92.33                                  | 77.944                       |
| 5,400.00                                                    | 5,201.48                           | 2,546.00                           | 2,545.89                           | 24.05                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,232.99                            | 7,140.87                             | 92.12                                  | 78.515                       |
| 5,500.00                                                    | 5,301.48                           | 2,546.00                           | 2,545.89                           | 24.31                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,270.71                            | 7,178.81                             | 91.91                                  | 79.110                       |
| 5,600.00                                                    | 5,401.48                           | 2,546.00                           | 2,545.89                           | 24.57                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,309.61                            | 7,217.93                             | 91.68                                  | 79.727                       |
| 5,700.00                                                    | 5,501.48                           | 2,546.00                           | 2,545.89                           | 24.84                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,349.66                            | 7,258.21                             | 91.45                                  | 80.367                       |
| 5,800.00                                                    | 5,601.48                           | 2,546.00                           | 2,545.89                           | 25.11                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,390.85                            | 7,299.64                             | 91.21                                  | 81.030                       |
| 5,900.00                                                    | 5,701.48                           | 2,546.00                           | 2,545.89                           | 25.38                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,433.15                            | 7,342.19                             | 90.96                                  | 81.715                       |
| 6,000.00                                                    | 5,801.48                           | 2,546.00                           | 2,545.89                           | 25.65                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,476.55                            | 7,385.84                             | 90.71                                  | 82.421                       |
| 6,100.00                                                    | 5,901.48                           | 2,546.00                           | 2,545.89                           | 25.93                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,521.04                            | 7,430.58                             | 90.45                                  | 83.149                       |
| 6,200.00                                                    | 6,001.48                           | 2,546.00                           | 2,545.89                           | 26.20                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,566.58                            | 7,476.39                             | 90.19                                  | 83.899                       |
| 6,300.00                                                    | 6,101.48                           | 2,546.00                           | 2,545.89                           | 26.48                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,613.16                            | 7,523.24                             | 89.92                                  | 84.668                       |
| 6,400.00                                                    | 6,201.48                           | 2,546.00                           | 2,545.89                           | 26.76                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,660.77                            | 7,571.12                             | 89.64                                  | 85.459                       |
| 6,500.00                                                    | 6,301.48                           | 2,546.00                           | 2,545.89                           | 27.05                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,709.38                            | 7,620.01                             | 89.36                                  | 86.269                       |
| 6,600.00                                                    | 6,401.48                           | 2,546.00                           | 2,545.89                           | 27.33                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,758.97                            | 7,669.89                             | 89.08                                  | 87.099                       |
| 6,700.00                                                    | 6,501.48                           | 2,546.00                           | 2,545.89                           | 27.62                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,809.53                            | 7,720.73                             | 88.80                                  | 87.949                       |
| 6,800.00                                                    | 6,601.48                           | 2,546.00                           | 2,545.89                           | 27.90                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,861.03                            | 7,772.52                             | 88.51                                  | 88.817                       |
| 6,883.52                                                    | 6,685.00                           | 2,546.00                           | 2,545.89                           | 28.15                     | 77.32                  | 23.85                                | 5,282.45                      | 3,191.36              | 7,904.76                            | 7,816.50                             | 88.27                                  | 89.556                       |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                     |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                          |                                   |
|---------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------|--------------------|------------------------------|-------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|-----------------------------------|
| <b>Offset Design:</b> Calloway Pad - Wallace Gas Com 001A - OH - OH |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                          | <b>Offset Site Error:</b> 0.00 ft |
| <b>Survey Program:</b> 2850-INCLINOMETER                            |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                          | <b>Offset Well Error:</b> 0.00 ft |
| <b>Reference</b>                                                    | <b>Offset</b>              | <b>Semi Major Axis</b>     |                            | <b>Distance</b>       |                    | <b>Rule Assigned:</b>        |                   | <b>Warning</b>    |                             |                              |                                |                          |                                   |
| <b>Measured Depth (ft)</b>                                          | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b> | <b>Offset (ft)</b> | <b>Highside Toolface (°)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> |                                   |
| 0.00                                                                | 0.00                       | 0.00                       | 0.00                       | 0.00                  | 0.00               | 59.35                        | 5,039.64          | 8,504.13          | 9,885.26                    |                              |                                |                          |                                   |
| 100.00                                                              | 100.00                     | 86.00                      | 86.00                      | 0.30                  | 2.61               | 59.35                        | 5,039.64          | 8,504.13          | 9,885.25                    | 9,882.34                     | 2.91                           | 3,397.651                |                                   |
| 200.00                                                              | 200.00                     | 186.00                     | 186.00                     | 0.66                  | 5.65               | 59.35                        | 5,039.64          | 8,504.13          | 9,885.25                    | 9,878.95                     | 6.30                           | 1,567.899                |                                   |
| 300.00                                                              | 300.00                     | 286.00                     | 286.00                     | 1.01                  | 8.69               | 59.35                        | 5,039.64          | 8,504.13          | 9,885.25                    | 9,875.55                     | 9.70                           | 1,019.086                |                                   |
| 400.00                                                              | 400.00                     | 386.00                     | 386.00                     | 1.37                  | 11.72              | 59.35                        | 5,039.64          | 8,504.13          | 9,885.25                    | 9,872.15                     | 13.10                          | 754.861                  |                                   |
| 500.00                                                              | 500.00                     | 486.00                     | 486.00                     | 1.73                  | 14.76              | 59.35                        | 5,039.64          | 8,504.13          | 9,885.25                    | 9,868.76                     | 16.49                          | 599.441                  |                                   |
| 600.00                                                              | 600.00                     | 586.00                     | 586.00                     | 2.09                  | 17.80              | 59.35                        | 5,039.64          | 8,504.13          | 9,885.25                    | 9,865.36                     | 19.89                          | 497.093                  |                                   |
| 700.00                                                              | 700.00                     | 686.00                     | 686.00                     | 2.45                  | 20.83              | 59.35                        | 5,039.64          | 8,504.13          | 9,885.25                    | 9,861.97                     | 23.28                          | 424.597                  |                                   |
| 800.00                                                              | 800.00                     | 786.00                     | 786.00                     | 2.81                  | 23.87              | 59.35                        | 5,039.64          | 8,504.13          | 9,885.25                    | 9,858.57                     | 26.68                          | 370.556                  |                                   |
| 900.00                                                              | 900.00                     | 886.00                     | 886.00                     | 3.17                  | 26.91              | 59.35                        | 5,039.64          | 8,504.13          | 9,885.25                    | 9,855.18                     | 30.07                          | 328.718                  |                                   |
| 918.00                                                              | 918.00                     | 904.00                     | 904.00                     | 3.23                  | 27.45              | 59.35                        | 5,039.64          | 8,504.13          | 9,885.25                    | 9,854.57                     | 30.68                          | 322.170                  | CC                                |
| 1,000.00                                                            | 999.97                     | 985.97                     | 985.97                     | 3.51                  | 29.94              | -91.71                       | 5,039.64          | 8,504.13          | 9,885.30                    | 9,851.85                     | 33.45                          | 295.500                  |                                   |
| 1,100.00                                                            | 1,099.72                   | 1,085.72                   | 1,085.72                   | 3.84                  | 32.97              | -91.75                       | 5,039.64          | 8,504.13          | 9,885.51                    | 9,848.70                     | 36.81                          | 268.542                  |                                   |
| 1,200.00                                                            | 1,198.98                   | 1,184.98                   | 1,184.98                   | 4.18                  | 35.99              | -91.80                       | 5,039.64          | 8,504.13          | 9,885.89                    | 9,845.72                     | 40.17                          | 246.126                  |                                   |
| 1,300.00                                                            | 1,297.46                   | 1,283.46                   | 1,283.46                   | 4.54                  | 38.98              | -91.89                       | 5,039.64          | 8,504.13          | 9,886.46                    | 9,842.94                     | 43.51                          | 227.207                  |                                   |
| 1,400.00                                                            | 1,394.90                   | 1,380.90                   | 1,380.90                   | 4.92                  | 41.94              | -91.99                       | 5,039.64          | 8,504.13          | 9,887.23                    | 9,840.38                     | 46.85                          | 211.030                  |                                   |
| 1,500.00                                                            | 1,491.03                   | 1,477.03                   | 1,477.03                   | 5.33                  | 44.86              | -92.11                       | 5,039.64          | 8,504.13          | 9,888.26                    | 9,838.07                     | 50.19                          | 197.035                  |                                   |
| 1,600.00                                                            | 1,585.60                   | 1,571.60                   | 1,571.60                   | 5.79                  | 47.73              | -92.25                       | 5,039.64          | 8,504.13          | 9,889.57                    | 9,836.05                     | 53.51                          | 184.805                  |                                   |
| 1,700.00                                                            | 1,678.33                   | 1,664.33                   | 1,664.33                   | 6.30                  | 50.54              | -92.40                       | 5,039.64          | 8,504.13          | 9,891.20                    | 9,834.36                     | 56.84                          | 174.020                  |                                   |
| 1,797.05                                                            | 1,766.34                   | 1,752.34                   | 1,752.34                   | 6.85                  | 53.22              | -92.56                       | 5,039.64          | 8,504.13          | 9,893.15                    | 9,833.09                     | 60.07                          | 164.703                  |                                   |
| 1,800.00                                                            | 1,768.98                   | 1,754.98                   | 1,754.98                   | 6.87                  | 53.30              | -92.56                       | 5,039.64          | 8,504.13          | 9,893.22                    | 9,833.05                     | 60.17                          | 164.435                  |                                   |
| 1,900.00                                                            | 1,858.58                   | 1,844.58                   | 1,844.58                   | 7.49                  | 56.02              | -92.79                       | 5,039.64          | 8,504.13          | 9,895.54                    | 9,832.03                     | 63.51                          | 155.810                  |                                   |
| 2,000.00                                                            | 1,948.17                   | 1,934.17                   | 1,934.17                   | 8.15                  | 58.74              | -93.02                       | 5,039.64          | 8,504.13          | 9,898.05                    | 9,831.17                     | 66.89                          | 147.983                  |                                   |
| 2,100.00                                                            | 2,037.76                   | 2,023.76                   | 2,023.76                   | 8.83                  | 61.46              | -93.26                       | 5,039.64          | 8,504.13          | 9,900.77                    | 9,830.48                     | 70.29                          | 140.864                  |                                   |
| 2,200.00                                                            | 2,127.36                   | 2,113.36                   | 2,113.36                   | 9.53                  | 64.18              | -93.48                       | 5,039.64          | 8,504.13          | 9,903.68                    | 9,829.98                     | 73.70                          | 134.370                  |                                   |
| 2,300.00                                                            | 2,216.95                   | 2,202.95                   | 2,202.95                   | 10.25                 | 66.90              | -93.71                       | 5,039.64          | 8,504.13          | 9,906.79                    | 9,829.65                     | 77.14                          | 128.431                  |                                   |
| 2,400.00                                                            | 2,306.54                   | 2,292.54                   | 2,292.54                   | 10.97                 | 69.62              | -93.94                       | 5,039.64          | 8,504.13          | 9,910.10                    | 9,829.52                     | 80.58                          | 122.983                  |                                   |
| 2,500.00                                                            | 2,396.14                   | 2,382.14                   | 2,382.14                   | 11.71                 | 72.34              | -94.17                       | 5,039.64          | 8,504.13          | 9,913.61                    | 9,829.57                     | 84.03                          | 117.970                  |                                   |
| 2,600.00                                                            | 2,485.73                   | 2,471.73                   | 2,471.73                   | 12.45                 | 75.06              | -94.40                       | 5,039.64          | 8,504.13          | 9,917.31                    | 9,829.82                     | 87.50                          | 113.346                  |                                   |
| 2,700.00                                                            | 2,575.32                   | 2,561.32                   | 2,561.32                   | 13.21                 | 77.78              | -94.63                       | 5,039.64          | 8,504.13          | 9,921.22                    | 9,830.25                     | 90.96                          | 109.068                  |                                   |
| 2,800.00                                                            | 2,664.92                   | 2,650.92                   | 2,650.92                   | 13.96                 | 80.50              | -94.86                       | 5,039.64          | 8,504.13          | 9,925.32                    | 9,830.88                     | 94.44                          | 105.102                  |                                   |
| 2,900.00                                                            | 2,754.51                   | 2,740.51                   | 2,740.51                   | 14.72                 | 83.23              | -95.09                       | 5,039.64          | 8,504.13          | 9,929.61                    | 9,831.70                     | 97.91                          | 101.414                  |                                   |
| 3,000.00                                                            | 2,844.10                   | 2,830.10                   | 2,830.10                   | 15.49                 | 85.95              | -95.32                       | 5,039.64          | 8,504.13          | 9,934.11                    | 9,832.72                     | 101.39                         | 97.978                   |                                   |
| 3,100.00                                                            | 2,933.70                   | 2,919.71                   | 2,919.70                   | 16.26                 | 88.67              | -95.55                       | 5,039.64          | 8,504.13          | 9,938.80                    | 9,833.92                     | 104.87                         | 94.769                   |                                   |
| 3,114.47                                                            | 2,946.66                   | 2,932.67                   | 2,932.66                   | 16.37                 | 89.06              | -95.58                       | 5,039.64          | 8,504.13          | 9,939.49                    | 9,834.11                     | 105.38                         | 94.322                   |                                   |
| 3,200.00                                                            | 3,024.12                   | 3,010.12                   | 3,010.12                   | 17.01                 | 91.41              | -95.89                       | 5,039.64          | 8,504.13          | 9,943.49                    | 9,835.13                     | 108.36                         | 91.764                   |                                   |
| 3,300.00                                                            | 3,116.62                   | 3,102.99                   | 3,102.98                   | 17.69                 | 94.23              | -96.22                       | 5,039.91          | 8,504.13          | 9,947.97                    | 9,836.11                     | 111.86                         | 88.936                   |                                   |
| 3,400.00                                                            | 3,210.99                   | 3,202.49                   | 3,202.48                   | 18.31                 | 97.26              | -96.53                       | 5,039.86          | 8,504.13          | 9,951.83                    | 9,836.34                     | 115.49                         | 86.172                   |                                   |
| 3,500.00                                                            | 3,306.96                   | 3,303.73                   | 3,303.72                   | 18.86                 | 100.33             | -96.79                       | 5,039.72          | 8,504.13          | 9,955.13                    | 9,836.02                     | 119.11                         | 83.581                   |                                   |
| 3,600.00                                                            | 3,404.26                   | 3,390.30                   | 3,390.26                   | 19.35                 | 102.96             | -96.98                       | 5,039.64          | 8,504.13          | 9,957.91                    | 9,835.69                     | 122.22                         | 81.477                   |                                   |
| 3,700.00                                                            | 3,502.64                   | 3,488.68                   | 3,488.64                   | 19.77                 | 105.95             | -97.15                       | 5,039.64          | 8,504.13          | 9,960.15                    | 9,834.52                     | 125.63                         | 79.284                   |                                   |
| 3,800.00                                                            | 3,601.81                   | 3,587.85                   | 3,587.81                   | 20.14                 | 108.96             | -97.27                       | 5,039.64          | 8,504.13          | 9,961.75                    | 9,832.75                     | 129.00                         | 77.223                   |                                   |
| 3,900.00                                                            | 3,701.52                   | 3,687.56                   | 3,687.52                   | 20.45                 | 111.98             | -97.34                       | 5,039.64          | 8,504.13          | 9,962.71                    | 9,830.38                     | 132.33                         | 75.284                   |                                   |
| 3,993.52                                                            | 3,795.00                   | 3,792.53                   | 3,792.47                   | 20.68                 | 115.17             | 53.68                        | 5,041.17          | 8,504.12          | 9,963.92                    | 9,828.16                     | 135.75                         | 73.397                   |                                   |
| 4,000.00                                                            | 3,801.48                   | 3,800.07                   | 3,800.01                   | 20.69                 | 115.40             | 53.68                        | 5,041.16          | 8,504.12          | 9,963.91                    | 9,827.91                     | 136.00                         | 73.266                   |                                   |
| 4,100.00                                                            | 3,901.48                   | 3,916.34                   | 3,916.27                   | 20.91                 | 118.93             | 53.69                        | 5,040.75          | 8,504.13          | 9,963.70                    | 9,823.95                     | 139.75                         | 71.298                   |                                   |
| 4,200.00                                                            | 4,001.48                   | 4,032.61                   | 4,032.54                   | 21.13                 | 122.46             | 53.69                        | 5,040.02          | 8,504.13          | 9,963.33                    | 9,819.83                     | 143.50                         | 69.431                   |                                   |
| 4,300.00                                                            | 4,101.48                   | 4,087.78                   | 4,087.48                   | 21.36                 | 124.14             | 53.69                        | 5,039.64          | 8,504.13          | 9,963.00                    | 9,817.60                     | 145.40                         | 68.521                   |                                   |
| 4,400.00                                                            | 4,201.48                   | 4,187.78                   | 4,187.48                   | 21.59                 | 127.17             | 53.69                        | 5,039.64          | 8,504.13          | 9,963.00                    | 9,814.34                     | 148.67                         | 67.015                   |                                   |
| 4,500.00                                                            | 4,301.48                   | 4,287.78                   | 4,287.48                   | 21.82                 | 130.21             | 53.69                        | 5,039.64          | 8,504.13          | 9,963.00                    | 9,811.07                     | 151.94                         | 65.573                   |                                   |
| 4,600.00                                                            | 4,401.48                   | 4,417.36                   | 4,417.00                   | 22.05                 | 134.14             | 53.68                        | 5,041.75          | 8,504.12          | 9,964.29                    | 9,808.19                     | 156.11                         | 63.829                   |                                   |
| 4,700.00                                                            | 4,501.48                   | 4,581.90                   | 4,581.49                   | 22.29                 | 139.14             | 53.69                        | 5,040.03          | 8,504.13          | 9,963.68                    | 9,802.33                     | 161.34                         | 61.755                   |                                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                     |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                           |                |
|---------------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|------------------------------------|---------------------------|----------------|
| <b>Offset Design:</b> Calloway Pad - Wallace Gas Com 001A - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    | <b>Offset Site Error:</b> | 0.00 ft        |
| <b>Survey Program:</b> 2850-INCLINOMETER                            |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    | <b>Offset Well Error:</b> | 0.00 ft        |
| <b>Reference</b>                                                    |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Rule Assigned:</b>              |                           | <b>Warning</b> |
| <b>Measured Depth<br/>(ft)</b>                                      | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> | <b>Minimum Separation<br/>(ft)</b> | <b>Separation Factor</b>  |                |
| 4,800.00                                                            | 4,601.48                       | 4,587.89                       | 4,587.48                       | 22.53                     | 139.32                 | 53.69                            | 5,039.64                      | 8,504.13              | 9,963.00                        | 9,801.23                         | 161.77                             | 61.587                    |                |
| 4,900.00                                                            | 4,701.48                       | 4,687.95                       | 4,687.48                       | 22.78                     | 142.36                 | 53.69                            | 5,039.64                      | 8,504.13              | 9,963.00                        | 9,797.95                         | 165.06                             | 60.361                    |                |
| 5,000.00                                                            | 4,801.48                       | 4,787.95                       | 4,787.48                       | 23.03                     | 145.40                 | 53.69                            | 5,039.64                      | 8,504.13              | 9,963.00                        | 9,794.66                         | 168.34                             | 59.183                    |                |
| 5,100.00                                                            | 4,901.48                       | 4,887.95                       | 4,887.48                       | 23.28                     | 148.43                 | 53.69                            | 5,039.64                      | 8,504.13              | 9,963.00                        | 9,791.37                         | 171.63                             | 58.049                    |                |
| 5,200.00                                                            | 5,001.48                       | 4,987.95                       | 4,987.48                       | 23.53                     | 151.47                 | 53.69                            | 5,039.64                      | 8,504.13              | 9,963.00                        | 9,788.08                         | 174.92                             | 56.956                    |                |
| 5,300.00                                                            | 5,101.48                       | 5,087.95                       | 5,087.48                       | 23.79                     | 154.51                 | 53.69                            | 5,039.64                      | 8,504.13              | 9,963.00                        | 9,784.79                         | 178.22                             | 55.903 ES                 |                |
| 5,400.00                                                            | 5,201.48                       | 5,090.00                       | 5,089.49                       | 24.05                     | 154.57                 | 53.69                            | 5,039.64                      | 8,504.13              | 9,963.49                        | 9,784.96                         | 178.53                             | 55.809                    |                |
| 5,500.00                                                            | 5,301.48                       | 5,090.00                       | 5,089.49                       | 24.31                     | 154.57                 | 53.69                            | 5,039.64                      | 8,504.13              | 9,964.97                        | 9,786.21                         | 178.76                             | 55.744                    |                |
| 5,600.00                                                            | 5,401.48                       | 5,090.00                       | 5,089.49                       | 24.57                     | 154.57                 | 53.69                            | 5,039.64                      | 8,504.13              | 9,967.46                        | 9,788.48                         | 178.98                             | 55.690                    |                |
| 5,700.00                                                            | 5,501.48                       | 5,090.00                       | 5,089.49                       | 24.84                     | 154.57                 | 53.69                            | 5,039.64                      | 8,504.13              | 9,970.95                        | 9,791.77                         | 179.19                             | 55.646                    |                |
| 5,800.00                                                            | 5,601.48                       | 5,090.00                       | 5,089.49                       | 25.11                     | 154.57                 | 53.69                            | 5,039.64                      | 8,504.13              | 9,975.44                        | 9,796.07                         | 179.37                             | 55.613                    |                |
| 5,900.00                                                            | 5,701.48                       | 5,090.00                       | 5,089.49                       | 25.38                     | 154.57                 | 53.69                            | 5,039.64                      | 8,504.13              | 9,980.93                        | 9,801.39                         | 179.55                             | 55.590                    |                |
| 6,000.00                                                            | 5,801.48                       | 5,090.00                       | 5,089.49                       | 25.65                     | 154.57                 | 53.69                            | 5,039.64                      | 8,504.13              | 9,987.42                        | 9,807.72                         | 179.70                             | 55.578                    |                |
| 6,100.00                                                            | 5,901.48                       | 5,090.00                       | 5,089.49                       | 25.93                     | 154.57                 | 53.69                            | 5,039.64                      | 8,504.13              | 9,994.91                        | 9,815.07                         | 179.84                             | 55.576 SF                 |                |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



## Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                   |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                |                           |         |
|-------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------|--------------------|------------------------------|-------------------|-------------------|-----------------------------|------------------------------|--------------------------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - Zella Calloway 001 - OH - OH |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 100-UNKNOWN                                |                            |                            |                            |                       |                    |                              |                   |                   |                             |                              |                                | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                                  | <b>Offset</b>              | <b>Semi Major Axis</b>     |                            | <b>Distance</b>       |                    | <b>Rule Assigned:</b>        |                   | <b>Warning</b>    |                             |                              |                                |                           |         |
| <b>Measured Depth (ft)</b>                                        | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b> | <b>Offset (ft)</b> | <b>Highside Toolface (°)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b>  |         |
| 0.00                                                              | 0.00                       | 49.00                      | 49.00                      | 0.00                  | 1.96               | 90.58                        | -61.36            | 6,074.13          | 6,074.44                    |                              |                                |                           |         |
| 100.00                                                            | 100.00                     | 149.00                     | 149.00                     | 0.30                  | 5.96               | 90.58                        | -61.36            | 6,074.13          | 6,074.44                    | 6,068.18                     | 6.26                           | 970.740                   |         |
| 200.00                                                            | 200.00                     | 249.00                     | 249.00                     | 0.66                  | 9.96               | 90.58                        | -61.36            | 6,074.13          | 6,074.44                    | 6,063.82                     | 10.62                          | 572.196                   |         |
| 300.00                                                            | 300.00                     | 349.00                     | 349.00                     | 1.01                  | 13.96              | 90.58                        | -61.36            | 6,074.13          | 6,074.44                    | 6,059.46                     | 14.97                          | 405.653                   |         |
| 400.00                                                            | 400.00                     | 449.00                     | 449.00                     | 1.37                  | 17.96              | 90.58                        | -61.36            | 6,074.13          | 6,074.44                    | 6,055.10                     | 19.33                          | 314.201                   |         |
| 500.00                                                            | 500.00                     | 549.00                     | 549.00                     | 1.73                  | 21.96              | 90.58                        | -61.36            | 6,074.13          | 6,074.44                    | 6,050.75                     | 23.69                          | 256.398                   |         |
| 600.00                                                            | 600.00                     | 649.00                     | 649.00                     | 2.09                  | 25.96              | 90.58                        | -61.36            | 6,074.13          | 6,074.44                    | 6,046.39                     | 28.05                          | 216.558                   |         |
| 700.00                                                            | 700.00                     | 749.00                     | 749.00                     | 2.45                  | 29.96              | 90.58                        | -61.36            | 6,074.13          | 6,074.44                    | 6,042.03                     | 32.41                          | 187.434                   |         |
| 800.00                                                            | 800.00                     | 849.00                     | 849.00                     | 2.81                  | 33.96              | 90.58                        | -61.36            | 6,074.13          | 6,074.44                    | 6,037.67                     | 36.77                          | 165.215                   |         |
| 900.00                                                            | 900.00                     | 949.00                     | 949.00                     | 3.17                  | 37.96              | 90.58                        | -61.36            | 6,074.13          | 6,074.44                    | 6,033.31                     | 41.13                          | 147.706                   |         |
| 918.00                                                            | 918.00                     | 967.00                     | 967.00                     | 3.23                  | 38.68              | 90.58                        | -61.36            | 6,074.13          | 6,074.44                    | 6,032.53                     | 41.91                          | 144.941                   |         |
| 1,000.00                                                          | 999.97                     | 1,048.97                   | 1,048.97                   | 3.51                  | 41.96              | -60.51                       | -61.36            | 6,074.13          | 6,073.57                    | 6,028.10                     | 45.47                          | 133.577                   |         |
| 1,100.00                                                          | 1,099.72                   | 1,148.72                   | 1,148.72                   | 3.84                  | 45.95              | -60.66                       | -61.36            | 6,074.13          | 6,070.17                    | 6,020.38                     | 49.79                          | 121.919                   |         |
| 1,200.00                                                          | 1,198.98                   | 1,247.98                   | 1,247.98                   | 4.18                  | 49.92              | -60.91                       | -61.36            | 6,074.13          | 6,064.22                    | 6,010.13                     | 54.10                          | 112.099                   |         |
| 1,300.00                                                          | 1,297.46                   | 1,346.46                   | 1,346.46                   | 4.54                  | 53.86              | -61.28                       | -61.36            | 6,074.13          | 6,055.76                    | 5,997.38                     | 58.39                          | 103.715                   |         |
| 1,400.00                                                          | 1,394.90                   | 1,443.90                   | 1,443.90                   | 4.92                  | 57.76              | -61.75                       | -61.36            | 6,074.13          | 6,044.85                    | 5,982.19                     | 62.66                          | 96.474                    |         |
| 1,500.00                                                          | 1,491.03                   | 1,540.03                   | 1,540.03                   | 5.33                  | 61.60              | -62.33                       | -61.36            | 6,074.13          | 6,031.56                    | 5,964.66                     | 66.90                          | 90.156                    |         |
| 1,600.00                                                          | 1,585.60                   | 1,634.60                   | 1,634.60                   | 5.79                  | 65.38              | -63.01                       | -61.36            | 6,074.13          | 6,015.98                    | 5,944.86                     | 71.12                          | 84.591                    |         |
| 1,700.00                                                          | 1,678.33                   | 1,727.33                   | 1,727.33                   | 6.30                  | 69.09              | -63.80                       | -61.36            | 6,074.13          | 5,998.21                    | 5,922.90                     | 75.31                          | 79.652                    |         |
| 1,797.05                                                          | 1,766.34                   | 1,815.34                   | 1,815.34                   | 6.85                  | 72.61              | -64.65                       | -61.36            | 6,074.13          | 5,978.99                    | 5,899.65                     | 79.34                          | 75.358                    |         |
| 1,800.00                                                          | 1,768.98                   | 1,817.98                   | 1,817.98                   | 6.87                  | 72.72              | -64.66                       | -61.36            | 6,074.13          | 5,978.38                    | 5,898.91                     | 79.46                          | 75.233                    |         |
| 1,900.00                                                          | 1,858.58                   | 1,907.58                   | 1,907.58                   | 7.49                  | 76.30              | -65.01                       | -61.36            | 6,074.13          | 5,957.75                    | 5,874.13                     | 83.62                          | 71.245                    |         |
| 2,000.00                                                          | 1,948.17                   | 1,997.17                   | 1,997.17                   | 8.15                  | 79.89              | -65.37                       | -61.36            | 6,074.13          | 5,937.38                    | 5,849.57                     | 87.81                          | 67.614                    |         |
| 2,100.00                                                          | 2,037.76                   | 2,086.76                   | 2,086.76                   | 8.83                  | 83.47              | -65.73                       | -61.36            | 6,074.13          | 5,917.28                    | 5,825.25                     | 92.03                          | 64.299                    |         |
| 2,200.00                                                          | 2,127.36                   | 2,176.36                   | 2,176.36                   | 9.53                  | 87.05              | -66.09                       | -61.36            | 6,074.13          | 5,897.44                    | 5,801.18                     | 96.26                          | 61.264                    |         |
| 2,300.00                                                          | 2,216.95                   | 2,265.95                   | 2,265.95                   | 10.25                 | 90.64              | -66.45                       | -61.36            | 6,074.13          | 5,877.88                    | 5,777.36                     | 100.52                         | 58.477                    |         |
| 2,400.00                                                          | 2,306.54                   | 2,355.54                   | 2,355.54                   | 10.97                 | 94.22              | -66.81                       | -61.36            | 6,074.13          | 5,858.58                    | 5,753.80                     | 104.78                         | 55.911                    |         |
| 2,500.00                                                          | 2,396.14                   | 2,445.14                   | 2,445.14                   | 11.71                 | 97.81              | -67.18                       | -61.36            | 6,074.13          | 5,839.56                    | 5,730.49                     | 109.07                         | 53.542                    |         |
| 2,600.00                                                          | 2,485.73                   | 2,534.73                   | 2,534.73                   | 12.45                 | 101.39             | -67.54                       | -61.36            | 6,074.13          | 5,820.81                    | 5,707.45                     | 113.36                         | 51.349                    |         |
| 2,700.00                                                          | 2,575.32                   | 2,624.32                   | 2,624.32                   | 13.21                 | 104.97             | -67.91                       | -61.36            | 6,074.13          | 5,802.35                    | 5,684.69                     | 117.66                         | 49.315                    |         |
| 2,800.00                                                          | 2,664.92                   | 2,713.92                   | 2,713.92                   | 13.96                 | 108.56             | -68.29                       | -61.36            | 6,074.13          | 5,784.16                    | 5,662.19                     | 121.97                         | 47.423                    |         |
| 2,900.00                                                          | 2,754.51                   | 2,803.51                   | 2,803.51                   | 14.72                 | 112.14             | -68.66                       | -61.36            | 6,074.13          | 5,766.26                    | 5,639.98                     | 126.29                         | 45.660                    |         |
| 3,000.00                                                          | 2,844.10                   | 2,893.10                   | 2,893.10                   | 15.49                 | 115.72             | -69.03                       | -61.36            | 6,074.13          | 5,748.65                    | 5,618.04                     | 130.61                         | 44.013                    |         |
| 3,100.00                                                          | 2,933.70                   | 2,982.70                   | 2,982.70                   | 16.26                 | 119.31             | -69.41                       | -61.36            | 6,074.13          | 5,731.33                    | 5,596.39                     | 134.94                         | 42.472                    |         |
| 3,114.47                                                          | 2,946.66                   | 2,995.66                   | 2,995.66                   | 16.37                 | 119.83             | -69.47                       | -61.36            | 6,074.13          | 5,728.85                    | 5,593.28                     | 135.57                         | 42.257                    |         |
| 3,200.00                                                          | 3,024.12                   | 3,073.12                   | 3,073.12                   | 17.01                 | 122.92             | -69.38                       | -61.36            | 6,074.13          | 5,714.96                    | 5,575.67                     | 139.29                         | 41.029                    |         |
| 3,300.00                                                          | 3,116.62                   | 3,165.62                   | 3,165.62                   | 17.69                 | 126.62             | -69.31                       | -61.36            | 6,074.13          | 5,700.63                    | 5,556.97                     | 143.66                         | 39.681                    |         |
| 3,400.00                                                          | 3,210.99                   | 3,259.99                   | 3,259.99                   | 18.31                 | 130.40             | -69.26                       | -61.36            | 6,074.13          | 5,688.33                    | 5,540.28                     | 148.05                         | 38.422                    |         |
| 3,500.00                                                          | 3,306.96                   | 3,355.96                   | 3,355.96                   | 18.86                 | 134.24             | -69.22                       | -61.36            | 6,074.13          | 5,678.02                    | 5,525.58                     | 152.44                         | 37.248                    |         |
| 3,600.00                                                          | 3,404.26                   | 3,453.26                   | 3,453.26                   | 19.35                 | 138.13             | -69.20                       | -61.36            | 6,074.13          | 5,669.65                    | 5,512.83                     | 156.82                         | 36.154                    |         |
| 3,700.00                                                          | 3,502.64                   | 3,551.64                   | 3,551.64                   | 19.77                 | 142.07             | -69.18                       | -61.36            | 6,074.13          | 5,663.20                    | 5,502.02                     | 161.18                         | 35.136                    |         |
| 3,800.00                                                          | 3,601.81                   | 3,650.81                   | 3,650.81                   | 20.14                 | 146.03             | -69.18                       | -61.36            | 6,074.13          | 5,658.65                    | 5,493.13                     | 165.52                         | 34.187                    |         |
| 3,900.00                                                          | 3,701.52                   | 3,750.52                   | 3,750.52                   | 20.45                 | 150.02             | -69.17                       | -61.36            | 6,074.13          | 5,655.97                    | 5,486.15                     | 169.82                         | 33.305                    |         |
| 3,993.52                                                          | 3,795.00                   | 3,844.00                   | 3,844.00                   | 20.68                 | 153.76             | 81.88                        | -61.36            | 6,074.13          | 5,655.16                    | 5,481.36                     | 173.80                         | 32.539                    |         |
| 4,000.00                                                          | 3,801.48                   | 3,850.48                   | 3,850.48                   | 20.69                 | 154.02             | 81.88                        | -61.36            | 6,074.13          | 5,655.16                    | 5,481.09                     | 174.07                         | 32.488                    |         |
| 4,100.00                                                          | 3,901.48                   | 3,950.48                   | 3,950.48                   | 20.91                 | 158.02             | 81.88                        | -61.36            | 6,074.13          | 5,655.16                    | 5,476.87                     | 178.29                         | 31.718                    |         |
| 4,200.00                                                          | 4,001.48                   | 4,050.48                   | 4,050.48                   | 21.13                 | 162.02             | 81.88                        | -61.36            | 6,074.13          | 5,655.16                    | 5,472.64                     | 182.52                         | 30.984                    |         |
| 4,300.00                                                          | 4,101.48                   | 4,150.48                   | 4,150.48                   | 21.36                 | 166.02             | 81.88                        | -61.36            | 6,074.13          | 5,655.16                    | 5,468.41                     | 186.75                         | 30.283                    |         |
| 4,400.00                                                          | 4,201.48                   | 4,250.48                   | 4,250.48                   | 21.59                 | 170.02             | 81.88                        | -61.36            | 6,074.13          | 5,655.16                    | 5,464.18                     | 190.98                         | 29.611                    |         |
| 4,500.00                                                          | 4,301.48                   | 4,350.48                   | 4,350.48                   | 21.82                 | 174.02             | 81.88                        | -61.36            | 6,074.13          | 5,655.16                    | 5,459.94                     | 195.22                         | 28.969                    |         |
| 4,600.00                                                          | 4,401.48                   | 4,450.48                   | 4,450.48                   | 22.05                 | 178.02             | 81.88                        | -61.36            | 6,074.13          | 5,655.16                    | 5,455.70                     | 199.46                         | 28.353                    |         |
| 4,700.00                                                          | 4,501.48                   | 4,550.48                   | 4,550.48                   | 22.29                 | 182.02             | 81.88                        | -61.36            | 6,074.13          | 5,655.16                    | 5,451.46                     | 203.70                         | 27.762                    |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                   |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |
|-------------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|------------------------------------|--------------------------|
| <b>Offset Design:</b> Calloway Pad - Zella Calloway 001 - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  | <b>Offset Site Error:</b>          | 0.00 ft                  |
| <b>Survey Program:</b> 100-UNKNOWN                                |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  | <b>Offset Well Error:</b>          | 0.00 ft                  |
| <b>Reference</b>                                                  |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Rule Assigned:</b>              |                          |
| <b>Measured Depth<br/>(ft)</b>                                    | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> | <b>Minimum Separation<br/>(ft)</b> | <b>Separation Factor</b> |
| 4,800.00                                                          | 4,601.48                       | 4,650.48                       | 4,650.48                       | 22.53                     | 186.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,447.21                         | 207.94                             | 27.196                   |
| 4,900.00                                                          | 4,701.48                       | 4,750.48                       | 4,750.48                       | 22.78                     | 190.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,442.97                         | 212.19                             | 26.651                   |
| 5,000.00                                                          | 4,801.48                       | 4,850.48                       | 4,850.48                       | 23.03                     | 194.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,438.71                         | 216.45                             | 26.127                   |
| 5,100.00                                                          | 4,901.48                       | 4,950.48                       | 4,950.48                       | 23.28                     | 198.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,434.46                         | 220.70                             | 25.624                   |
| 5,200.00                                                          | 5,001.48                       | 5,050.48                       | 5,050.48                       | 23.53                     | 202.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,430.20                         | 224.96                             | 25.139                   |
| 5,300.00                                                          | 5,101.48                       | 5,150.48                       | 5,150.48                       | 23.79                     | 206.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,425.94                         | 229.22                             | 24.671                   |
| 5,400.00                                                          | 5,201.48                       | 5,250.48                       | 5,250.48                       | 24.05                     | 210.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,421.68                         | 233.48                             | 24.221                   |
| 5,500.00                                                          | 5,301.48                       | 5,350.48                       | 5,350.48                       | 24.31                     | 214.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,417.41                         | 237.75                             | 23.786                   |
| 5,600.00                                                          | 5,401.48                       | 5,450.48                       | 5,450.48                       | 24.57                     | 218.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,413.14                         | 242.01                             | 23.367                   |
| 5,700.00                                                          | 5,501.48                       | 5,550.48                       | 5,550.48                       | 24.84                     | 222.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,408.87                         | 246.29                             | 22.962                   |
| 5,800.00                                                          | 5,601.48                       | 5,650.48                       | 5,650.48                       | 25.11                     | 226.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,404.60                         | 250.56                             | 22.570                   |
| 5,900.00                                                          | 5,701.48                       | 5,750.48                       | 5,750.48                       | 25.38                     | 230.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,400.33                         | 254.83                             | 22.192                   |
| 6,000.00                                                          | 5,801.48                       | 5,850.48                       | 5,850.48                       | 25.65                     | 234.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,396.05                         | 259.11                             | 21.825                   |
| 6,100.00                                                          | 5,901.48                       | 5,950.48                       | 5,950.48                       | 25.93                     | 238.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,391.77                         | 263.39                             | 21.471                   |
| 6,200.00                                                          | 6,001.48                       | 6,050.48                       | 6,050.48                       | 26.20                     | 242.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,387.49                         | 267.67                             | 21.127                   |
| 6,300.00                                                          | 6,101.48                       | 6,150.48                       | 6,150.48                       | 26.48                     | 246.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,383.21                         | 271.95                             | 20.795                   |
| 6,400.00                                                          | 6,201.48                       | 6,250.48                       | 6,250.48                       | 26.76                     | 250.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,378.92                         | 276.24                             | 20.472                   |
| 6,500.00                                                          | 6,301.48                       | 6,350.48                       | 6,350.48                       | 27.05                     | 254.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,374.64                         | 280.52                             | 20.159                   |
| 6,600.00                                                          | 6,401.48                       | 6,450.48                       | 6,450.48                       | 27.33                     | 258.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,370.35                         | 284.81                             | 19.856                   |
| 6,700.00                                                          | 6,501.48                       | 6,550.48                       | 6,550.48                       | 27.62                     | 262.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,366.06                         | 289.10                             | 19.561                   |
| 6,800.00                                                          | 6,601.48                       | 6,650.48                       | 6,650.48                       | 27.90                     | 266.02                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,361.77                         | 293.39                             | 19.275                   |
| 6,883.52                                                          | 6,685.00                       | 6,734.00                       | 6,734.00                       | 28.15                     | 269.36                 | 81.88                            | -61.36                        | 6,074.13              | 5,655.16                        | 5,358.18                         | 296.98                             | 19.042 CC, ES, SF        |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                    |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          |                           |         |
|--------------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|------------------------|----------------------------------|-------------------------------|-----------------------|---------------------------------|----------------------------------|------------------------------------|--------------------------|---------------------------|---------|
| <b>Offset Design:</b> Calloway Pad - Zella Calloway 001M - OH - OH |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          | <b>Offset Site Error:</b> | 0.00 ft |
| <b>Survey Program:</b> 251-MWD SDI                                 |                                |                                |                                |                           |                        |                                  |                               |                       |                                 |                                  |                                    |                          | <b>Offset Well Error:</b> | 0.00 ft |
| <b>Reference</b>                                                   |                                | <b>Offset</b>                  |                                | <b>Semi Major Axis</b>    |                        | <b>Highside Toolface<br/>(°)</b> | <b>Offset Wellbore Centre</b> |                       | <b>Distance</b>                 |                                  | <b>Minimum Separation<br/>(ft)</b> | <b>Separation Factor</b> | <b>Warning</b>            |         |
| <b>Measured Depth<br/>(ft)</b>                                     | <b>Vertical Depth<br/>(ft)</b> | <b>Measured Depth<br/>(ft)</b> | <b>Vertical Depth<br/>(ft)</b> | <b>Reference<br/>(ft)</b> | <b>Offset<br/>(ft)</b> |                                  | <b>+N/-S<br/>(ft)</b>         | <b>+E/-W<br/>(ft)</b> | <b>Between Centres<br/>(ft)</b> | <b>Between Ellipses<br/>(ft)</b> |                                    |                          |                           |         |
| 0.00                                                               | 0.00                           | 2,681.00                       | 2,539.46                       | 0.00                      | 14.92                  | 91.83                            | -173.03                       | 5,412.34              | 5,960.76                        |                                  |                                    |                          |                           |         |
| 100.00                                                             | 100.00                         | 2,725.00                       | 2,579.50                       | 0.30                      | 15.26                  | 91.83                            | -172.36                       | 5,394.11              | 5,919.32                        | 5,910.74                         | 8.58                               | 689.500                  |                           |         |
| 200.00                                                             | 200.00                         | 2,766.71                       | 2,617.59                       | 0.66                      | 15.58                  | 91.83                            | -172.23                       | 5,377.13              | 5,878.62                        | 5,869.76                         | 8.86                               | 663.689                  |                           |         |
| 300.00                                                             | 300.00                         | 2,806.00                       | 2,653.61                       | 1.01                      | 15.88                  | 91.84                            | -172.49                       | 5,361.43              | 5,838.71                        | 5,829.51                         | 9.20                               | 634.847                  |                           |         |
| 400.00                                                             | 400.00                         | 2,845.56                       | 2,690.01                       | 1.37                      | 16.16                  | 91.85                            | -172.92                       | 5,345.95              | 5,799.63                        | 5,790.05                         | 9.58                               | 605.193                  |                           |         |
| 500.00                                                             | 500.00                         | 2,887.95                       | 2,729.17                       | 1.73                      | 16.47                  | 91.86                            | -173.32                       | 5,329.73              | 5,761.39                        | 5,751.38                         | 10.01                              | 575.728                  |                           |         |
| 600.00                                                             | 600.00                         | 2,930.00                       | 2,768.14                       | 2.09                      | 16.77                  | 91.87                            | -173.50                       | 5,313.93              | 5,723.90                        | 5,713.45                         | 10.45                              | 547.886                  |                           |         |
| 700.00                                                             | 700.00                         | 2,965.73                       | 2,801.39                       | 2.45                      | 17.02                  | 91.87                            | -173.51                       | 5,300.83              | 5,687.29                        | 5,676.42                         | 10.88                              | 522.890                  |                           |         |
| 800.00                                                             | 800.00                         | 3,004.21                       | 2,837.34                       | 2.81                      | 17.28                  | 91.88                            | -173.43                       | 5,287.15              | 5,651.68                        | 5,640.36                         | 11.32                              | 499.126                  |                           |         |
| 900.00                                                             | 900.00                         | 3,056.00                       | 2,885.85                       | 3.17                      | 17.62                  | 91.88                            | -173.16                       | 5,268.98              | 5,616.71                        | 5,604.89                         | 11.82                              | 475.343                  |                           |         |
| 918.00                                                             | 918.00                         | 3,075.14                       | 2,903.79                       | 3.23                      | 17.75                  | 91.88                            | -173.02                       | 5,262.34              | 5,610.45                        | 5,598.52                         | 11.94                              | 470.083                  |                           |         |
| 1,000.00                                                           | 999.97                         | 3,119.00                       | 2,945.03                       | 3.51                      | 18.03                  | -59.98                           | -172.71                       | 5,247.39              | 5,581.60                        | 5,569.26                         | 12.34                              | 452.419                  |                           |         |
| 1,100.00                                                           | 1,099.72                       | 3,143.51                       | 2,968.15                       | 3.84                      | 18.19                  | -61.02                           | -172.55                       | 5,239.25              | 5,544.99                        | 5,532.26                         | 12.73                              | 435.584                  |                           |         |
| 1,200.00                                                           | 1,198.98                       | 3,181.00                       | 3,003.64                       | 4.18                      | 18.42                  | -62.15                           | -172.38                       | 5,227.17              | 5,507.07                        | 5,493.91                         | 13.17                              | 418.236                  |                           |         |
| 1,300.00                                                           | 1,297.46                       | 3,244.00                       | 3,063.41                       | 4.54                      | 18.80                  | -63.41                           | -172.06                       | 5,207.26              | 5,467.60                        | 5,453.91                         | 13.69                              | 399.463                  |                           |         |
| 1,400.00                                                           | 1,394.90                       | 3,288.08                       | 3,105.30                       | 4.92                      | 19.06                  | -64.73                           | -171.89                       | 5,193.55              | 5,426.55                        | 5,412.38                         | 14.17                              | 383.068                  |                           |         |
| 1,500.00                                                           | 1,491.03                       | 3,307.00                       | 3,123.32                       | 5.33                      | 19.17                  | -66.05                           | -171.89                       | 5,187.79              | 5,384.43                        | 5,369.83                         | 14.60                              | 368.908                  |                           |         |
| 1,600.00                                                           | 1,585.60                       | 3,369.00                       | 3,182.59                       | 5.79                      | 19.52                  | -67.59                           | -171.98                       | 5,169.58              | 5,341.24                        | 5,326.06                         | 15.17                              | 351.980                  |                           |         |
| 1,700.00                                                           | 1,678.33                       | 3,369.00                       | 3,182.59                       | 6.30                      | 19.52                  | -68.95                           | -171.98                       | 5,169.58              | 5,297.37                        | 5,281.75                         | 15.62                              | 339.040                  |                           |         |
| 1,797.05                                                           | 1,766.34                       | 3,432.00                       | 3,243.16                       | 6.85                      | 19.86                  | -70.62                           | -172.21                       | 5,152.26              | 5,254.08                        | 5,237.80                         | 16.28                              | 322.771                  |                           |         |
| 1,800.00                                                           | 1,768.98                       | 3,432.00                       | 3,243.16                       | 6.87                      | 19.86                  | -70.62                           | -172.21                       | 5,152.26              | 5,252.75                        | 5,236.45                         | 16.30                              | 322.326                  |                           |         |
| 1,900.00                                                           | 1,858.58                       | 3,432.00                       | 3,243.16                       | 7.49                      | 19.86                  | -70.62                           | -172.21                       | 5,152.26              | 5,208.52                        | 5,191.66                         | 16.85                              | 309.074                  |                           |         |
| 2,000.00                                                           | 1,948.17                       | 3,494.00                       | 3,303.13                       | 8.15                      | 20.16                  | -70.95                           | -172.70                       | 5,136.54              | 5,165.43                        | 5,147.83                         | 17.61                              | 293.399                  |                           |         |
| 2,100.00                                                           | 2,037.76                       | 3,494.00                       | 3,303.13                       | 8.83                      | 20.16                  | -70.95                           | -172.70                       | 5,136.54              | 5,123.37                        | 5,105.13                         | 18.24                              | 280.944                  |                           |         |
| 2,200.00                                                           | 2,127.36                       | 3,526.54                       | 3,334.76                       | 9.53                      | 20.30                  | -71.12                           | -173.08                       | 5,128.89              | 5,082.57                        | 5,063.60                         | 18.97                              | 267.919                  |                           |         |
| 2,300.00                                                           | 2,216.95                       | 3,557.00                       | 3,364.46                       | 10.25                     | 20.44                  | -71.28                           | -173.53                       | 5,122.16              | 5,043.05                        | 5,023.33                         | 19.72                              | 255.688                  |                           |         |
| 2,400.00                                                           | 2,306.54                       | 3,609.24                       | 3,415.50                       | 10.97                     | 20.66                  | -71.55                           | -174.30                       | 5,111.05              | 5,004.57                        | 4,984.03                         | 20.54                              | 243.606                  |                           |         |
| 2,500.00                                                           | 2,396.14                       | 3,808.00                       | 3,609.03                       | 11.71                     | 21.55                  | -72.66                           | -174.09                       | 5,065.84              | 4,964.84                        | 4,943.10                         | 21.74                              | 228.418                  |                           |         |
| 2,600.00                                                           | 2,485.73                       | 3,840.25                       | 3,640.39                       | 12.45                     | 21.70                  | -72.84                           | -173.88                       | 5,058.33              | 4,925.60                        | 4,903.04                         | 22.55                              | 218.390                  |                           |         |
| 2,700.00                                                           | 2,575.32                       | 3,871.00                       | 3,670.40                       | 13.21                     | 21.84                  | -73.02                           | -173.83                       | 5,051.62              | 4,887.70                        | 4,864.31                         | 23.39                              | 209.007                  |                           |         |
| 2,800.00                                                           | 2,664.92                       | 3,871.00                       | 3,670.40                       | 13.96                     | 21.84                  | -73.02                           | -173.83                       | 5,051.62              | 4,851.24                        | 4,827.08                         | 24.16                              | 200.790                  |                           |         |
| 2,900.00                                                           | 2,754.51                       | 3,907.97                       | 3,706.62                       | 14.72                     | 21.98                  | -73.23                           | -173.93                       | 5,044.25              | 4,816.02                        | 4,790.99                         | 25.03                              | 192.442                  |                           |         |
| 3,000.00                                                           | 2,844.10                       | 3,933.00                       | 3,731.25                       | 15.49                     | 22.07                  | -73.37                           | -174.10                       | 5,039.74              | 4,782.37                        | 4,756.49                         | 25.88                              | 184.801                  |                           |         |
| 3,100.00                                                           | 2,933.70                       | 3,955.99                       | 3,753.91                       | 16.26                     | 22.15                  | -73.49                           | -174.32                       | 5,035.89              | 4,750.15                        | 4,723.42                         | 26.73                              | 177.687                  |                           |         |
| 3,114.47                                                           | 2,946.66                       | 3,960.05                       | 3,757.92                       | 16.37                     | 22.16                  | -73.52                           | -174.36                       | 5,035.23              | 4,745.61                        | 4,718.75                         | 26.86                              | 176.684                  |                           |         |
| 3,200.00                                                           | 3,024.12                       | 3,996.00                       | 3,793.44                       | 17.01                     | 22.28                  | -72.93                           | -174.84                       | 5,029.74              | 4,719.90                        | 4,692.30                         | 27.61                              | 170.973                  |                           |         |
| 3,300.00                                                           | 3,116.62                       | 4,016.92                       | 3,814.15                       | 17.69                     | 22.34                  | -72.20                           | -175.17                       | 5,026.79              | 4,692.41                        | 4,664.04                         | 28.38                              | 165.347                  |                           |         |
| 3,400.00                                                           | 3,210.99                       | 4,058.00                       | 3,854.87                       | 18.31                     | 22.45                  | -71.64                           | -175.88                       | 5,021.44              | 4,667.84                        | 4,638.72                         | 29.12                              | 160.274                  |                           |         |
| 3,500.00                                                           | 3,306.96                       | 4,098.12                       | 3,894.70                       | 18.86                     | 22.55                  | -71.14                           | -176.67                       | 5,016.68              | 4,646.09                        | 4,616.29                         | 29.80                              | 155.927                  |                           |         |
| 3,600.00                                                           | 3,404.26                       | 4,140.56                       | 3,936.88                       | 19.35                     | 22.66                  | -70.71                           | -177.61                       | 5,012.04              | 4,627.12                        | 4,596.71                         | 30.40                              | 152.196                  |                           |         |
| 3,700.00                                                           | 3,502.64                       | 4,180.00                       | 3,976.12                       | 19.77                     | 22.75                  | -70.33                           | -178.65                       | 5,008.29              | 4,611.14                        | 4,580.21                         | 30.93                              | 149.076                  |                           |         |
| 3,800.00                                                           | 3,601.81                       | 4,180.00                       | 3,976.12                       | 20.14                     | 22.75                  | -69.97                           | -178.65                       | 5,008.29              | 4,598.58                        | 4,567.27                         | 31.32                              | 146.830                  |                           |         |
| 3,900.00                                                           | 3,701.52                       | 4,180.00                       | 3,976.12                       | 20.45                     | 22.75                  | -69.73                           | -178.65                       | 5,008.29              | 4,589.96                        | 4,558.33                         | 31.63                              | 145.104                  |                           |         |
| 3,993.52                                                           | 3,795.00                       | 4,180.00                       | 3,976.12                       | 20.68                     | 22.75                  | 81.45                            | -178.65                       | 5,008.29              | 4,585.50                        | 4,553.65                         | 31.85                              | 143.976                  |                           |         |
| 4,000.00                                                           | 3,801.48                       | 4,180.00                       | 3,976.12                       | 20.69                     | 22.75                  | 81.45                            | -178.65                       | 5,008.29              | 4,585.32                        | 4,553.46                         | 31.86                              | 143.915                  |                           |         |
| 4,100.00                                                           | 3,901.48                       | 4,180.00                       | 3,976.12                       | 20.91                     | 22.75                  | 81.45                            | -178.65                       | 5,008.29              | 4,583.65                        | 4,551.60                         | 32.04                              | 143.042                  |                           |         |
| 4,126.60                                                           | 3,928.08                       | 4,180.00                       | 3,976.12                       | 20.97                     | 22.75                  | 81.45                            | -178.65                       | 5,008.29              | 4,583.57                        | 4,551.48                         | 32.09                              | 142.828 CC, ES           |                           |         |
| 4,200.00                                                           | 4,001.48                       | 4,180.00                       | 3,976.12                       | 21.13                     | 22.75                  | 81.45                            | -178.65                       | 5,008.29              | 4,584.16                        | 4,551.94                         | 32.22                              | 142.287                  |                           |         |
| 4,300.00                                                           | 4,101.48                       | 4,180.00                       | 3,976.12                       | 21.36                     | 22.75                  | 81.45                            | -178.65                       | 5,008.29              | 4,586.85                        | 4,554.46                         | 32.38                              | 141.651                  |                           |         |
| 4,400.00                                                           | 4,201.48                       | 4,180.00                       | 3,976.12                       | 21.59                     | 22.75                  | 81.45                            | -178.65                       | 5,008.29              | 4,591.71                        | 4,559.18                         | 32.53                              | 141.132                  |                           |         |
| 4,500.00                                                           | 4,301.48                       | 4,180.00                       | 3,976.12                       | 21.82                     | 22.75                  | 81.45                            | -178.65                       | 5,008.29              | 4,598.75                        | 4,566.07                         | 32.68                              | 140.729                  |                           |         |
| 4,600.00                                                           | 4,401.48                       | 4,180.00                       | 3,976.12                       | 22.05                     | 22.75                  | 81.45                            | -178.65                       | 5,008.29              | 4,607.95                        | 4,575.14                         | 32.81                              | 140.439                  |                           |         |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report



|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

|                                                                    |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          |                                   |
|--------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|------------------------|--------------------|------------------------------|-------------------------------|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|-----------------------------------|
| <b>Offset Design:</b> Calloway Pad - Zella Calloway 001M - OH - OH |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          | <b>Offset Site Error:</b> 0.00 ft |
| <b>Survey Program:</b> 251-MWD SDI                                 |                            |                            |                            |                        |                    |                              |                               |                   |                             |                              |                                |                          | <b>Offset Well Error:</b> 0.00 ft |
| <b>Reference</b>                                                   |                            | <b>Offset</b>              |                            | <b>Semi Major Axis</b> |                    | <b>Highside Toolface (°)</b> | <b>Offset Wellbore Centre</b> |                   | <b>Distance</b>             |                              | <b>Minimum Separation (ft)</b> | <b>Separation Factor</b> | <b>Warning</b>                    |
| <b>Measured Depth (ft)</b>                                         | <b>Vertical Depth (ft)</b> | <b>Measured Depth (ft)</b> | <b>Vertical Depth (ft)</b> | <b>Reference (ft)</b>  | <b>Offset (ft)</b> |                              | <b>+N/-S (ft)</b>             | <b>+E/-W (ft)</b> | <b>Between Centres (ft)</b> | <b>Between Ellipses (ft)</b> |                                |                          |                                   |
| 4,700.00                                                           | 4,501.48                   | 4,180.00                   | 3,976.12                   | 22.29                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 4,619.29                    | 4,586.36                     | 32.93                          | 140.262                  |                                   |
| 4,800.00                                                           | 4,601.48                   | 4,180.00                   | 3,976.12                   | 22.53                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 4,632.77                    | 4,599.72                     | 33.05                          | 140.194 SF               |                                   |
| 4,900.00                                                           | 4,701.48                   | 4,180.00                   | 3,976.12                   | 22.78                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 4,648.35                    | 4,615.21                     | 33.15                          | 140.235                  |                                   |
| 5,000.00                                                           | 4,801.48                   | 4,180.00                   | 3,976.12                   | 23.03                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 4,666.03                    | 4,632.79                     | 33.24                          | 140.381                  |                                   |
| 5,100.00                                                           | 4,901.48                   | 4,180.00                   | 3,976.12                   | 23.28                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 4,685.78                    | 4,652.46                     | 33.32                          | 140.631                  |                                   |
| 5,200.00                                                           | 5,001.48                   | 4,180.00                   | 3,976.12                   | 23.53                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 4,707.57                    | 4,674.18                     | 33.39                          | 140.983                  |                                   |
| 5,300.00                                                           | 5,101.48                   | 4,180.00                   | 3,976.12                   | 23.79                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 4,731.37                    | 4,697.92                     | 33.45                          | 141.435                  |                                   |
| 5,400.00                                                           | 5,201.48                   | 4,180.00                   | 3,976.12                   | 24.05                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 4,757.16                    | 4,723.65                     | 33.51                          | 141.982                  |                                   |
| 5,500.00                                                           | 5,301.48                   | 4,180.00                   | 3,976.12                   | 24.31                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 4,784.89                    | 4,751.35                     | 33.55                          | 142.625                  |                                   |
| 5,600.00                                                           | 5,401.48                   | 4,180.00                   | 3,976.12                   | 24.57                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 4,814.55                    | 4,780.97                     | 33.58                          | 143.359                  |                                   |
| 5,700.00                                                           | 5,501.48                   | 4,180.00                   | 3,976.12                   | 24.84                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 4,846.09                    | 4,812.48                     | 33.61                          | 144.182                  |                                   |
| 5,800.00                                                           | 5,601.48                   | 4,180.00                   | 3,976.12                   | 25.11                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 4,879.47                    | 4,845.84                     | 33.63                          | 145.091                  |                                   |
| 5,900.00                                                           | 5,701.48                   | 4,180.00                   | 3,976.12                   | 25.38                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 4,914.66                    | 4,881.02                     | 33.64                          | 146.085                  |                                   |
| 6,000.00                                                           | 5,801.48                   | 4,180.00                   | 3,976.12                   | 25.65                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 4,951.62                    | 4,917.97                     | 33.65                          | 147.159                  |                                   |
| 6,100.00                                                           | 5,901.48                   | 4,180.00                   | 3,976.12                   | 25.93                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 4,990.31                    | 4,956.67                     | 33.65                          | 148.312                  |                                   |
| 6,200.00                                                           | 6,001.48                   | 4,180.00                   | 3,976.12                   | 26.20                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 5,030.70                    | 4,997.06                     | 33.64                          | 149.539                  |                                   |
| 6,300.00                                                           | 6,101.48                   | 4,180.00                   | 3,976.12                   | 26.48                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 5,072.73                    | 5,039.10                     | 33.63                          | 150.840                  |                                   |
| 6,400.00                                                           | 6,201.48                   | 4,180.00                   | 3,976.12                   | 26.76                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 5,116.37                    | 5,082.76                     | 33.61                          | 152.209                  |                                   |
| 6,500.00                                                           | 6,301.48                   | 4,180.00                   | 3,976.12                   | 27.05                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 5,161.58                    | 5,127.99                     | 33.59                          | 153.645                  |                                   |
| 6,600.00                                                           | 6,401.48                   | 4,180.00                   | 3,976.12                   | 27.33                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 5,208.32                    | 5,174.75                     | 33.57                          | 155.145                  |                                   |
| 6,700.00                                                           | 6,501.48                   | 4,180.00                   | 3,976.12                   | 27.62                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 5,256.55                    | 5,223.00                     | 33.54                          | 156.705                  |                                   |
| 6,800.00                                                           | 6,601.48                   | 4,180.00                   | 3,976.12                   | 27.90                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 5,306.22                    | 5,272.70                     | 33.52                          | 158.322                  |                                   |
| 6,883.52                                                           | 6,685.00                   | 4,180.00                   | 3,976.12                   | 28.15                  | 22.75              | 81.45                        | -178.65                       | 5,008.29          | 5,348.78                    | 5,315.29                     | 33.49                          | 159.715                  |                                   |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report

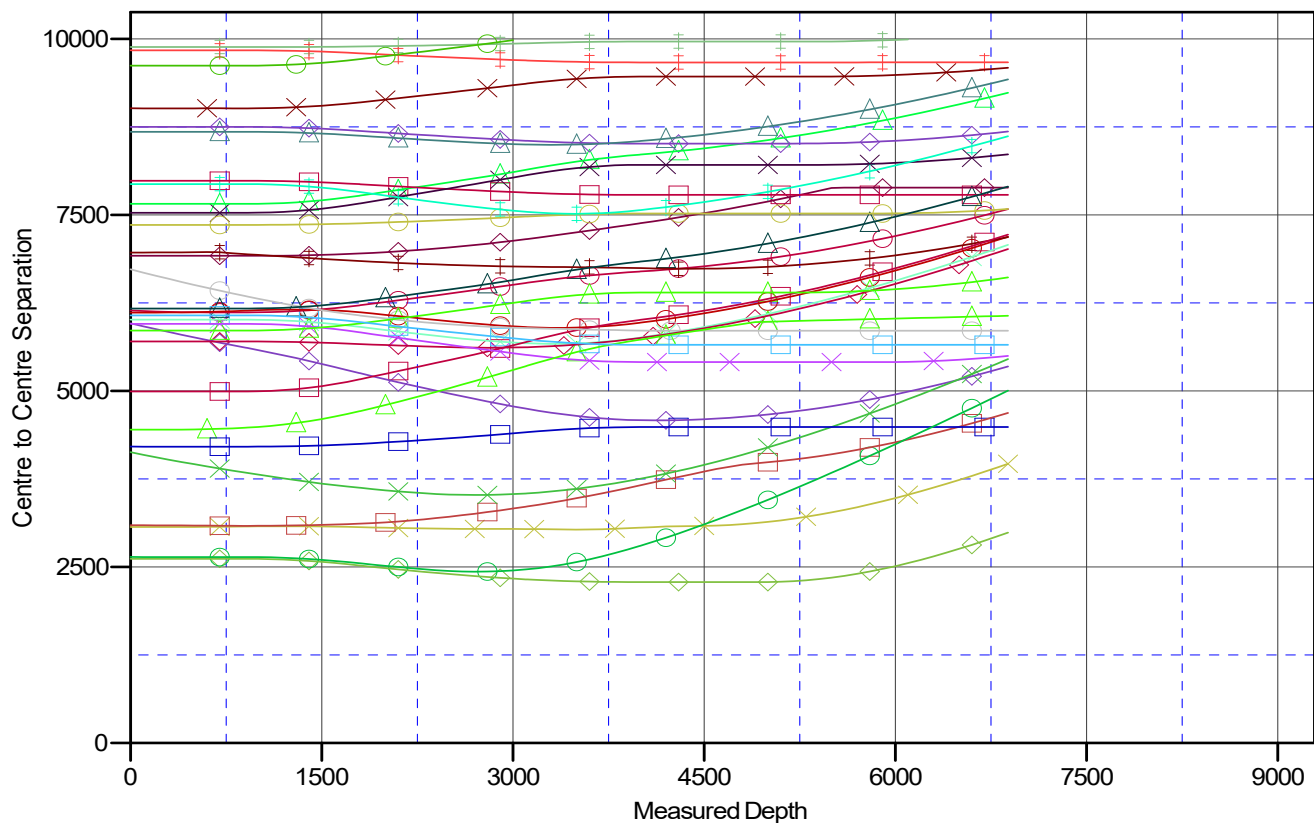


|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

Reference Depths are relative to GL 5692' 7 RKB 17' @ 5709.00ft (Dra  
Offset Depths are relative to Offset Datum  
Central Meridian is -107.8333334

Coordinates are relative to: Haynie 2N  
Coordinate System is US State Plane 1927 (Exact solution), New Mexico West 30  
Grid Convergence at Surface is: -0.10°

### Ladder Plot



### LEGEND

|                                 |                                 |                               |
|---------------------------------|---------------------------------|-------------------------------|
| Flood LS 001 (P/A), OH, OH V0   | Tilt 100, OH, OH V0             | Lester 001A, OH, OH V0        |
| Calloway Area 4, OH, Plan #1 V0 | Sloane Com 009F, OH, OH V0      | Calloway 001A, OH, OH V0      |
| Lester 001B, OH, OH V0          | Calloway 100S, OH, OH V0        | Barbara K 001, OH, OH V0      |
| Calloway 001 (P/A), OH, OH V0   | Zella Calloway 001M, OH, OH V0  | Turner A 100, OH, OH V0       |
| Federal 001, OH, OH V0          | Ella Rose 1 012, OH, OH V0      | Turner A 001A, OH, OH V0      |
| FJ Tilt 002, OH, OH V0          | Heaton 101, OH, OH V0           | FJ Tilt Com (P/A), OH, OH V0  |
| Lester 100S, OH, OH V0          | Calloway 2M, OH, Plan #1 V0     | Zella Calloway 001, OH, OH V0 |
| Federal 100A, OH, OH V0         | Calloway LS 003(P/A), OH, OH V0 | Turner A 001, OH, OH V0       |
| Alston 001 (P/A), OH, OH V0     | Lester 001, OH, OH V0           | Sexton 001 (P/A), OH, OH V0   |
| Wallace Gas Com 001A, OH, OH V0 | Rhoda Abrams 002N, OH, OH V0    |                               |
| Tilt 002B, OH, OH V0            | Calloway LS 002, OH, OH V0      |                               |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Lonestar Consulting, LLC

## Anticollision Report

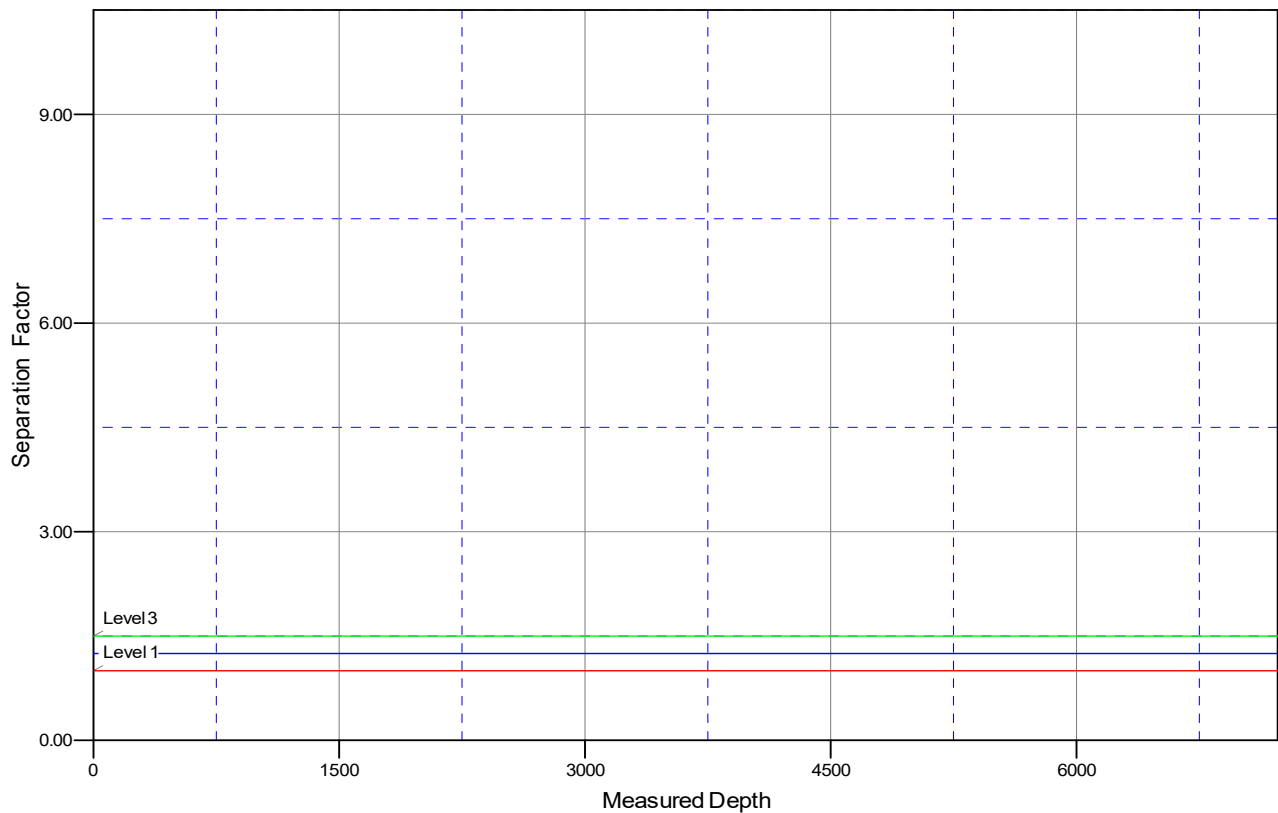


|                           |                                 |                                     |                                          |
|---------------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Company:</b>           | Hilcorp Energy - San Juan Basin | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Project:</b>           | San Juan, NM NAD27              | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Reference Site:</b>    | Calloway Pad                    | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site Error:</b>        | 0.00 ft                         | <b>North Reference:</b>             | True                                     |
| <b>Reference Well:</b>    | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Well Error:</b>        | 0.00 ft                         | <b>Output errors are at</b>         | 2.00 sigma                               |
| <b>Reference Wellbore</b> | OH                              | <b>Database:</b>                    | Grand Junction                           |
| <b>Reference Design:</b>  | Plan #1                         | <b>Offset TVD Reference:</b>        | Offset Datum                             |

Reference Depths are relative to GL 5692' 7 RKB 17' @ 5709.00ft (Dra  
Offset Depths are relative to Offset Datum  
Central Meridian is -107.8333334

Coordinates are relative to: Haynie 2N  
Coordinate System is US State Plane 1927 (Exact solution), New Mexico West 30  
Grid Convergence at Surface is: -0.10°

## Separation Factor Plot



### LEGEND

|                                 |                                 |                               |
|---------------------------------|---------------------------------|-------------------------------|
| Flood LS 001 (P/A), OH, OH V0   | Tlt 100, OH, OH V0              | Lester 001A, OH, OH V0        |
| Calloway Area 4, OH, Plan #1 V0 | Sloane Com 00F, OH, OH V0       | Calloway 001A, OH, OH V0      |
| Lester 001B, OH, OH V0          | Calloway 100S, OH, OH V0        | Barbara K 001, OH, OH V0      |
| Calloway 001 (P/A), OH, OH V0   | Zella Calloway 001M, OH, OH V0  | Turner A 100, OH, OH V0       |
| Federal 001, OH, OH V0          | Ella Rose 1 012, OH, OH V0      | Turner A 001A, OH, OH V0      |
| FJ Tlt 002, OH, OH V0           | Heaton 101, OH, OH V0           | FJ Tlt Com (P/A), OH, OH V0   |
| Lester 100S, OH, OH V0          | Calloway 2M, OH, Plan #1 V0     | Zella Calloway 001, OH, OH V0 |
| Federal 100A, OH, OH V0         | Calloway LS 003(P/A), OH, OH V0 | Turner A 001, OH, OH V0       |
| Alston 001 (P/A), OH, OH V0     | Lester 001, OH, OH V0           | Sexton 001 (P/A), OH, OH V0   |
| Wallace Gas Com 001A, OH, OH V0 | Rhoda Abrams 002N, OH, OH V0    |                               |
| Tlt 002B, OH, OH V0             | Calloway LS 002, OH, OH V0      |                               |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company: Hilcorp Energy - San Juan Basin  
 Project: San Juan, NM NAD27  
 Site: Calloway Pad  
 Well: Haynie 2N  
 Wellbore: OH  
 Design: Plan #1



## Well Details: Haynie 2N

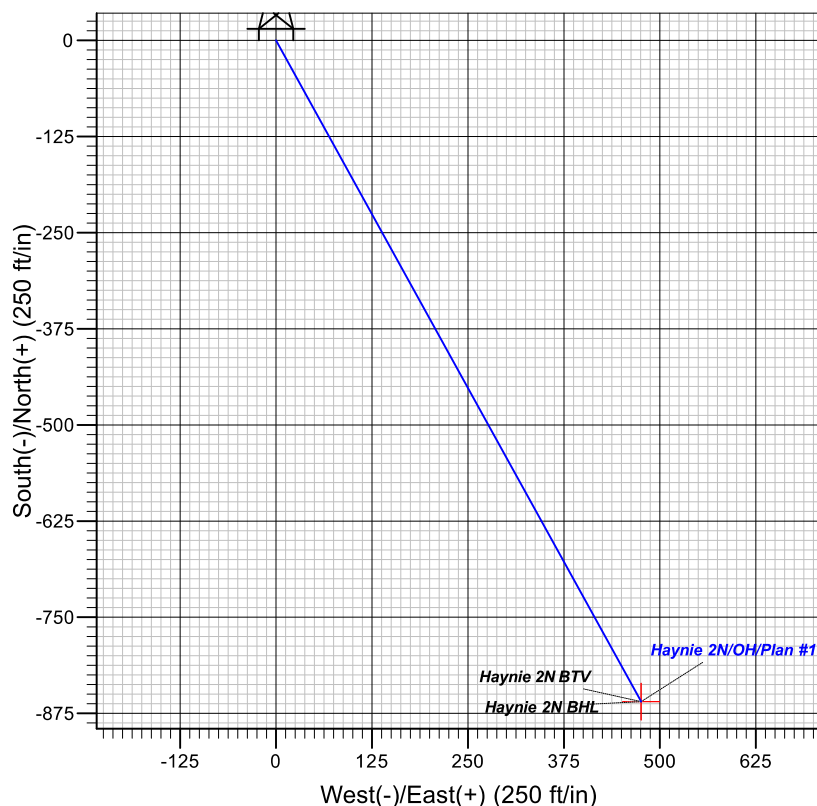
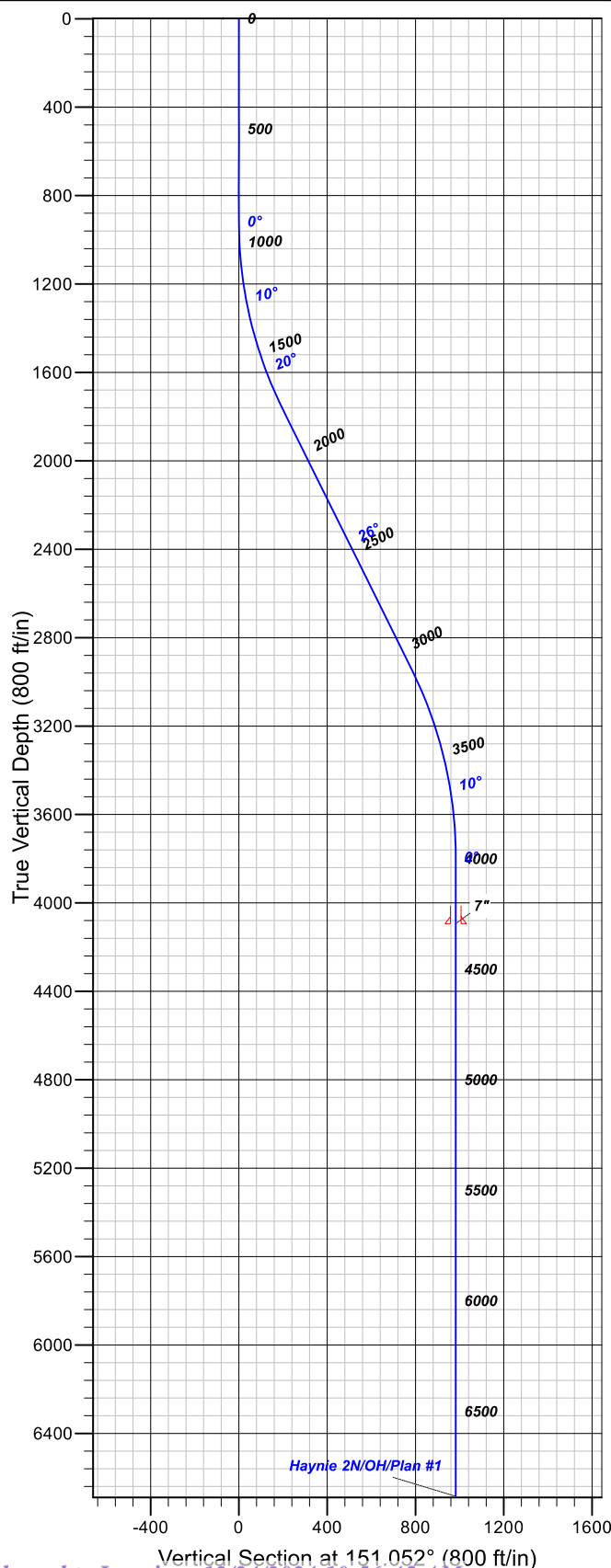
GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3)

| +N/-S | +E/-W | Northing   | Easting   | Latitude   | Longitude    | Slot |
|-------|-------|------------|-----------|------------|--------------|------|
| 0.00  | 0.00  | 2127211.20 | 453480.30 | 36.8459104 | -107.9923188 |      |



Azimuths to True North  
 Magnetic North: 8.48°

Magnetic Field  
 Strength: 49167.8nT  
 Dip Angle: 63.17°  
 Date: 9/26/2024  
 Model: HDGM2024



## FORMATION TOP DETAILS

| TVDPath | MDPath  | Formation            |
|---------|---------|----------------------|
| 705.00  | 705.00  | Ojo Alamo            |
| 818.00  | 818.00  | Kirtland             |
| 1774.00 | 1805.60 | Fruitland Coal       |
| 2197.00 | 2277.73 | Pictured Cliffs      |
| 2316.00 | 2410.56 | Lewis                |
| 2944.00 | 3111.50 | Huerfano Bentonite   |
| 3274.00 | 3465.83 | Chacra               |
| 3791.00 | 3989.52 | Mesaverde Cliffhouse |
| 3994.00 | 4192.52 | Menefee              |
| 4494.00 | 4692.52 | Point Lookout        |
| 4853.00 | 5051.52 | Mancos               |
| 5762.00 | 5960.52 | Gallup               |
| 6012.00 | 6210.52 | Basal Niobrara       |
| 6171.00 | 6369.52 | Juana Lopez          |
| 6502.00 | 6700.52 | Greenhorn            |
| 6560.00 | 6758.52 | Graneros             |
| 6614.00 | 6812.52 | Two Wells            |

## Plan: Plan #1

11:06, October 03 2024  
 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 |
|---------|--------|--------|------|
| 4094.00 | 292.52 | 7"     | 7.00 |
| 6883.00 |        | 4 1/2" | 4.50 |

## 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   |
| 918.00  | 0.00  | 0.000   | 918.00  | 0.00    | 0.00   | 0.00 | 0.00   | 0.00   |
| 1797.05 | 26.37 | 151.052 | 1766.34 | -173.92 | 96.20  | 3.00 | 151.05 | 198.75 |
| 3114.47 | 26.37 | 151.052 | 2946.66 | -685.99 | 379.43 | 0.00 | 0.00   | 783.94 |
| 3993.52 | 0.00  | 0.000   | 3795.00 | -859.91 | 475.63 | 3.00 | 180.00 | 982.69 |
| 6883.52 | 0.00  | 0.000   | 6685.00 | -859.91 | 475.63 | 0.00 | 0.00   | 982.69 |

## DESIGN TARGET DETAILS

| Name                      | TVD     | +N/-S   | +E/-W  | Northing   | Easting   | Latitude   | Longitude    |
|---------------------------|---------|---------|--------|------------|-----------|------------|--------------|
| Haynie 2N BTV             | 3795.00 | -859.91 | 475.63 | 2126350.50 | 453954.50 | 36.8435483 | -107.9906933 |
| - plan hits target center |         |         |        |            |           |            |              |
| Haynie 2N BHL             | 6685.00 | -859.91 | 475.63 | 2126350.50 | 453954.50 | 36.8435483 | -107.9906933 |
| - plan hits target center |         |         |        |            |           |            |              |



# Hilcorp Energy - San Juan Basin

San Juan, NM NAD27

Calloway Pad

Haynie 2N

OH

Plan: Plan #1

## Standard Planning Report

03 October, 2024





Lonestar Consulting, LLC  
Planning Report



|           |                                 |                              |                                          |
|-----------|---------------------------------|------------------------------|------------------------------------------|
| Database: | Grand Junction                  | Local Co-ordinate Reference: | Well Haynie 2N                           |
| Company:  | Hilcorp Energy - San Juan Basin | TVD Reference:               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| Project:  | San Juan, NM NAD27              | MD Reference:                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| Site:     | Calloway Pad                    | North Reference:             | True                                     |
| Well:     | Haynie 2N                       | Survey Calculation Method:   | Minimum Curvature                        |
| Wellbore: | OH                              |                              |                                          |
| Design:   | Plan #1                         |                              |                                          |

|             |                                      |               |                |
|-------------|--------------------------------------|---------------|----------------|
| 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                  |     | Calloway Pad |              |              |            |              |
|-----------------------|-----|--------------|--------------|--------------|------------|--------------|
| Site Position:        |     | Northing:    | 2,130,747.80 | usft         | Latitude:  | 36.8556500   |
| From:                 | Map | Easting:     | 459,353.00   | usft         | Longitude: | -107.9722659 |
| Position Uncertainty: |     | 0.00         | ft           | Slot Radius: | 13.20      | in           |

|                      |           |         |                     |                   |               |              |
|----------------------|-----------|---------|---------------------|-------------------|---------------|--------------|
| Well                 | Haynie 2N |         |                     |                   |               |              |
| Well Position        | +N/-S     | 0.00 ft | Northing:           | 2,127,211.20 usft | Latitude:     | 36.8459103   |
|                      | +E/-W     | 0.00 ft | Easting:            | 453,480.30 usft   | Longitude:    | -107.9923188 |
| Position Uncertainty |           | 0.00 ft | Wellhead Elevation: | ft                | Ground Level: | 5,692.00 ft  |
| Grid Convergence:    | -0.10 °   |         |                     |                   |               |              |

|           |            |             |                 |               |                     |
|-----------|------------|-------------|-----------------|---------------|---------------------|
| Wellbore  | OH         |             |                 |               |                     |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|           | HDGM2024   | 9/26/2024   | 8.48            | 63.17         | 49,167.80000000     |

|                   |                          |               |               |                  |
|-------------------|--------------------------|---------------|---------------|------------------|
| Design            | Plan #1                  |               |               |                  |
| Audit Notes:      |                          |               |               |                  |
| Version:          | Phase:                   | PLAN          | Tie On Depth: | 0.00             |
| Vertical Section: | Depth From (TVD)<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Direction<br>(°) |
|                   | 0.00                     | 0.00          | 0.00          | 151.052          |

|                          |               |                       |                 |         |
|--------------------------|---------------|-----------------------|-----------------|---------|
| Plan Survey Tool Program | Date          | 10/1/2024             |                 |         |
| Depth From (ft)          | Depth To (ft) | Survey (Wellbore)     | Tool Name       | Remarks |
| 1                        | 0.00          | 6,883.52 Plan #1 (OH) | MWD+HDGM        |         |
|                          |               |                       | OWSG MWD + HDGM |         |

|                     |                 |             |                     |            |            |                         |                        |                       |         |               |
|---------------------|-----------------|-------------|---------------------|------------|------------|-------------------------|------------------------|-----------------------|---------|---------------|
| 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    |               |
| 1,797.05            | 26.37           | 151.052     | 1,766.34            | -173.92    | 96.20      | 3.00                    | 3.00                   | 0.00                  | 151.05  |               |
| 3,114.47            | 26.37           | 151.052     | 2,946.66            | -685.99    | 379.43     | 0.00                    | 0.00                   | 0.00                  | 0.00    |               |
| 3,993.52            | 0.00            | 0.000       | 3,795.00            | -859.91    | 475.63     | 3.00                    | -3.00                  | 0.00                  | 180.00  | Haynie 2N BTV |
| 6,883.52            | 0.00            | 0.000       | 6,685.00            | -859.91    | 475.63     | 0.00                    | 0.00                   | 0.00                  | 0.00    | Haynie 2N BHL |



## Lonestar Consulting, LLC

## Planning Report



|                  |                                 |                                     |                                          |
|------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Database:</b> | Grand Junction                  | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Company:</b>  | Hilcorp Energy - San Juan Basin | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Project:</b>  | San Juan, NM NAD27              | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site:</b>     | Calloway Pad                    | <b>North Reference:</b>             | True                                     |
| <b>Well:</b>     | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Wellbore:</b> | OH                              |                                     |                                          |
| <b>Design:</b>   | Plan #1                         |                                     |                                          |

| 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            | 151.052     | 999.97              | -1.54      | 0.85       | 1.76                  | 3.00                    | 3.00                   | 0.00                  |
| 1,100.00            | 5.46            | 151.052     | 1,099.72            | -7.58      | 4.19       | 8.67                  | 3.00                    | 3.00                   | 0.00                  |
| 1,200.00            | 8.46            | 151.052     | 1,198.98            | -18.19     | 10.06      | 20.78                 | 3.00                    | 3.00                   | 0.00                  |
| 1,300.00            | 11.46           | 151.052     | 1,297.46            | -33.32     | 18.43      | 38.08                 | 3.00                    | 3.00                   | 0.00                  |
| 1,400.00            | 14.46           | 151.052     | 1,394.90            | -52.94     | 29.28      | 60.50                 | 3.00                    | 3.00                   | 0.00                  |
| 1,500.00            | 17.46           | 151.052     | 1,491.03            | -77.00     | 42.59      | 87.99                 | 3.00                    | 3.00                   | 0.00                  |
| 1,600.00            | 20.46           | 151.052     | 1,585.60            | -105.43    | 58.31      | 120.48                | 3.00                    | 3.00                   | 0.00                  |
| 1,700.00            | 23.46           | 151.052     | 1,678.33            | -138.15    | 76.41      | 157.87                | 3.00                    | 3.00                   | 0.00                  |
| 1,797.05            | 26.37           | 151.052     | 1,766.34            | -173.92    | 96.20      | 198.75                | 3.00                    | 3.00                   | 0.00                  |
| 1,800.00            | 26.37           | 151.052     | 1,768.98            | -175.07    | 96.83      | 200.06                | 0.00                    | 0.00                   | 0.00                  |
| 1,900.00            | 26.37           | 151.052     | 1,858.58            | -213.94    | 118.33     | 244.48                | 0.00                    | 0.00                   | 0.00                  |
| 2,000.00            | 26.37           | 151.052     | 1,948.17            | -252.81    | 139.83     | 288.90                | 0.00                    | 0.00                   | 0.00                  |
| 2,100.00            | 26.37           | 151.052     | 2,037.76            | -291.68    | 161.33     | 333.32                | 0.00                    | 0.00                   | 0.00                  |
| 2,200.00            | 26.37           | 151.052     | 2,127.36            | -330.54    | 182.83     | 377.74                | 0.00                    | 0.00                   | 0.00                  |
| 2,300.00            | 26.37           | 151.052     | 2,216.95            | -369.41    | 204.33     | 422.16                | 0.00                    | 0.00                   | 0.00                  |
| 2,400.00            | 26.37           | 151.052     | 2,306.54            | -408.28    | 225.83     | 466.58                | 0.00                    | 0.00                   | 0.00                  |
| 2,500.00            | 26.37           | 151.052     | 2,396.14            | -447.15    | 247.33     | 510.99                | 0.00                    | 0.00                   | 0.00                  |
| 2,600.00            | 26.37           | 151.052     | 2,485.73            | -486.02    | 268.83     | 555.41                | 0.00                    | 0.00                   | 0.00                  |
| 2,700.00            | 26.37           | 151.052     | 2,575.32            | -524.89    | 290.33     | 599.83                | 0.00                    | 0.00                   | 0.00                  |
| 2,800.00            | 26.37           | 151.052     | 2,664.92            | -563.76    | 311.83     | 644.25                | 0.00                    | 0.00                   | 0.00                  |
| 2,900.00            | 26.37           | 151.052     | 2,754.51            | -602.63    | 333.32     | 688.67                | 0.00                    | 0.00                   | 0.00                  |
| 3,000.00            | 26.37           | 151.052     | 2,844.10            | -641.50    | 354.82     | 733.09                | 0.00                    | 0.00                   | 0.00                  |
| 3,100.00            | 26.37           | 151.052     | 2,933.70            | -680.37    | 376.32     | 777.51                | 0.00                    | 0.00                   | 0.00                  |
| 3,114.47            | 26.37           | 151.052     | 2,946.66            | -685.99    | 379.43     | 783.94                | 0.00                    | 0.00                   | 0.00                  |
| 3,200.00            | 23.81           | 151.052     | 3,024.12            | -717.72    | 396.99     | 820.20                | 3.00                    | -3.00                  | 0.00                  |
| 3,300.00            | 20.81           | 151.052     | 3,116.62            | -750.93    | 415.35     | 858.15                | 3.00                    | -3.00                  | 0.00                  |
| 3,400.00            | 17.81           | 151.052     | 3,210.99            | -779.86    | 431.35     | 891.20                | 3.00                    | -3.00                  | 0.00                  |
| 3,500.00            | 14.81           | 151.052     | 3,306.96            | -804.42    | 444.94     | 919.28                | 3.00                    | -3.00                  | 0.00                  |
| 3,600.00            | 11.81           | 151.052     | 3,404.26            | -824.56    | 456.08     | 942.29                | 3.00                    | -3.00                  | 0.00                  |
| 3,700.00            | 8.81            | 151.052     | 3,502.64            | -840.21    | 464.74     | 960.18                | 3.00                    | -3.00                  | 0.00                  |
| 3,800.00            | 5.81            | 151.052     | 3,601.81            | -851.34    | 470.89     | 972.89                | 3.00                    | -3.00                  | 0.00                  |
| 3,900.00            | 2.81            | 151.052     | 3,701.52            | -857.91    | 474.52     | 980.40                | 3.00                    | -3.00                  | 0.00                  |
| 3,993.52            | 0.00            | 0.000       | 3,795.00            | -859.91    | 475.63     | 982.69                | 3.00                    | -3.00                  | 0.00                  |
| 4,000.00            | 0.00            | 0.000       | 3,801.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |
| 4,100.00            | 0.00            | 0.000       | 3,901.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |
| 4,200.00            | 0.00            | 0.000       | 4,001.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |
| 4,300.00            | 0.00            | 0.000       | 4,101.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |
| 4,400.00            | 0.00            | 0.000       | 4,201.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |
| 4,500.00            | 0.00            | 0.000       | 4,301.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |
| 4,600.00            | 0.00            | 0.000       | 4,401.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |
| 4,700.00            | 0.00            | 0.000       | 4,501.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |
| 4,800.00            | 0.00            | 0.000       | 4,601.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |
| 4,900.00            | 0.00            | 0.000       | 4,701.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |



## Lonestar Consulting, LLC

## Planning Report



|                  |                                 |                                     |                                          |
|------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Database:</b> | Grand Junction                  | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Company:</b>  | Hilcorp Energy - San Juan Basin | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Project:</b>  | San Juan, NM NAD27              | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site:</b>     | Calloway Pad                    | <b>North Reference:</b>             | True                                     |
| <b>Well:</b>     | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Wellbore:</b> | OH                              |                                     |                                          |
| <b>Design:</b>   | Plan #1                         |                                     |                                          |

| 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       | 4,801.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,100.00            | 0.00            | 0.000       | 4,901.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,200.00            | 0.00            | 0.000       | 5,001.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,300.00            | 0.00            | 0.000       | 5,101.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,400.00            | 0.00            | 0.000       | 5,201.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,500.00            | 0.00            | 0.000       | 5,301.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,600.00            | 0.00            | 0.000       | 5,401.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,700.00            | 0.00            | 0.000       | 5,501.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,800.00            | 0.00            | 0.000       | 5,601.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,900.00            | 0.00            | 0.000       | 5,701.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,000.00            | 0.00            | 0.000       | 5,801.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,100.00            | 0.00            | 0.000       | 5,901.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,200.00            | 0.00            | 0.000       | 6,001.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,300.00            | 0.00            | 0.000       | 6,101.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,400.00            | 0.00            | 0.000       | 6,201.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,500.00            | 0.00            | 0.000       | 6,301.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,600.00            | 0.00            | 0.000       | 6,401.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,700.00            | 0.00            | 0.000       | 6,501.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,800.00            | 0.00            | 0.000       | 6,601.48            | -859.91    | 475.63     | 982.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,883.52            | 0.00            | 0.000       | 6,685.00            | -859.91    | 475.63     | 982.69                | 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                   |               |              |          |            |            |                 |                |            |              |
| Haynie 2N BTV             | 0.00          | 0.000        | 3,795.00 | -859.91    | 475.63     | 2,126,350.50    | 453,954.50     | 36.8435483 | -107.9906934 |
| - plan hits target center |               |              |          |            |            |                 |                |            |              |
| - Point                   |               |              |          |            |            |                 |                |            |              |
| Haynie 2N BHL             | 0.00          | 0.000        | 6,685.00 | -859.91    | 475.63     | 2,126,350.50    | 453,954.50     | 36.8435483 | -107.9906934 |
| - plan hits target center |               |              |          |            |            |                 |                |            |              |
| - Point                   |               |              |          |            |            |                 |                |            |              |

| Casing Points       |                     |        |                      |                    |  |
|---------------------|---------------------|--------|----------------------|--------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name   | Casing Diameter (in) | Hole Diameter (in) |  |
|                     | 6,883.00            | 4 1/2" | 4.50                 | 6.25               |  |
| 4,292.52            | 4,094.00            | 7"     | 7.00                 | 8.75               |  |



**Lonestar Consulting, LLC**  
Planning Report



|                  |                                 |                                     |                                          |
|------------------|---------------------------------|-------------------------------------|------------------------------------------|
| <b>Database:</b> | Grand Junction                  | <b>Local Co-ordinate Reference:</b> | Well Haynie 2N                           |
| <b>Company:</b>  | Hilcorp Energy - San Juan Basin | <b>TVD Reference:</b>               | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Project:</b>  | San Juan, NM NAD27              | <b>MD Reference:</b>                | GL 5692' 7 RKB 17' @ 5709.00ft (Drake 3) |
| <b>Site:</b>     | Calloway Pad                    | <b>North Reference:</b>             | True                                     |
| <b>Well:</b>     | Haynie 2N                       | <b>Survey Calculation Method:</b>   | Minimum Curvature                        |
| <b>Wellbore:</b> | OH                              |                                     |                                          |
| <b>Design:</b>   | Plan #1                         |                                     |                                          |

| Formations          |                     |                      |           |         |                   |  |
|---------------------|---------------------|----------------------|-----------|---------|-------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name                 | Lithology | Dip (°) | Dip Direction (°) |  |
| 705.00              | 705.00              | Ojo Alamo            |           | 0.00    | 0.000             |  |
| 818.00              | 818.00              | Kirtland             |           | 0.00    | 0.000             |  |
| 1,805.60            | 1,774.00            | Fruitland Coal       |           | 0.00    | 0.000             |  |
| 2,277.73            | 2,197.00            | Pictured Cliffs      |           | 0.00    | 0.000             |  |
| 2,410.56            | 2,316.00            | Lewis                |           | 0.00    | 0.000             |  |
| 3,111.50            | 2,944.00            | Huerfano Bentonite   |           | 0.00    | 0.000             |  |
| 3,465.83            | 3,274.00            | Chacra               |           | 0.00    | 0.000             |  |
| 3,989.52            | 3,791.00            | Mesaverde Cliffhouse |           | 0.00    | 0.000             |  |
| 4,192.52            | 3,994.00            | Menefee              |           | 0.00    | 0.000             |  |
| 4,692.52            | 4,494.00            | Point Lookout        |           | 0.00    | 0.000             |  |
| 5,051.52            | 4,853.00            | Mancos               |           | 0.00    | 0.000             |  |
| 5,960.52            | 5,762.00            | Gallup               |           | 0.00    | 0.000             |  |
| 6,210.52            | 6,012.00            | Basal Niobrara       |           | 0.00    | 0.000             |  |
| 6,369.52            | 6,171.00            | Juana Lopez          |           | 0.00    | 0.000             |  |
| 6,700.52            | 6,502.00            | Greenhorn            |           | 0.00    | 0.000             |  |
| 6,758.52            | 6,560.00            | Graneros             |           | 0.00    | 0.000             |  |
| 6,812.52            | 6,614.00            | Two Wells            |           | 0.00    | 0.000             |  |

|                                                          |                                                                                                         |                                     |                                                       |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------|
| C-102<br><br>Submit Electronically<br>Via OCD Permitting | State of New Mexico<br>Energy, Minerals & Natural Resources Department<br><br>OIL CONSERVATION DIVISION | Revised July 9, 2024                |                                                       |
|                                                          |                                                                                                         | Submittal<br>Type                   | <input checked="" type="checkbox"/> Initial Submittal |
|                                                          |                                                                                                         |                                     | <input type="checkbox"/> Amended Report               |
|                                                          |                                                                                                         | <input type="checkbox"/> As Drilled |                                                       |

WELL LOCATION INFORMATION

|                                                                                                                                                        |                                         |                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| API Number<br><b>30-045-38408</b>                                                                                                                      | Pool Code<br>72319                      | Pool Name<br>BLANCO MESAVERDE                                                                                                                          |
| Property Code<br><b>321941</b>                                                                                                                         | Property Name<br>HAYNIE                 | Well Number<br>2N                                                                                                                                      |
| OGRID No.<br>372171                                                                                                                                    | Operator Name<br>HILCORP ENERGY COMPANY | Ground Level Elevation<br>5784'                                                                                                                        |
| Surface Owner: <input type="checkbox"/> State <input checked="" type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal |                                         | Mineral Owner: <input type="checkbox"/> State <input checked="" type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal |

Surface Location

|         |              |                 |              |          |                                  |                                  |                          |                             |                    |
|---------|--------------|-----------------|--------------|----------|----------------------------------|----------------------------------|--------------------------|-----------------------------|--------------------|
| UL<br>B | Section<br>4 | Township<br>30N | Range<br>11W | Lot<br>2 | Feet from N/S Line<br>762' NORTH | Feet from E/W Line<br>1680' EAST | Latitude<br>36.846129 °N | Longitude<br>-107.992951 °W | County<br>SAN JUAN |
|---------|--------------|-----------------|--------------|----------|----------------------------------|----------------------------------|--------------------------|-----------------------------|--------------------|

Bottom Hole Location

|         |              |                 |              |     |                                   |                                  |                          |                             |                    |
|---------|--------------|-----------------|--------------|-----|-----------------------------------|----------------------------------|--------------------------|-----------------------------|--------------------|
| UL<br>H | Section<br>4 | Township<br>30N | Range<br>11W | Lot | Feet from N/S Line<br>1697' NORTH | Feet from E/W Line<br>1196' EAST | Latitude<br>36.843552 °N | Longitude<br>-107.991317 °W | County<br>SAN JUAN |
|---------|--------------|-----------------|--------------|-----|-----------------------------------|----------------------------------|--------------------------|-----------------------------|--------------------|

|                           |                                                         |                                   |                                                                                                               |                                                                                                 |                         |
|---------------------------|---------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------|
| Dedicated Acres<br>319.80 | Penetrated Spacing Unit:<br>N/2 - Section 4, T30N, R11W | Infill or Defining Well<br>Infill | Defining Well API<br>30-045-24181                                                                             | Overlapping Spacing Unit<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Consolidation Code<br>C |
| Order Numbers             |                                                         |                                   | Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                                                                 |                         |

Kick Off Point (KOP)

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

First Take Point (FTP)

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

Last Take Point (LTP)

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

|                                           |                                                                                                                                            |                                 |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| Unitized Area or Area of Uniform Interest | Spacing Unit Type<br><input type="checkbox"/> Horizontal <input type="checkbox"/> Vertical <input checked="" type="checkbox"/> Directional | Ground Floor Elevation<br>5784' |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|

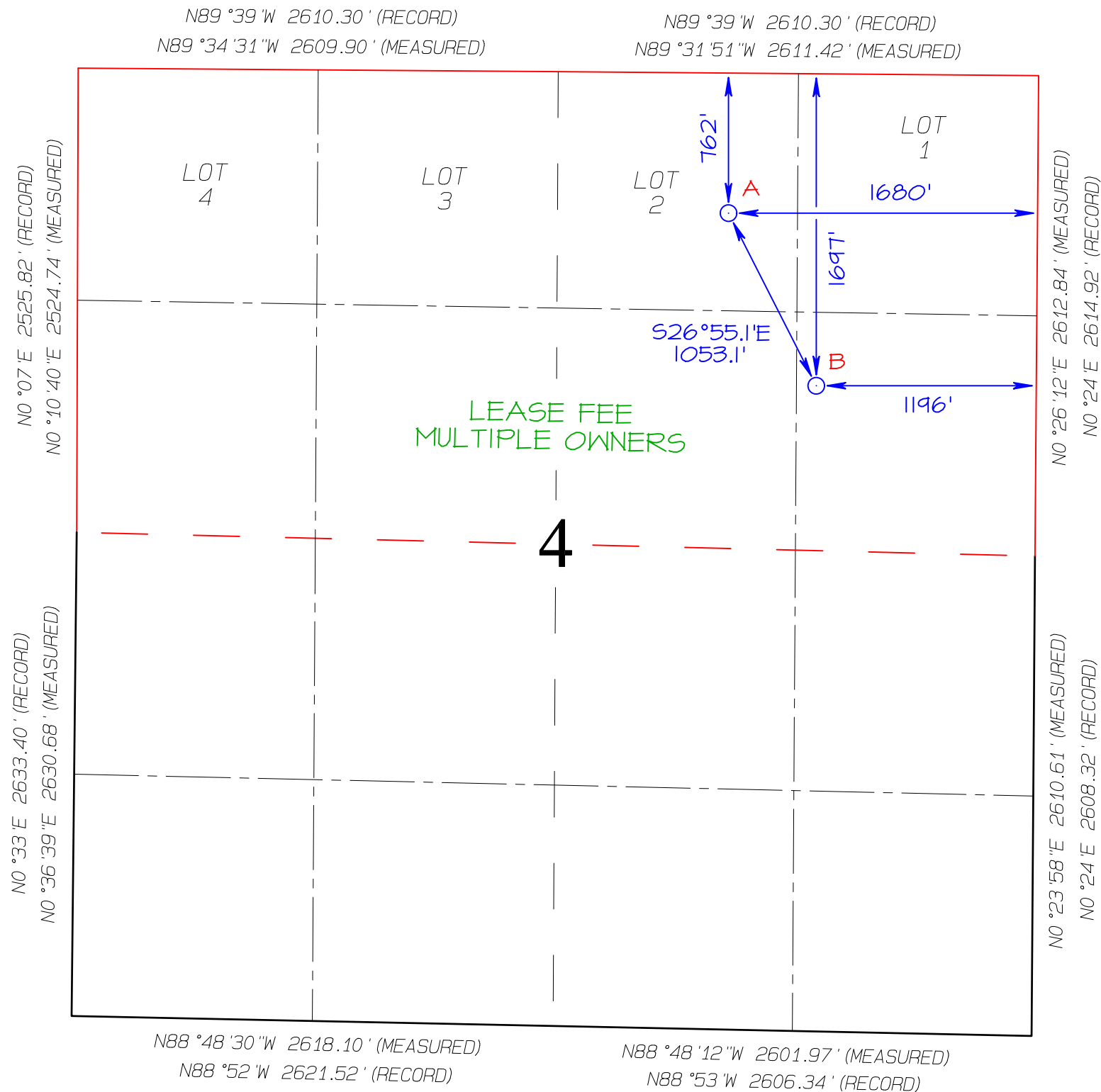
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</p> <p><b>Cherylene Weston</b><br/>Signature<br/><br/>Cherylene Weston, Operations/Regulatory Tech-Sr.<br/>Printed Name<br/><br/>cweston@hilcorp.com<br/>E-mail Address</p> <p>12/10/2024<br/>Date</p> | <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p></p> <p><b>JASON C. EDWARDS</b><br/>Signature and Seal of Professional Surveyor<br/><br/>Certificate Number 15269<br/>Date of Survey NOVEMBER 11, 2024</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

SURFACE LOCATION (A)  
762' FNL 1680' FEL  
SECTION 4, T30N, R11W  
LAT 36.846125 °N  
LONG -107.992328 °W  
DATUM: NAD1927

LAT 36.846129 °N  
LONG -107.992951 °W  
DATUM: NAD1983

BOTTOM-HOLE LOC (B)  
1697' FNL 1196' FEL  
SECTION 4, T30N, R11W  
LAT 36.843548 °N  
LONG -107.990693 °W  
DATUM: NAD1927

LAT 36.843552 °N  
LONG -107.991317 °W  
DATUM: NAD1983



|                                                          |                                                                                                         |                                     |                                                       |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------|
| C-102<br><br>Submit Electronically<br>Via OCD Permitting | State of New Mexico<br>Energy, Minerals & Natural Resources Department<br><br>OIL CONSERVATION DIVISION | Revised July 9, 2024                |                                                       |
|                                                          |                                                                                                         | Submittal<br>Type                   | <input checked="" type="checkbox"/> Initial Submittal |
|                                                          |                                                                                                         |                                     | <input type="checkbox"/> Amended Report               |
|                                                          |                                                                                                         | <input type="checkbox"/> As Drilled |                                                       |

WELL LOCATION INFORMATION

|                                                                                                                                                        |                                         |                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| API Number<br><b>30-045-38408</b>                                                                                                                      | Pool Code<br>71599                      | Pool Name<br>BASIN DAKOTA                                                                                                                              |
| Property Code<br>321941                                                                                                                                | Property Name<br>HAYNIE                 | Well Number<br>2N                                                                                                                                      |
| OGRID No.<br>372171                                                                                                                                    | Operator Name<br>HILCORP ENERGY COMPANY | Ground Level Elevation<br>5784'                                                                                                                        |
| Surface Owner: <input type="checkbox"/> State <input checked="" type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal |                                         | Mineral Owner: <input type="checkbox"/> State <input checked="" type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal |

Surface Location

|         |              |                 |              |          |                                  |                                  |                          |                             |                    |
|---------|--------------|-----------------|--------------|----------|----------------------------------|----------------------------------|--------------------------|-----------------------------|--------------------|
| UL<br>B | Section<br>4 | Township<br>30N | Range<br>11W | Lot<br>2 | Feet from N/S Line<br>762' NORTH | Feet from E/W Line<br>1680' EAST | Latitude<br>36.846129 °N | Longitude<br>-107.992951 °W | County<br>SAN JUAN |
|---------|--------------|-----------------|--------------|----------|----------------------------------|----------------------------------|--------------------------|-----------------------------|--------------------|

Bottom Hole Location

|         |              |                 |              |     |                                   |                                  |                          |                             |                    |
|---------|--------------|-----------------|--------------|-----|-----------------------------------|----------------------------------|--------------------------|-----------------------------|--------------------|
| UL<br>H | Section<br>4 | Township<br>30N | Range<br>11W | Lot | Feet from N/S Line<br>1697' NORTH | Feet from E/W Line<br>1196' EAST | Latitude<br>36.843552 °N | Longitude<br>-107.991317 °W | County<br>SAN JUAN |
|---------|--------------|-----------------|--------------|-----|-----------------------------------|----------------------------------|--------------------------|-----------------------------|--------------------|

|                           |                                                         |                                   |                                                                                                               |                                                                                                 |                         |
|---------------------------|---------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------|
| Dedicated Acres<br>319.80 | Penetrated Spacing Unit:<br>N/2 - Section 4, T30N, R11W | Infill or Defining Well<br>Infill | Defining Well API<br>30-045-24181                                                                             | Overlapping Spacing Unit<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Consolidation Code<br>C |
| Order Numbers             |                                                         |                                   | Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                                                                 |                         |

Kick Off Point (KOP)

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

First Take Point (FTP)

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

Last Take Point (LTP)

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

|                                           |                                                                                                                                            |                                 |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| Unitized Area or Area of Uniform Interest | Spacing Unit Type<br><input type="checkbox"/> Horizontal <input type="checkbox"/> Vertical <input checked="" type="checkbox"/> Directional | Ground Floor Elevation<br>5784' |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|

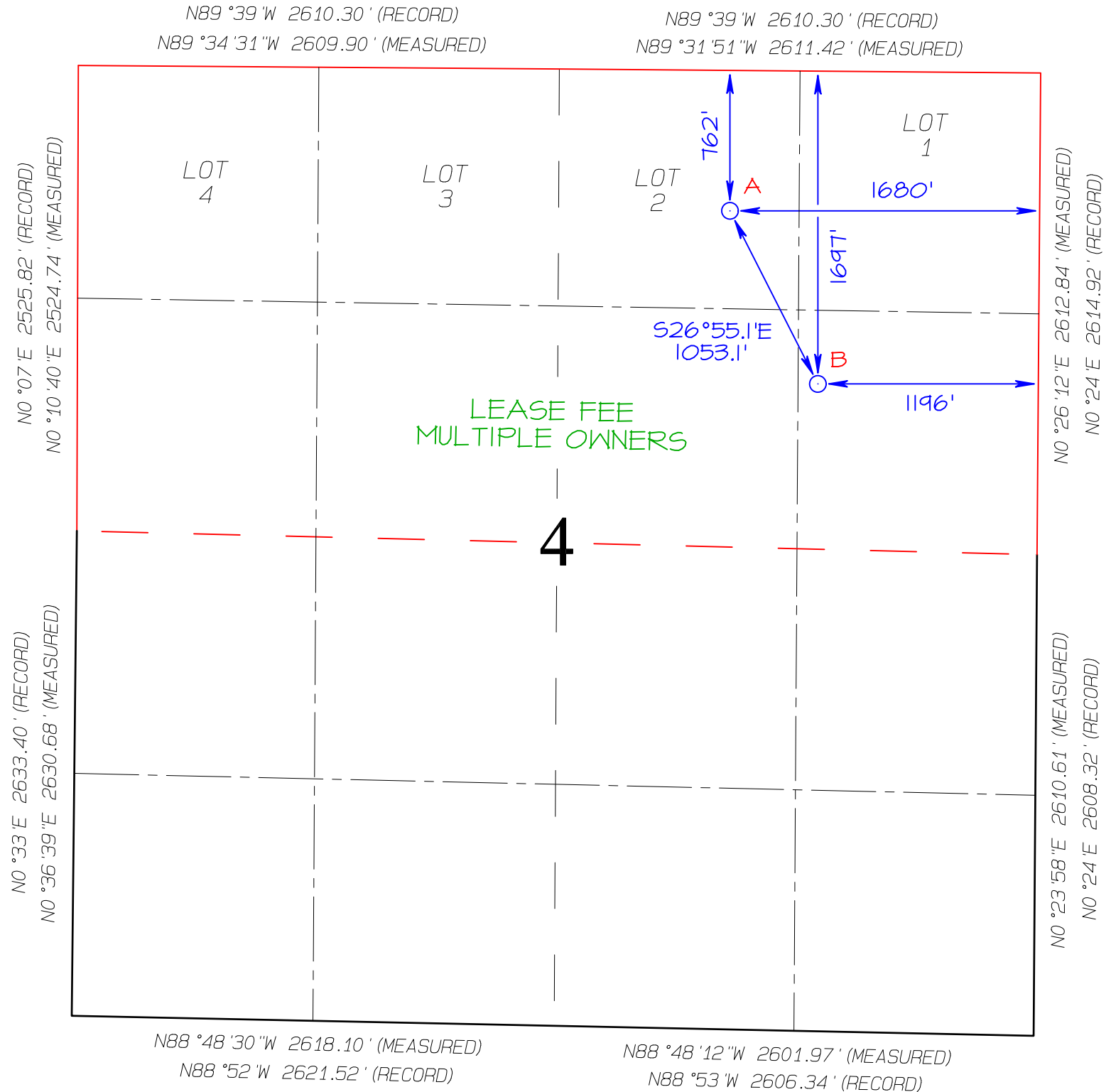
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                                  |
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| Certificate Number 15269                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Date of Survey NOVEMBER 11, 2024                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                                  |

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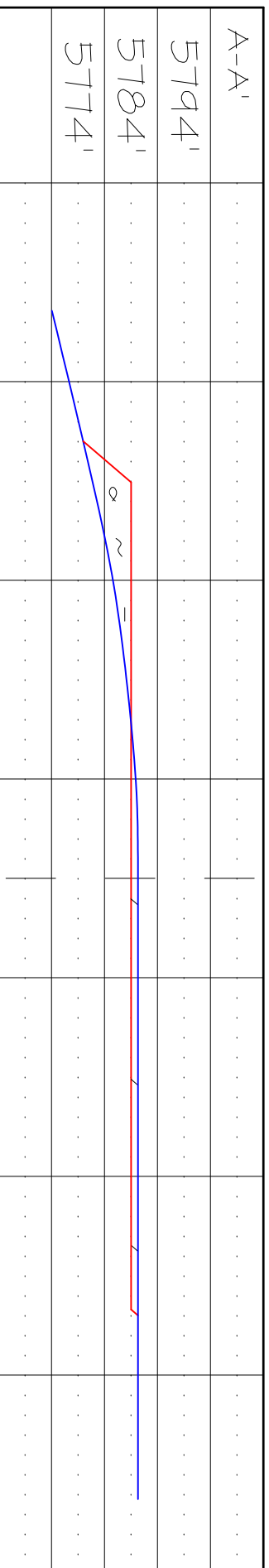


**HILCORP ENERGY COMPANY HAYNIE #2N  
762' FNL & 1680' FEL, SECTION 4, T30N, R11W, NMPM  
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 5784'**

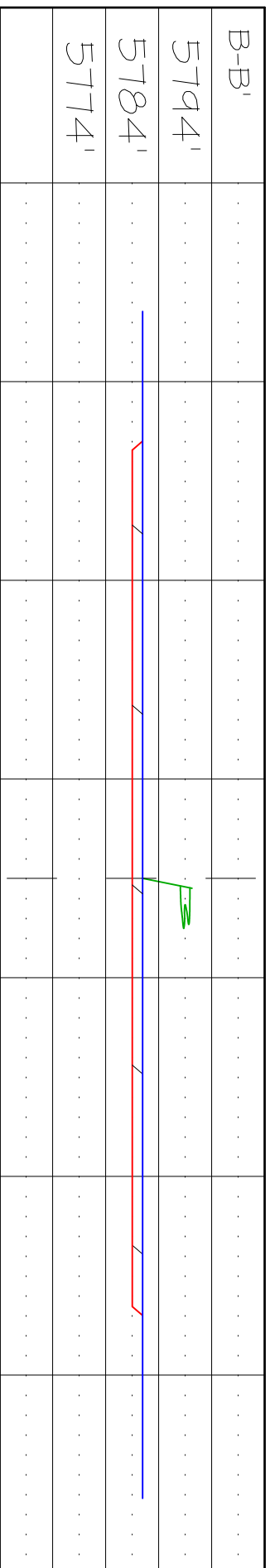
HORIZONTAL SCALE 1"=40'

C/L

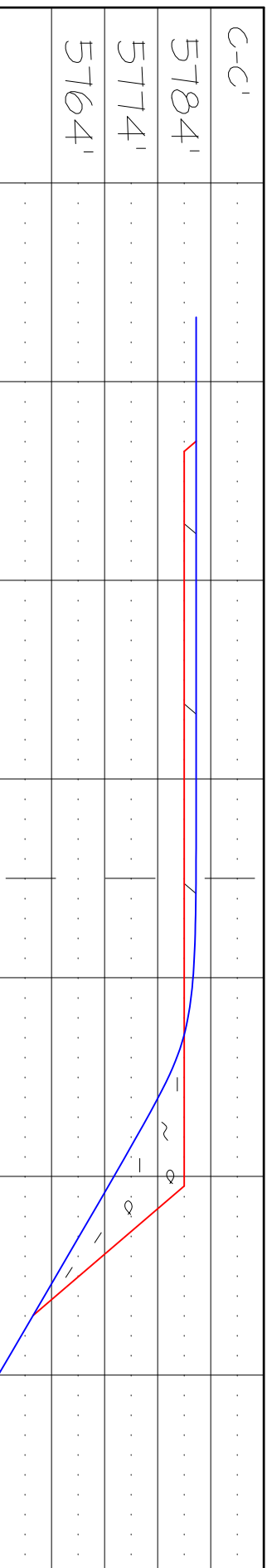
VERTICAL SCALE 1"=30'



C/L



C/L



EDWARDS SURVEYING, INC. IS NOT LIABLE FOR LOCATION OF UNDERGROUND UTILITIES OR PIPELINES.  
CONTRACTOR SHOULD CONTACT ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED UNDERGROUND  
UTILITIES OR PIPELINES ON WELLPAD AND/OR ACCESS ROAD AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION.

# HILCORP ENERGY COMPANY HAYNIE #2N

762' FNL & 1680' FEL, SECTION 4, T30N, R11W, N.M.P.M.  
SAN JUAN COUNTY, NEW MEXICO



TOPO NAME : AZTEC

⊕ PRODUCING WELL

⊗ PLUGGED & ABANDONED WELL

**Directions from the Intersection of State Hwy 516 & State Hwy 574**

**in Aztec, NM to Hilcorp Energy Company Haynie #2N**

**762' FNL & 1680' FEL, Section 4, T30N, R11W, N.M.P.M., San Juan County, NM**

**Latitude: 36.846129°N Longitude: -107.992951°W Datum: NAD1983**

From the intersection of State Hwy 516 & State Hwy 574 in Aztec, NM, travel Easterly on State Hwy 516 for 0.3 miles to County Road #2900 (aka Ruins Road);

Go Left (North-easterly) exiting State Hwy 516 on County Road #2900 for 2.1 miles;

Go Left (South-westerly) exiting County Road #2900 for 0.3 miles to fork in roadway;

Go Left (Westerly) for 200' to fork in roadway;

Go Left (Southerly) for 0.1 miles to Hilcorp Haynie #2N staked location which overlaps the Hilcorp Haynie #2 existing wellpad.

State of New Mexico  
Energy, Minerals and Natural Resources Department

Submit Electronically  
Via E-permitting

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

## NATURAL GAS MANAGEMENT PLAN

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

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

**I. Operator:** Hilcorp Energy Company **OGRID:** 372171 **Date:** 12/10/2024

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

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

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

| Well Name | API | ULSTR       | Footages             | Anticipated Oil BBL/D | Anticipated Gas MCF/D | Anticipated Produced Water BBL/D |
|-----------|-----|-------------|----------------------|-----------------------|-----------------------|----------------------------------|
| Haynie 2N |     | B-4-30N-11W | 762' FNL & 1680' FEL | 6                     | 825                   | 8                                |
|           |     |             |                      |                       |                       |                                  |

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

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

| Well Name        | API | Spud Date   | TD Reached Date | Completion Commencement Date | Initial Flow Back Date | First Production Date |
|------------------|-----|-------------|-----------------|------------------------------|------------------------|-----------------------|
| <u>Haynie 2N</u> |     | <u>2025</u> |                 |                              |                        | <u>2025</u>           |
|                  |     |             |                 |                              |                        |                       |

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

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

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

## **Section 2 – Enhanced Plan**

### **EFFECTIVE APRIL 1, 2022**

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

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

#### **IX. Anticipated Natural Gas Production:**

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

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

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

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

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

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

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

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

### **Section 3 - Certifications**

**Effective May 25, 2021**

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

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

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

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

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

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

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

### **Section 4 - Notices**

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

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

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

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

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

|                                                                                                  |
|--------------------------------------------------------------------------------------------------|
| Signature: <b>Cherylene Weston</b>                                                               |
| Printed Name: Cherylene Weston                                                                   |
| Title: Operations Regulatory Tech Sr.                                                            |
| E-mail Address: <a href="mailto:cweston@hilcorp.com">cweston@hilcorp.com</a>                     |
| Date: 12/10/2024                                                                                 |
| Phone: 713-289-2615                                                                              |
| <b>OIL CONSERVATION DIVISION</b><br><b>(Only applicable when submitted as a standalone form)</b> |
| Approved By:                                                                                     |
| Title:                                                                                           |
| Approval Date:                                                                                   |
| Conditions of Approval:                                                                          |

## Hilcorp Energy Natural Gas Management Plan Attachments

### VI. Separation Equipment

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

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

### VII. Operational Practices 19.15.27.8 NMAC A through F

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

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

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

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

E. Performance standards:

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

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

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

San Juan County, NM

Haynie 2N



## Technical Drilling Plan (Rev. 0)

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:                  | October 2, 2024             | Pool:                       | Mesaverde / Dakota  |
| Well Name:             | Haynie 2N                   | Ground Elevation (ft. MSL): | 5,784'              |
| Surface Hole Location: | 36.846129° N, 107.992951° W | Total Depth (ft. TMD/TVD)   | 6,884' / 6,685'     |
| Bottom Hole Location:  | 36.843552° N, 107.991317° W | County, State:              | San Juan County, NM |

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

## 2. Geological Markers

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

| Formation                | Depth (ft. TVD) | Remarks               |
|--------------------------|-----------------|-----------------------|
| Ojo Alamo                | 741             | Water (fresh/useable) |
| Kirtland                 | 815             | None                  |
| Fruitland Coal           | 1,776           | Gas, Water            |
| Pictured Cliffs          | 2,200           | Gas                   |
| Lewis Shale              | 2,312           | None                  |
| Huerfanito Bentonite     | 2,945           | None                  |
| Chacra                   | 3,275           | Gas                   |
| Mesa Verde / Cliff House | 3,791           | Gas / Water           |
| Menefee                  | 3,994           | Gas                   |
| Point Lookout            | 4,494           | Gas                   |
| Mancos                   | 4,853           | Gas                   |
| Upper Gallup             | 5,762           | Gas                   |
| Niobrara                 | 6,012           | None                  |
| Juana Lopez              | 6,171           | Gas                   |
| Greenhorn                | 6,502           | Gas                   |
| Graneros                 | 6,560           | Gas                   |
| Two Wells                | 6,614           | Gas                   |
| Paugate                  | 6,687           | Gas                   |
| Cubero                   | 6,730           | Gas                   |
| Encinal                  | 6,783           | Gas                   |

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### 3. Pressure Control Equipment

#### A. BOP 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 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.

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## 4. Casing Program

## A. Proposed Casing Program:

| Proposed Casing Design |           |                                      |                    |                     |           |           |          |
|------------------------|-----------|--------------------------------------|--------------------|---------------------|-----------|-----------|----------|
| Casing String          | Hole Size | Casing (size/weight/grade)           | Top Depth (MD/TVD) | Shoe Depth (MD/TVD) | Collapse  | Burst     | Tensile  |
| Surface                | 12-1/4"   | 9-5/8"-32.3#-H40 (or equiv.)-LTC/BTC | 0'                 | 200'/200'           | 1,370 psi | 2,270 psi | 254 klbs |
| Intermediate           | 8-3/4"    | 7"-23#-J55 (or equiv.)-LTC/BTC       | 0'                 | 3,091'/2,925'       | 3,270 psi | 4,360 psi | 366 klbs |
| Production             | 6-1/4"    | 4-1/2"-11.6#-J55 (or equiv.)-LTC/BTC | 0'                 | 6,884'/6,685'       | 4,960 psi | 5,350 psi | 184 klbs |

| Proposed Casing Design Safety Factors |                 |                    |                         |                              |
|---------------------------------------|-----------------|--------------------|-------------------------|------------------------------|
| Casing String                         | Burst Design SF | Collapse Design SF | Joint Tensile Design SF | Connection Tensile Design SF |
| Surface                               | 24.3            | 18.6               | 65.5                    | 45.6                         |
| Intermediate                          | 3.0             | 2.8                | 6.0                     | 7.1                          |
| Production                            | 1.5             | 1.8                | 2.7                     | 3.3                          |

## B. Casing Design Parameters &amp; 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:

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

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

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

## 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.

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## 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.<br>1 centralizer every 3 <sup>rd</sup> joint from float collar to base of Ojo Alamo.<br>1 centralizer per joint from base of Ojo Alamo to the top of the Ojo Alamo.<br>1 centralizer every 3 <sup>rd</sup> joint from top of Ojo Alamo to surface. |
| Production Casing            | 1 centralizer per joint in shoe track.<br>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 <sup>3</sup> ) | Sacks | Excess (%) | Slurry                                            | Density (ppg) | Planned TOC |
| Surface                                                            | 200'           | Lead                                                                                                                                                                                                                 | 125 ft <sup>3</sup>       | 91    | 100%       | Class G Cement<br>Yield: 1.38 ft <sup>3</sup> /sk | 14.6          | Surface     |
| Slurry Additives: CaCl (1%), Cello Flake (0.25 lb/sk), CD-2 (0.2%) |                |                                                                                                                                                                                                                      |                           |       |            |                                                   |               |             |
| Intermediate                                                       | 3,091'         | Lead                                                                                                                                                                                                                 | 574 ft <sup>3</sup>       | 112   | 50%        | ASTM Type IL<br>Yield: 5.12 ft <sup>3</sup> /sk   | 9.5           | Surface     |
|                                                                    |                | Slurry Additives: FL-24 (0.5%), FL-66 (0.5%), IntegraGuard GW-86 (0.2%), IntegraSeal PHENO (2.0 lb/sk), IntegraSeal POLI (0.25 lb/sk), LW-5E (50.0%), R-3 (0.4%), S-8 Silica Flour (35.0%), XCem-311 (0.3%)          |                           |       |            |                                                   |               |             |
|                                                                    |                | Tail                                                                                                                                                                                                                 | 113 ft <sup>3</sup>       | 46    | 50%        | ASTM Type IL<br>Yield: 2.46 ft <sup>3</sup> /sk   | 11.5          | 2,591'      |
|                                                                    |                | Slurry Additives: AEXT-1012 (60.0%), BA-90 (8.0 lb/sk), FL-66 (0.5%), GW-86 (0.3%), IntegraSeal PHENO (2.0 lb/sk), IntegraSeal POLI (0.25 lb/sk), KCl (3.0%), R-3 (0.55%), S-8 Silica Flour (25.0%), XCem-311 (0.3%) |                           |       |            |                                                   |               |             |
| Production                                                         | 6,884'         | Lead                                                                                                                                                                                                                 | 764 ft <sup>3</sup>       | 149   | 25%        | ASTM Type IL<br>Yield: 5.12 ft <sup>3</sup> /sk   | 9.5           | Surface     |
|                                                                    |                | Slurry Additives: FL-24 (0.5%), FL-66 (0.5%), IntegraGuard GW-86 (0.2%), IntegraSeal PHENO (2.0 lb/sk), IntegraSeal POLI (0.25 lb/sk), LW-5E (50.0%), R-3 (0.4%), S-8 Silica Flour (35.0%), XCem-311 (0.3%)          |                           |       |            |                                                   |               |             |
|                                                                    |                | Tail                                                                                                                                                                                                                 | 122 ft <sup>3</sup>       | 50    | 25%        | ASTM Type IL<br>Yield: 2.46 ft <sup>3</sup> /sk   | 11.5          | 6,384'      |
|                                                                    |                | Slurry Additives: AEXT-1012 (60.0%), BA-90 (8.0 lb/sk), FL-66 (0.5%), GW-86 (0.3%), IntegraSeal PHENO (2.0 lb/sk), IntegraSeal POLI (0.25 lb/sk), KCl (3.0%), R-3 (0.55%), S-8 Silica Flour (25.0%), XCem-311 (0.3%) |                           |       |            |                                                   |               |             |

## Cement Program Notes:

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

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Hilcorp Energy Company

## 7. Drilling Fluids Program

## A. Proposed Drilling Fluids Program:

| Proposed Drilling Fluids Program |            |                  |                           |                            |                   |
|----------------------------------|------------|------------------|---------------------------|----------------------------|-------------------|
| Interval                         | Fluid Type | Density<br>(ppg) | Fluid Loss<br>(mL/30 min) | Maximum Chlorides<br>(ppm) | Depth<br>(ft. MD) |
| Surface                          | Water/Gel  | 8.4 – 9.2        | NC                        | 1,000                      | 0' – 200'         |
| Intermediate                     | LSND / Gel | 8.4 – 9.2        | 6-16                      | 5,000                      | 200' – 3,091'     |
| Production                       | LSND / Gel | 8.4 – 9.2        | 6-16                      | 5,000                      | 3,091' – 6,884'   |

*Drilling Fluids Notes:*

- Lost circulation material may be added to the mud systems to manage fluid losses as hole conditions dictate.
- The well will be drilled utilizing a closed-loop circulating system. Drill cuttings for all hole sections will be transported to an approved disposal site.
- Estimated total volume of drill cuttings for disposal: 388 bbls (2,179 ft<sup>3</sup>).

## 8. Estimated Pressures &amp; 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.

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## 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.

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## 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.

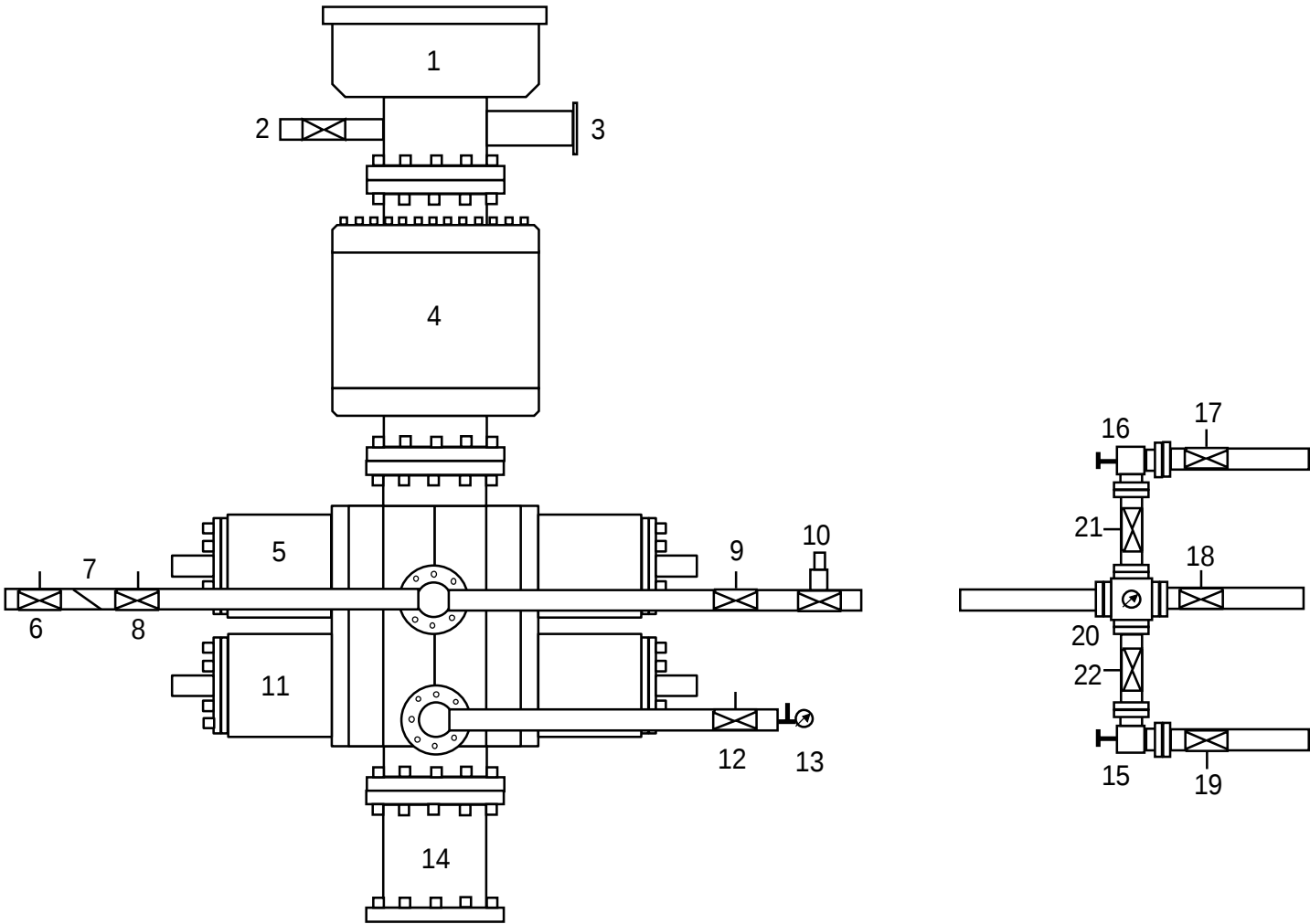
San Juan County, NM

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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 | 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 | 3M Blind Rams            | 22 | Manual Isolation Valve        |

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 410489

CONDITIONS

|                                                                                |                                                           |
|--------------------------------------------------------------------------------|-----------------------------------------------------------|
| Operator:<br>HILCORP ENERGY COMPANY<br>1111 Travis Street<br>Houston, TX 77002 | OGRID:<br>372171                                          |
|                                                                                | Action Number:<br>410489                                  |
|                                                                                | Action Type:<br>[C-101] Drilling Non-Federal/Indian (APD) |

CONDITIONS

| Created By  | Condition                                                                                                                                                                                                                                                             | Condition Date |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| ward.rikala | Notify the OCD 24 hours prior to casing & cement.                                                                                                                                                                                                                     | 12/24/2024     |
| ward.rikala | File As Drilled C-102 and a directional Survey with C-104 completion packet.                                                                                                                                                                                          | 12/24/2024     |
| ward.rikala | Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string. | 12/24/2024     |
| ward.rikala | Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.                  | 12/24/2024     |
| ward.rikala | Cement is required to circulate on both surface and intermediate1 strings of casing.                                                                                                                                                                                  | 12/24/2024     |
| ward.rikala | If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.                                                                                                                                                            | 12/24/2024     |
| ward.rikala | A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.                                                                                                                                                                                                | 12/24/2024     |