

# One Energy Partners

GL = 3587.6' @ 3612.60usft (KB +25')

Ground Level: 3587.60

Project: Lea County, NM (NAD 27)

Site: Silverton BS2 State Com

Well: 1H

Wellbore: Wellbore #1

Design: Plan 1

Rig: KB +25'

Map System: US State Plane 1927 (Exact solution)  
Datum: NAD 1927 (NADCON CONUS)  
Ellipsoid: Clarke 1866  
Zone Name: New Mexico East 3001

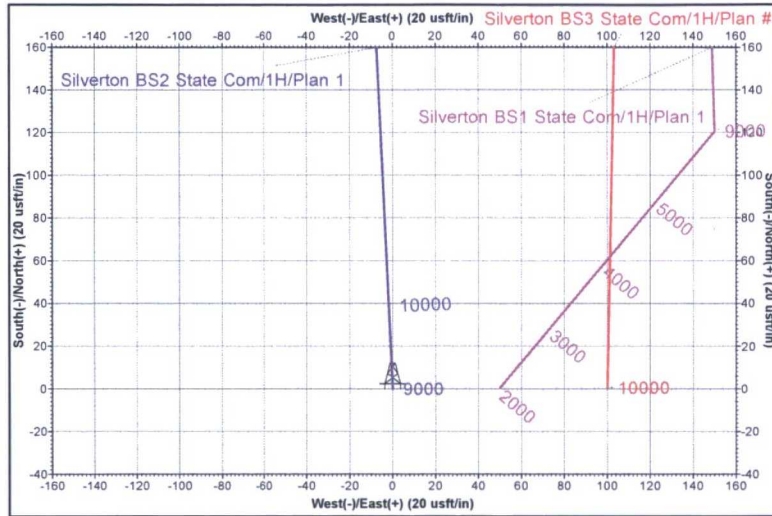


Azimuths to Grid North  
True North: -0.50°  
Magnetic North: 6.40°  
Magnetic Field  
Strength: 48056.5nT  
Dip Angle: 60.23°  
Date: 12/8/2017  
Model: BGM2017

## WELL DETAILS

Ground Level: 3587.60

| +N/-S | +E/-W | Northing  | Easting   | Latitude    | Longitude     |
|-------|-------|-----------|-----------|-------------|---------------|
| 0.00  | 0.00  | 507976.74 | 785567.82 | 32.39314700 | -103.40817900 |

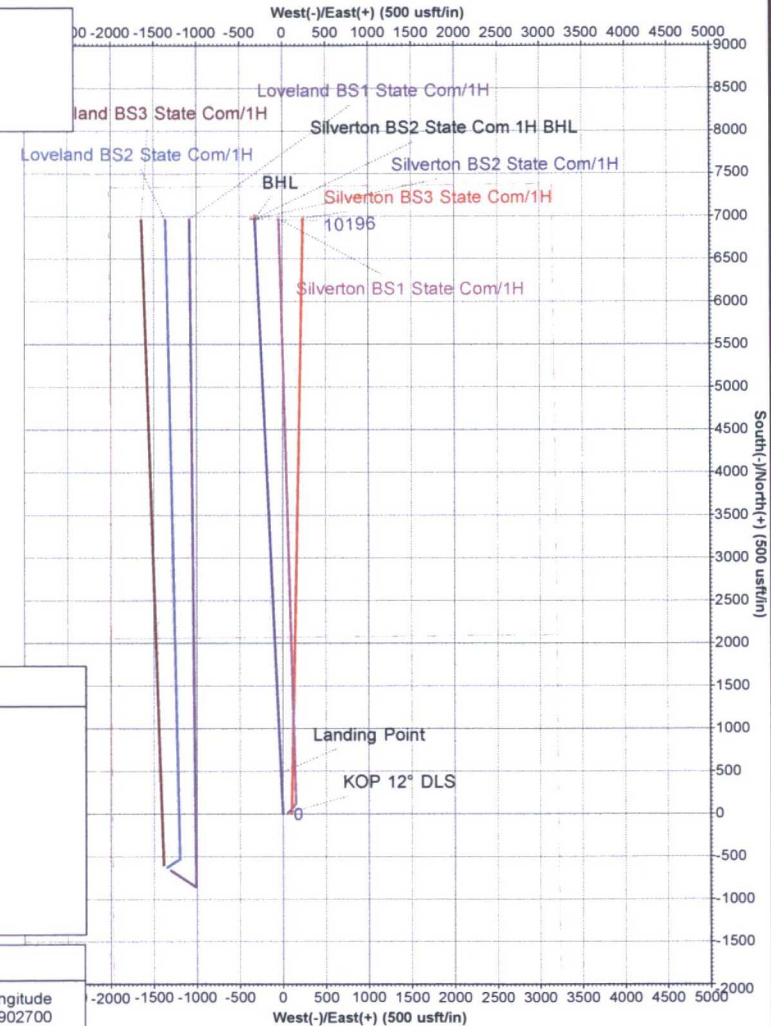


## SECTION DETAILS

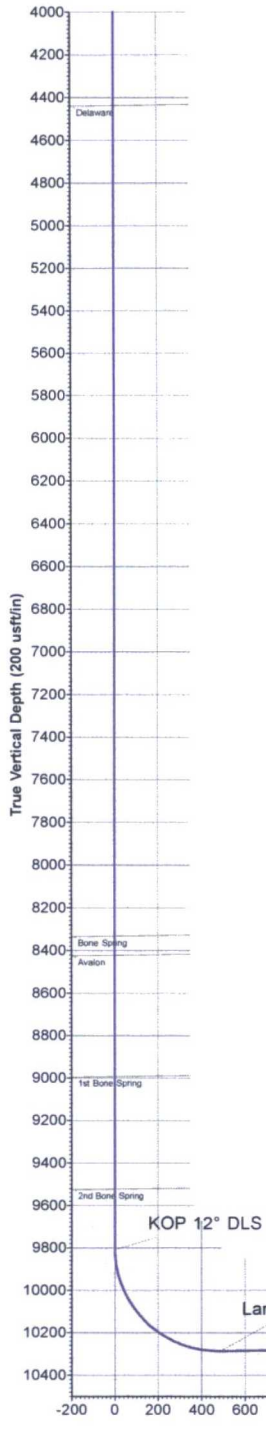
| MD       | Inc   | Azi    | TVD      | +N/-S   | +E/-W   | Dleg  | Vsect   | Annotation    |
|----------|-------|--------|----------|---------|---------|-------|---------|---------------|
| 0.00     | 0.00  | 0.00   | 0.00     | 0.00    | 0.00    | 0.00  | 0.00    |               |
| 9808.84  | 0.00  | 0.00   | 9808.84  | 0.00    | 0.00    | 0.00  | 0.00    | KOP 12° DLS   |
| 10565.50 | 90.80 | 357.35 | 10286.25 | 483.62  | -22.35  | 12.00 | 484.13  | Landing Point |
| 17058.31 | 90.80 | 357.35 | 10195.60 | 6968.87 | -322.03 | 0.00  | 6976.31 | BHL           |

## DESIGN TARGET DETAILS

| Name                           | TVD     | +N/-S   | +E/-W     | Northing  | Easting     | Latitude      | Longitude |
|--------------------------------|---------|---------|-----------|-----------|-------------|---------------|-----------|
| Silverton BS2 State Com 1H BHL | 6968.87 | -322.03 | 514945.61 | 785245.79 | 32.41230900 | -103.40902700 |           |



HALLIBURTON | Sperry Drilling



KOP 12° DLS

Landing Point

BHL

17058

Plan 1

Vertical Section at 357.35° (200 usft/in)

KB +25'

# One Energy Partners

Lea County, NM (NAD 27) Silverton BS2 State Com

API#

1H

Wellbore #1

Plan: Plan 1

## Sperry Drilling Services

### Combo Report

08 December, 2017

Well Coordinates: 32° 23' 35.33" N  
103° 24' 29.44" W

NAD 1927 (NADCON CONUS)  
New Mexico East 3001  
507,976.74 N  
785,567.82 E

Ground Level: 3,587.60 usft

Local Coordinate Origin:

Viewing Datum:

TVDs to System:

**North Reference:**

Unit System:

Centered on Site Silverton BS2 State Com

GL = 3587.6' @ 3612.60usft (KB +25')

N

**Grid**

Midcon (2 decimal)

Version: 5000.1 Build: 81D

Report Version: Midcon Combo v1.11

**HALLIBURTON**

## Plan Report for 1H - Plan 1

| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Grid<br>Azimuth<br>(°) | TVD below<br>System<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates  |                   | Map Coordinates    |                   | Dogleg<br>Rate<br>(°/100usft) | Vertical<br>Section<br>(usft) | Comments                       |
|-----------------------------|--------------------|------------------------|-------------------------------|-----------------------------|--------------------|-------------------|--------------------|-------------------|-------------------------------|-------------------------------|--------------------------------|
|                             |                    |                        |                               |                             | Northing<br>(usft) | Easting<br>(usft) | Northing<br>(usft) | Easting<br>(usft) |                               |                               |                                |
| 0.00                        | 0.00               | 0.00                   | -3,612.60                     | 0.00                        | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          | Silverton BS2 State Com 1H BHL |
| 100.00                      | 0.00               | 0.00                   | -3,512.60                     | 100.00                      | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 200.00                      | 0.00               | 0.00                   | -3,412.60                     | 200.00                      | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 300.00                      | 0.00               | 0.00                   | -3,312.60                     | 300.00                      | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 400.00                      | 0.00               | 0.00                   | -3,212.60                     | 400.00                      | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 500.00                      | 0.00               | 0.00                   | -3,112.60                     | 500.00                      | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 563.00                      | 0.00               | 0.00                   | -3,049.60                     | 563.00                      | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          | Rustler                        |
| 600.00                      | 0.00               | 0.00                   | -3,012.60                     | 600.00                      | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 700.00                      | 0.00               | 0.00                   | -2,912.60                     | 700.00                      | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 800.00                      | 0.00               | 0.00                   | -2,812.60                     | 800.00                      | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 900.00                      | 0.00               | 0.00                   | -2,712.60                     | 900.00                      | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 1,000.00                    | 0.00               | 0.00                   | -2,612.60                     | 1,000.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          | 13 3/8"                        |
| 1,100.00                    | 0.00               | 0.00                   | -2,512.60                     | 1,100.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 1,200.00                    | 0.00               | 0.00                   | -2,412.60                     | 1,200.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 1,300.00                    | 0.00               | 0.00                   | -2,312.60                     | 1,300.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 1,400.00                    | 0.00               | 0.00                   | -2,212.60                     | 1,400.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 1,500.00                    | 0.00               | 0.00                   | -2,112.60                     | 1,500.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 1,563.00                    | 0.00               | 0.00                   | -2,049.60                     | 1,563.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          | Top of Salt                    |
| 1,600.00                    | 0.00               | 0.00                   | -2,012.60                     | 1,600.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 1,700.00                    | 0.00               | 0.00                   | -1,912.60                     | 1,700.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 1,800.00                    | 0.00               | 0.00                   | -1,812.60                     | 1,800.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 1,900.00                    | 0.00               | 0.00                   | -1,712.60                     | 1,900.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 2,000.00                    | 0.00               | 0.00                   | -1,612.60                     | 2,000.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 2,100.00                    | 0.00               | 0.00                   | -1,512.60                     | 2,100.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 2,200.00                    | 0.00               | 0.00                   | -1,412.60                     | 2,200.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 2,300.00                    | 0.00               | 0.00                   | -1,312.60                     | 2,300.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 2,400.00                    | 0.00               | 0.00                   | -1,212.60                     | 2,400.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 2,500.00                    | 0.00               | 0.00                   | -1,112.60                     | 2,500.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 2,600.00                    | 0.00               | 0.00                   | -1,012.60                     | 2,600.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 2,700.00                    | 0.00               | 0.00                   | -912.60                       | 2,700.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 2,800.00                    | 0.00               | 0.00                   | -812.60                       | 2,800.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 2,900.00                    | 0.00               | 0.00                   | -712.60                       | 2,900.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 3,000.00                    | 0.00               | 0.00                   | -612.60                       | 3,000.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 3,100.00                    | 0.00               | 0.00                   | -512.60                       | 3,100.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 3,200.00                    | 0.00               | 0.00                   | -412.60                       | 3,200.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 3,300.00                    | 0.00               | 0.00                   | -312.60                       | 3,300.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 3,400.00                    | 0.00               | 0.00                   | -212.60                       | 3,400.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 3,500.00                    | 0.00               | 0.00                   | -112.60                       | 3,500.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 3,563.00                    | 0.00               | 0.00                   | -49.60                        | 3,563.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          | Base of Salt                   |
| 3,600.00                    | 0.00               | 0.00                   | -12.60                        | 3,600.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |
| 3,700.00                    | 0.00               | 0.00                   | 87.40                         | 3,700.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                                |

## Plan Report for 1H - Plan 1

| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Grid<br>Azimuth<br>(°) | TVD below<br>System<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates  |                   | Map Coordinates    |                   | Dogleg<br>Rate<br>(°/100usft) | Vertical<br>Section<br>(usft) | Comments |
|-----------------------------|--------------------|------------------------|-------------------------------|-----------------------------|--------------------|-------------------|--------------------|-------------------|-------------------------------|-------------------------------|----------|
|                             |                    |                        |                               |                             | Northing<br>(usft) | Easting<br>(usft) | Northing<br>(usft) | Easting<br>(usft) |                               |                               |          |
| 3,800.00                    | 0.00               | 0.00                   | 187.40                        | 3,800.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 3,900.00                    | 0.00               | 0.00                   | 287.40                        | 3,900.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 4,000.00                    | 0.00               | 0.00                   | 387.40                        | 4,000.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 4,100.00                    | 0.00               | 0.00                   | 487.40                        | 4,100.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 4,200.00                    | 0.00               | 0.00                   | 587.40                        | 4,200.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 4,300.00                    | 0.00               | 0.00                   | 687.40                        | 4,300.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 4,400.00                    | 0.00               | 0.00                   | 787.40                        | 4,400.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 4,438.00                    | 0.00               | 0.00                   | 825.40                        | 4,438.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          | Delaware |
| 4,500.00                    | 0.00               | 0.00                   | 887.40                        | 4,500.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 4,600.00                    | 0.00               | 0.00                   | 987.40                        | 4,600.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 4,700.00                    | 0.00               | 0.00                   | 1,087.40                      | 4,700.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 4,800.00                    | 0.00               | 0.00                   | 1,187.40                      | 4,800.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 4,900.00                    | 0.00               | 0.00                   | 1,287.40                      | 4,900.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 5,000.00                    | 0.00               | 0.00                   | 1,387.40                      | 5,000.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 5,100.00                    | 0.00               | 0.00                   | 1,487.40                      | 5,100.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 5,200.00                    | 0.00               | 0.00                   | 1,587.40                      | 5,200.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 5,300.00                    | 0.00               | 0.00                   | 1,687.40                      | 5,300.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 5,400.00                    | 0.00               | 0.00                   | 1,787.40                      | 5,400.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 5,500.00                    | 0.00               | 0.00                   | 1,887.40                      | 5,500.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 5,600.00                    | 0.00               | 0.00                   | 1,987.40                      | 5,600.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 5,700.00                    | 0.00               | 0.00                   | 2,087.40                      | 5,700.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 5,800.00                    | 0.00               | 0.00                   | 2,187.40                      | 5,800.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 5,900.00                    | 0.00               | 0.00                   | 2,287.40                      | 5,900.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 6,000.00                    | 0.00               | 0.00                   | 2,387.40                      | 6,000.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 6,100.00                    | 0.00               | 0.00                   | 2,487.40                      | 6,100.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 6,200.00                    | 0.00               | 0.00                   | 2,587.40                      | 6,200.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 6,300.00                    | 0.00               | 0.00                   | 2,687.40                      | 6,300.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 6,400.00                    | 0.00               | 0.00                   | 2,787.40                      | 6,400.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 6,500.00                    | 0.00               | 0.00                   | 2,887.40                      | 6,500.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 6,600.00                    | 0.00               | 0.00                   | 2,987.40                      | 6,600.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 6,700.00                    | 0.00               | 0.00                   | 3,087.40                      | 6,700.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 6,800.00                    | 0.00               | 0.00                   | 3,187.40                      | 6,800.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 6,900.00                    | 0.00               | 0.00                   | 3,287.40                      | 6,900.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 7,000.00                    | 0.00               | 0.00                   | 3,387.40                      | 7,000.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 7,100.00                    | 0.00               | 0.00                   | 3,487.40                      | 7,100.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 7,200.00                    | 0.00               | 0.00                   | 3,587.40                      | 7,200.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 7,300.00                    | 0.00               | 0.00                   | 3,687.40                      | 7,300.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 7,400.00                    | 0.00               | 0.00                   | 3,787.40                      | 7,400.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 7,500.00                    | 0.00               | 0.00                   | 3,887.40                      | 7,500.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 7,600.00                    | 0.00               | 0.00                   | 3,987.40                      | 7,600.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |
| 7,700.00                    | 0.00               | 0.00                   | 4,087.40                      | 7,700.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |          |

## Plan Report for 1H - Plan 1

| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Grid<br>Azimuth<br>(°) | TVD below<br>System<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates  |                   | Map Coordinates    |                   | Dogleg<br>Rate<br>(°/100usft) | Vertical<br>Section<br>(usft) | Comments        |
|-----------------------------|--------------------|------------------------|-------------------------------|-----------------------------|--------------------|-------------------|--------------------|-------------------|-------------------------------|-------------------------------|-----------------|
|                             |                    |                        |                               |                             | Northing<br>(usft) | Easting<br>(usft) | Northing<br>(usft) | Easting<br>(usft) |                               |                               |                 |
| 7,800.00                    | 0.00               | 0.00                   | 4,187.40                      | 7,800.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 7,900.00                    | 0.00               | 0.00                   | 4,287.40                      | 7,900.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 8,000.00                    | 0.00               | 0.00                   | 4,387.40                      | 8,000.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 8,100.00                    | 0.00               | 0.00                   | 4,487.40                      | 8,100.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 8,200.00                    | 0.00               | 0.00                   | 4,587.40                      | 8,200.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 8,300.00                    | 0.00               | 0.00                   | 4,687.40                      | 8,300.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 8,333.00                    | 0.00               | 0.00                   | 4,720.40                      | 8,333.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          | Bone Spring     |
| 8,400.00                    | 0.00               | 0.00                   | 4,787.40                      | 8,400.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 8,423.00                    | 0.00               | 0.00                   | 4,810.40                      | 8,423.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          | Avalon          |
| 8,500.00                    | 0.00               | 0.00                   | 4,887.40                      | 8,500.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 8,600.00                    | 0.00               | 0.00                   | 4,987.40                      | 8,600.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 8,700.00                    | 0.00               | 0.00                   | 5,087.40                      | 8,700.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 8,800.00                    | 0.00               | 0.00                   | 5,187.40                      | 8,800.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 8,900.00                    | 0.00               | 0.00                   | 5,287.40                      | 8,900.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 8,993.00                    | 0.00               | 0.00                   | 5,380.40                      | 8,993.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          | 1st Bone Spring |
| 9,000.00                    | 0.00               | 0.00                   | 5,387.40                      | 9,000.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 9,100.00                    | 0.00               | 0.00                   | 5,487.40                      | 9,100.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 9,200.00                    | 0.00               | 0.00                   | 5,587.40                      | 9,200.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 9,300.00                    | 0.00               | 0.00                   | 5,687.40                      | 9,300.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 9,400.00                    | 0.00               | 0.00                   | 5,787.40                      | 9,400.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 9,500.00                    | 0.00               | 0.00                   | 5,887.40                      | 9,500.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 9,523.00                    | 0.00               | 0.00                   | 5,910.40                      | 9,523.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          | 2nd Bone Spring |
| 9,600.00                    | 0.00               | 0.00                   | 5,987.40                      | 9,600.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 9,700.00                    | 0.00               | 0.00                   | 6,087.40                      | 9,700.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 9,800.00                    | 0.00               | 0.00                   | 6,187.40                      | 9,800.00                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          |                 |
| 9,808.84                    | 0.00               | 0.00                   | 6,196.24                      | 9,808.84                    | 0.00 N             | 0.00 E            | 507,976.74         | 785,567.82        | 0.00                          | 0.00                          | KOP 12° DLS     |
| 9,900.00                    | 10.94              | 357.35                 | 6,286.85                      | 9,899.45                    | 8.67 N             | 0.40 W            | 507,985.40         | 785,567.42        | 12.00                         | 8.68                          |                 |
| 10,000.00                   | 22.94              | 357.35                 | 6,382.33                      | 9,994.93                    | 37.72 N            | 1.74 W            | 508,014.46         | 785,566.08        | 12.00                         | 37.76                         |                 |
| 10,100.00                   | 34.94              | 357.35                 | 6,469.69                      | 10,082.29                   | 85.97 N            | 3.97 W            | 508,062.71         | 785,563.85        | 12.00                         | 86.06                         |                 |
| 10,200.00                   | 46.94              | 357.35                 | 6,545.09                      | 10,157.69                   | 151.31 N           | 6.99 W            | 508,128.04         | 785,560.83        | 12.00                         | 151.47                        |                 |
| 10,300.00                   | 58.94              | 357.35                 | 6,605.24                      | 10,217.84                   | 230.88 N           | 10.67 W           | 508,207.61         | 785,557.16        | 12.00                         | 231.12                        |                 |
| 10,400.00                   | 70.94              | 357.35                 | 6,647.52                      | 10,260.12                   | 321.20 N           | 14.84 W           | 508,297.94         | 785,552.98        | 12.00                         | 321.54                        |                 |
| 10,500.00                   | 82.94              | 357.35                 | 6,670.08                      | 10,282.68                   | 418.33 N           | 19.33 W           | 508,395.07         | 785,548.49        | 12.00                         | 418.78                        |                 |
| 10,565.50                   | 90.80              | 357.35                 | 6,673.65                      | 10,286.25                   | 483.61 N           | 22.35 W           | 508,460.35         | 785,545.48        | 12.00                         | 484.13                        | Landing Point   |
| 10,600.00                   | 90.80              | 357.35                 | 6,673.17                      | 10,285.77                   | 518.07 N           | 23.94 W           | 508,494.81         | 785,543.88        | 0.00                          | 518.63                        |                 |
| 10,700.00                   | 90.80              | 357.35                 | 6,671.78                      | 10,284.38                   | 617.96 N           | 28.56 W           | 508,594.69         | 785,539.27        | 0.00                          | 618.62                        |                 |
| 10,800.00                   | 90.80              | 357.35                 | 6,670.38                      | 10,282.98                   | 717.84 N           | 33.17 W           | 508,694.58         | 785,534.65        | 0.00                          | 718.61                        |                 |
| 10,900.00                   | 90.80              | 357.35                 | 6,668.98                      | 10,281.58                   | 817.72 N           | 37.79 W           | 508,794.46         | 785,530.04        | 0.00                          | 818.60                        |                 |
| 11,000.00                   | 90.80              | 357.35                 | 6,667.59                      | 10,280.19                   | 917.61 N           | 42.40 W           | 508,894.34         | 785,525.42        | 0.00                          | 918.59                        |                 |
| 11,100.00                   | 90.80              | 357.35                 | 6,666.19                      | 10,278.79                   | 1,017.49 N         | 47.02 W           | 508,994.23         | 785,520.81        | 0.00                          | 1,018.58                      |                 |
| 11,200.00                   | 90.80              | 357.35                 | 6,664.79                      | 10,277.39                   | 1,117.37 N         | 51.63 W           | 509,094.11         | 785,516.19        | 0.00                          | 1,118.57                      |                 |

## Plan Report for 1H - Plan 1

| Measured Depth (usft) | Inclination (°) | Grid Azimuth (°) | TVD below System (usft) | Vertical Depth (usft) | Local Coordinates |                | Map Coordinates |                | Dogleg Rate (°/100usft) | Vertical Section (usft) | Comments |
|-----------------------|-----------------|------------------|-------------------------|-----------------------|-------------------|----------------|-----------------|----------------|-------------------------|-------------------------|----------|
|                       |                 |                  |                         |                       | Northing (usft)   | Easting (usft) | Northing (usft) | Easting (usft) |                         |                         |          |
| 11,300.00             | 90.80           | 357.35           | 6,663.40                | 10,276.00             | 1,217.26 N        | 56.25 W        | 509,193.99      | 785,511.58     | 0.00                    | 1,218.56                |          |
| 11,400.00             | 90.80           | 357.35           | 6,662.00                | 10,274.60             | 1,317.14 N        | 60.87 W        | 509,293.88      | 785,506.96     | 0.00                    | 1,318.55                |          |
| 11,500.00             | 90.80           | 357.35           | 6,660.61                | 10,273.21             | 1,417.03 N        | 65.48 W        | 509,393.76      | 785,502.34     | 0.00                    | 1,418.54                |          |
| 11,600.00             | 90.80           | 357.35           | 6,659.21                | 10,271.81             | 1,516.91 N        | 70.10 W        | 509,493.65      | 785,497.73     | 0.00                    | 1,518.53                |          |
| 11,700.00             | 90.80           | 357.35           | 6,657.81                | 10,270.41             | 1,616.79 N        | 74.71 W        | 509,593.53      | 785,493.11     | 0.00                    | 1,618.52                |          |
| 11,800.00             | 90.80           | 357.35           | 6,656.42                | 10,269.02             | 1,716.68 N        | 79.33 W        | 509,693.41      | 785,488.50     | 0.00                    | 1,718.51                |          |
| 11,900.00             | 90.80           | 357.35           | 6,655.02                | 10,267.62             | 1,816.56 N        | 83.94 W        | 509,793.30      | 785,483.88     | 0.00                    | 1,818.50                |          |
| 12,000.00             | 90.80           | 357.35           | 6,653.63                | 10,266.23             | 1,916.44 N        | 88.56 W        | 509,893.18      | 785,479.27     | 0.00                    | 1,918.49                |          |
| 12,100.00             | 90.80           | 357.35           | 6,652.23                | 10,264.83             | 2,016.33 N        | 93.17 W        | 509,993.06      | 785,474.65     | 0.00                    | 2,018.48                |          |
| 12,200.00             | 90.80           | 357.35           | 6,650.83                | 10,263.43             | 2,116.21 N        | 97.79 W        | 510,092.95      | 785,470.03     | 0.00                    | 2,118.47                |          |
| 12,300.00             | 90.80           | 357.35           | 6,649.44                | 10,262.04             | 2,216.10 N        | 102.41 W       | 510,192.83      | 785,465.42     | 0.00                    | 2,218.46                |          |
| 12,400.00             | 90.80           | 357.35           | 6,648.04                | 10,260.64             | 2,315.98 N        | 107.02 W       | 510,292.71      | 785,460.80     | 0.00                    | 2,318.45                |          |
| 12,500.00             | 90.80           | 357.35           | 6,646.64                | 10,259.24             | 2,415.86 N        | 111.64 W       | 510,392.60      | 785,456.19     | 0.00                    | 2,418.44                |          |
| 12,600.00             | 90.80           | 357.35           | 6,645.25                | 10,257.85             | 2,515.75 N        | 116.25 W       | 510,492.48      | 785,451.57     | 0.00                    | 2,518.43                |          |
| 12,700.00             | 90.80           | 357.35           | 6,643.85                | 10,256.45             | 2,615.63 N        | 120.87 W       | 510,592.37      | 785,446.96     | 0.00                    | 2,618.42                |          |
| 12,800.00             | 90.80           | 357.35           | 6,642.46                | 10,255.06             | 2,715.51 N        | 125.48 W       | 510,692.25      | 785,442.34     | 0.00                    | 2,718.41                |          |
| 12,900.00             | 90.80           | 357.35           | 6,641.06                | 10,253.66             | 2,815.40 N        | 130.10 W       | 510,792.13      | 785,437.73     | 0.00                    | 2,818.40                |          |
| 13,000.00             | 90.80           | 357.35           | 6,639.66                | 10,252.26             | 2,915.28 N        | 134.71 W       | 510,892.02      | 785,433.11     | 0.00                    | 2,918.39                |          |
| 13,100.00             | 90.80           | 357.35           | 6,638.27                | 10,250.87             | 3,015.16 N        | 139.33 W       | 510,991.90      | 785,428.49     | 0.00                    | 3,018.38                |          |
| 13,200.00             | 90.80           | 357.35           | 6,636.87                | 10,249.47             | 3,115.05 N        | 143.95 W       | 511,091.78      | 785,423.88     | 0.00                    | 3,118.37                |          |
| 13,300.00             | 90.80           | 357.35           | 6,635.47                | 10,248.07             | 3,214.93 N        | 148.56 W       | 511,191.67      | 785,419.26     | 0.00                    | 3,218.36                |          |
| 13,400.00             | 90.80           | 357.35           | 6,634.08                | 10,246.68             | 3,314.82 N        | 153.18 W       | 511,291.55      | 785,414.65     | 0.00                    | 3,318.35                |          |
| 13,500.00             | 90.80           | 357.35           | 6,632.68                | 10,245.28             | 3,414.70 N        | 157.79 W       | 511,391.44      | 785,410.03     | 0.00                    | 3,418.34                |          |
| 13,600.00             | 90.80           | 357.35           | 6,631.29                | 10,243.89             | 3,514.58 N        | 162.41 W       | 511,491.32      | 785,405.42     | 0.00                    | 3,518.33                |          |
| 13,700.00             | 90.80           | 357.35           | 6,629.89                | 10,242.49             | 3,614.47 N        | 167.02 W       | 511,591.20      | 785,400.80     | 0.00                    | 3,618.32                |          |
| 13,800.00             | 90.80           | 357.35           | 6,628.49                | 10,241.09             | 3,714.35 N        | 171.64 W       | 511,691.09      | 785,396.18     | 0.00                    | 3,718.31                |          |
| 13,900.00             | 90.80           | 357.35           | 6,627.10                | 10,239.70             | 3,814.23 N        | 176.26 W       | 511,790.97      | 785,391.57     | 0.00                    | 3,818.30                |          |
| 14,000.00             | 90.80           | 357.35           | 6,625.70                | 10,238.30             | 3,914.12 N        | 180.87 W       | 511,890.85      | 785,386.95     | 0.00                    | 3,918.29                |          |
| 14,100.00             | 90.80           | 357.35           | 6,624.30                | 10,236.90             | 4,014.00 N        | 185.49 W       | 511,990.74      | 785,382.34     | 0.00                    | 4,018.28                |          |
| 14,200.00             | 90.80           | 357.35           | 6,622.91                | 10,235.51             | 4,113.88 N        | 190.10 W       | 512,090.62      | 785,377.72     | 0.00                    | 4,118.27                |          |
| 14,300.00             | 90.80           | 357.35           | 6,621.51                | 10,234.11             | 4,213.77 N        | 194.72 W       | 512,190.50      | 785,373.11     | 0.00                    | 4,218.27                |          |
| 14,400.00             | 90.80           | 357.35           | 6,620.12                | 10,232.72             | 4,313.65 N        | 199.33 W       | 512,290.39      | 785,368.49     | 0.00                    | 4,318.26                |          |
| 14,500.00             | 90.80           | 357.35           | 6,618.72                | 10,231.32             | 4,413.54 N        | 203.95 W       | 512,390.27      | 785,363.88     | 0.00                    | 4,418.25                |          |
| 14,600.00             | 90.80           | 357.35           | 6,617.32                | 10,229.92             | 4,513.42 N        | 208.56 W       | 512,490.16      | 785,359.26     | 0.00                    | 4,518.24                |          |
| 14,700.00             | 90.80           | 357.35           | 6,615.93                | 10,228.53             | 4,613.30 N        | 213.18 W       | 512,590.04      | 785,354.64     | 0.00                    | 4,618.23                |          |
| 14,800.00             | 90.80           | 357.35           | 6,614.53                | 10,227.13             | 4,713.19 N        | 217.80 W       | 512,689.92      | 785,350.03     | 0.00                    | 4,718.22                |          |
| 14,900.00             | 90.80           | 357.35           | 6,613.13                | 10,225.73             | 4,813.07 N        | 222.41 W       | 512,789.81      | 785,345.41     | 0.00                    | 4,818.21                |          |
| 15,000.00             | 90.80           | 357.35           | 6,611.74                | 10,224.34             | 4,912.95 N        | 227.03 W       | 512,889.69      | 785,340.80     | 0.00                    | 4,918.20                |          |
| 15,100.00             | 90.80           | 357.35           | 6,610.34                | 10,222.94             | 5,012.84 N        | 231.64 W       | 512,989.57      | 785,336.18     | 0.00                    | 5,018.19                |          |
| 15,200.00             | 90.80           | 357.35           | 6,608.95                | 10,221.55             | 5,112.72 N        | 236.26 W       | 513,089.46      | 785,331.57     | 0.00                    | 5,118.18                |          |
| 15,300.00             | 90.80           | 357.35           | 6,607.55                | 10,220.15             | 5,212.61 N        | 240.87 W       | 513,189.34      | 785,326.95     | 0.00                    | 5,218.17                |          |

## Plan Report for 1H - Plan 1

| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Grid<br>Azimuth<br>(°) | TVD below<br>System<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates  |                   | Map Coordinates    |                   | Dogleg<br>Rate<br>(°/100usft) | Vertical<br>Section<br>(usft) | Comments |
|-----------------------------|--------------------|------------------------|-------------------------------|-----------------------------|--------------------|-------------------|--------------------|-------------------|-------------------------------|-------------------------------|----------|
|                             |                    |                        |                               |                             | Northing<br>(usft) | Easting<br>(usft) | Northing<br>(usft) | Easting<br>(usft) |                               |                               |          |
| 15,400.00                   | 90.80              | 357.35                 | 6,606.15                      | 10,218.75                   | 5,312.49 N         | 245.49 W          | 513,289.22         | 785,322.33        | 0.00                          | 5,318.16                      |          |
| 15,500.00                   | 90.80              | 357.35                 | 6,604.76                      | 10,217.36                   | 5,412.37 N         | 250.11 W          | 513,389.11         | 785,317.72        | 0.00                          | 5,418.15                      |          |
| 15,600.00                   | 90.80              | 357.35                 | 6,603.36                      | 10,215.96                   | 5,512.26 N         | 254.72 W          | 513,488.99         | 785,313.10        | 0.00                          | 5,518.14                      |          |
| 15,700.00                   | 90.80              | 357.35                 | 6,601.97                      | 10,214.57                   | 5,612.14 N         | 259.34 W          | 513,588.88         | 785,308.49        | 0.00                          | 5,618.13                      |          |
| 15,800.00                   | 90.80              | 357.35                 | 6,600.57                      | 10,213.17                   | 5,712.02 N         | 263.95 W          | 513,688.76         | 785,303.87        | 0.00                          | 5,718.12                      |          |
| 15,900.00                   | 90.80              | 357.35                 | 6,599.17                      | 10,211.77                   | 5,811.91 N         | 268.57 W          | 513,788.64         | 785,299.26        | 0.00                          | 5,818.11                      |          |
| 16,000.00                   | 90.80              | 357.35                 | 6,597.78                      | 10,210.38                   | 5,911.79 N         | 273.18 W          | 513,888.53         | 785,294.64        | 0.00                          | 5,918.10                      |          |
| 16,100.00                   | 90.80              | 357.35                 | 6,596.38                      | 10,208.98                   | 6,011.67 N         | 277.80 W          | 513,988.41         | 785,290.03        | 0.00                          | 6,018.09                      |          |
| 16,200.00                   | 90.80              | 357.35                 | 6,594.98                      | 10,207.58                   | 6,111.56 N         | 282.41 W          | 514,088.29         | 785,285.41        | 0.00                          | 6,118.08                      |          |
| 16,300.00                   | 90.80              | 357.35                 | 6,593.59                      | 10,206.19                   | 6,211.44 N         | 287.03 W          | 514,188.18         | 785,280.79        | 0.00                          | 6,218.07                      |          |
| 16,400.00                   | 90.80              | 357.35                 | 6,592.19                      | 10,204.79                   | 6,311.33 N         | 291.65 W          | 514,288.06         | 785,276.18        | 0.00                          | 6,318.06                      |          |
| 16,500.00                   | 90.80              | 357.35                 | 6,590.80                      | 10,203.40                   | 6,411.21 N         | 296.26 W          | 514,387.95         | 785,271.56        | 0.00                          | 6,418.05                      |          |
| 16,600.00                   | 90.80              | 357.35                 | 6,589.40                      | 10,202.00                   | 6,511.09 N         | 300.88 W          | 514,487.83         | 785,266.95        | 0.00                          | 6,518.04                      |          |
| 16,700.00                   | 90.80              | 357.35                 | 6,588.00                      | 10,200.60                   | 6,610.98 N         | 305.49 W          | 514,587.71         | 785,262.33        | 0.00                          | 6,618.03                      |          |
| 16,800.00                   | 90.80              | 357.35                 | 6,586.61                      | 10,199.21                   | 6,710.86 N         | 310.11 W          | 514,687.60         | 785,257.72        | 0.00                          | 6,718.02                      |          |
| 16,900.00                   | 90.80              | 357.35                 | 6,585.21                      | 10,197.81                   | 6,810.74 N         | 314.72 W          | 514,787.48         | 785,253.10        | 0.00                          | 6,818.01                      |          |
| 17,000.00                   | 90.80              | 357.35                 | 6,583.81                      | 10,196.41                   | 6,910.63 N         | 319.34 W          | 514,887.36         | 785,248.48        | 0.00                          | 6,918.00                      |          |
| 17,058.31                   | 90.80              | 357.35                 | 6,583.00                      | 10,195.60                   | 6,968.87 N         | 322.03 W          | 514,945.61         | 785,245.79        | 0.00                          | 6,976.31                      | BHL      |

Plan Annotations

| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 | Comment       |
|-----------------------------|-----------------------------|-------------------|-----------------|---------------|
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) |               |
| 9,808.84                    | 9,808.84                    | 0.00              | 0.00            | KOP 12° DLS   |
| 10,565.50                   | 10,286.25                   | 483.61            | -22.35          | Landing Point |
| 17,058.31                   | 10,195.60                   | 6,968.87          | -322.03         | BHL           |

Vertical Section Information

| Angle<br>Type | Target               | Azimuth<br>(°) | Origin<br>Type | Origin<br>+N/-S<br>(usft) | Origin<br>+E/-W<br>(usft) | Start<br>TVD<br>(usft) |
|---------------|----------------------|----------------|----------------|---------------------------|---------------------------|------------------------|
| User          | No Target (Freehand) | 357.35         | Slot           | 0.00                      | 0.00                      | 0.00                   |

Survey tool program

| From<br>(usft) | To<br>(usft) | Survey/Plan | Survey Tool |
|----------------|--------------|-------------|-------------|
| 0.00           | 17,058.31    | Plan 1      | MWD         |

## Plan Report for 1H - Plan 1

### Casing Details

| Measured Depth (usft) | Vertical Depth (usft) | Name    | Casing Diameter (") | Hole Diameter (") |
|-----------------------|-----------------------|---------|---------------------|-------------------|
| 1,000.00              | 1,000.00              | 13 3/8" | 13-3/8              | 17-1/2            |

### Formation Details

| Measured Depth (usft) | Vertical Depth (usft) | TVDSS (usft) | Name            | Lithology | Dip (°) | Dip Direction (°) |
|-----------------------|-----------------------|--------------|-----------------|-----------|---------|-------------------|
| 563.00                | 563.00                | -3,049.60    | Rustler         |           | -0.80   | 357.35            |
| 1,563.00              | 1,563.00              | -2,049.60    | Top of Salt     |           | -0.80   | 357.35            |
| 3,563.00              | 3,563.00              | -49.60       | Base of Salt    |           | -0.80   | 357.35            |
| 4,438.00              | 4,438.00              | 825.40       | Delaware        |           | -0.80   | 357.35            |
| 8,333.00              | 8,333.00              | 4,720.40     | Bone Spring     |           | -0.80   | 357.35            |
| 8,423.00              | 8,423.00              | 4,810.40     | Avalon          |           | -0.80   | 357.35            |
| 8,993.00              | 8,993.00              | 5,380.40     | 1st Bone Spring |           | -0.80   | 357.35            |
| 9,523.00              | 9,523.00              | 5,910.40     | 2nd Bone Spring |           | -0.80   | 357.35            |

### Design Targets

| Target Name                                                                          | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude    | Longitude     |
|--------------------------------------------------------------------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-------------|---------------|
| - hit/miss target                                                                    |               |              |            |              |              |                 |                |             |               |
| - Shape                                                                              |               |              |            |              |              |                 |                |             |               |
| Silverton BS2 State Com 1H BHL ()                                                    | 0.00          | 0.00         | 0.00       | 6,968.87     | -322.03      | 514,945.61      | 785,245.79     | 32.41230900 | -103.40902700 |
| - plan misses target center by 6976.31usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E) |               |              |            |              |              |                 |                |             |               |
| - Point                                                                              |               |              |            |              |              |                 |                |             |               |

### Directional Difficulty Index

|                                     |                |                               |                                   |
|-------------------------------------|----------------|-------------------------------|-----------------------------------|
| Average Dogleg over Survey:         | 0.53 °/100usft | Maximum Dogleg over Survey:   | 12.00 °/100usft at 10,565.50 usft |
| Net Tortousity applicable to Plans: | 0.53 °/100usft | Directional Difficulty Index: | 6.300                             |

### Audit Info

## North Reference Sheet for Silverton BS2 State Com - 1H - Wellbore #1

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to Grid North Reference.

Vertical Depths are relative to GL = 3587.6' @ 3612.60usft (KB +25'). Northing and Easting are relative to Silverton BS2 State Com

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 3001 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866

Projection method is Transverse Mercator (Gauss-Kruger)

Central Meridian is -104.33333333°, Longitude Origin:0.00000000°, Latitude Origin:0.00000000°

False Easting: 500,000.00usft, False Northing: 0.00usft, Scale Reduction: 1.00000249

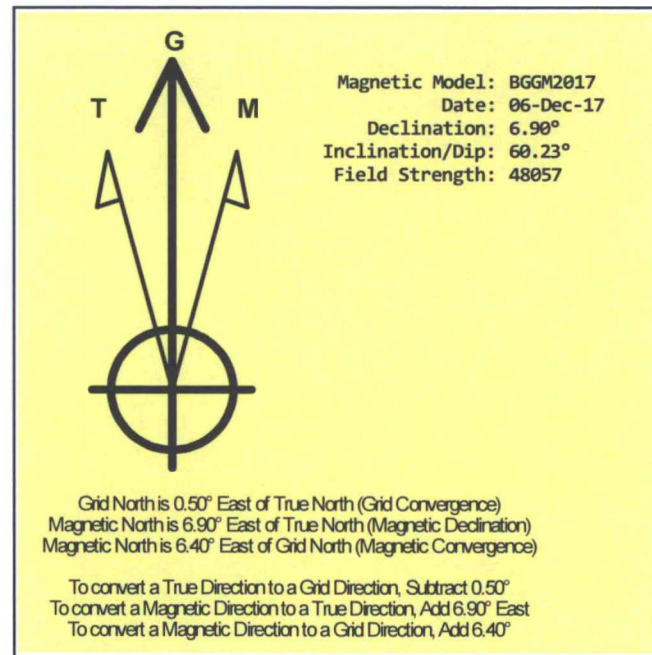
Grid Coordinates of Well: 507,976.74 usft N, 785,567.82 usft E

Geographical Coordinates of Well: 32° 23' 35.33" N, 103° 24' 29.44" W

Grid Convergence at Surface is: 0.50°

Based upon Minimum Curvature type calculations, at a Measured Depth of 17,058.31usft  
the Bottom Hole Displacement is 6,976.31usft in the Direction of 357.35° (Grid).

Magnetic Convergence at surface is: -6.40° ( 6 December 2017, , BGGM2017)





**Engineer:**

|                                      |
|--------------------------------------|
| Melissa Saurborn                     |
| 11/30/2017                           |
| Melissa Saurborn; (c ) 303-325-1233  |
| Vladimir Roudakov; (c ) 720-933-9784 |

Kelly Bushing Elev (FEET): 30126

**Kelly Bushing Elev:**

| Surface/Bottom Hole Footage Calls | FNL  | FSL | FEL | FWL  |
|-----------------------------------|------|-----|-----|------|
| Sec 18 T22S R35E                  | 2070 |     |     | 1980 |
| Sec 7 T22S R35E                   | 380  |     |     | 1700 |
|                                   |      |     |     |      |

Rig KB: 25

| Formations            | Lithology                      | TVD<br>(RKB) | (calc)        |                 | Sample<br>Top | (calc)  |                     | Actual<br>Log | (calc)  |                  | Adjusted<br>Prog Top | (calc)       |               | (calc)          |   |
|-----------------------|--------------------------------|--------------|---------------|-----------------|---------------|---------|---------------------|---------------|---------|------------------|----------------------|--------------|---------------|-----------------|---|
|                       |                                |              | TVD<br>Subsea | Is to<br>Target |               | Δft     | Sample<br><Lo   Hi> |               | Δft     | Log<br><Lo   Hi> |                      | TVD<br>(RKB) | TVD<br>Subsea | Is to<br>Target |   |
| Rustler               | Mixed lithologies              | 563          | 3050          | 9730            |               | 562.6   |                     |               | 562.6   |                  |                      |              |               |                 | 0 |
| Top of Salt           | Salt (Halite)                  | 1563         | 2050          | 8730            |               | 1562.6  |                     |               | 1562.6  |                  |                      |              |               |                 | 0 |
| Base of Salt          | Limestone/ Anhydrite           | 3563         | 50            | 6730            |               | 3562.6  |                     |               | 3562.6  |                  |                      |              |               |                 | 0 |
| Delaware              | Sand/Siltstone/Shale/Limestone | 4438         | -825          | 5855            |               | 4437.6  |                     |               | 4437.6  |                  |                      |              |               |                 | 0 |
| Bone Spring           | Limestone                      | 8333         | -4720         | 1960            |               | 8332.6  |                     |               | 8332.6  |                  |                      |              |               |                 | 0 |
| Avalon                | Shale                          | 8423         | -4810         | 1870            |               | 8422.6  |                     |               | 8422.6  |                  |                      |              |               |                 | 0 |
| 1st Bone Spring       | Sand/Siltstone/Shale/Limestone | 8993         | -5380         | 1300            |               | 8992.6  |                     |               | 8992.6  |                  |                      |              |               |                 | 0 |
| 2nd Bone Spring       | Sand/Siltstone/Shale/Limestone | 9523         | -5910         | 770             |               | 9522.6  |                     |               | 9522.6  |                  |                      |              |               |                 | 0 |
| Target (± 90.8')      | Shale/Siltstone/Limestone      | 10293        | -6680         | 0               |               | 10292.6 |                     |               | 10292.6 |                  |                      |              |               |                 | 0 |
| 3rd Bone Spring       | Siltstone                      | 10953        | -7340         | -660            |               | 10952.6 |                     |               | 10952.6 |                  |                      |              |               |                 | 0 |
| SURFACE CASING POINT  |                                |              |               |                 |               |         |                     |               |         |                  |                      |              |               |                 |   |
| 1st INT. CASING POINT |                                |              |               |                 |               |         |                     |               |         |                  |                      |              |               |                 |   |
| 2nd INT. CASING POINT |                                |              |               |                 |               |         |                     |               |         |                  |                      |              |               |                 |   |
| PROD. CASING POINT    |                                |              |               |                 |               |         |                     |               |         |                  |                      |              |               |                 |   |