

# **VERDAD RESOURCES**

**WATTENBERG FIELD**

**9N-59W-01 TIMBRO 0101 PAD**

**TIMBRO 0101-05H**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**21 May, 2019**

Project: WATTENBERG FIELD  
 Site: 9N-59W-01 TIMBRO 0101 PAD  
 Well: TIMBRO 0101-05H  
 Wellbore: Wellbore #1  
 Design: Design #1

# VERDAD RESOURCES

## CASING DETAILS

| TVD     | MD      | Name   | Size  |
|---------|---------|--------|-------|
| 1700.00 | 1737.87 | 9 5/8" | 9-5/8 |

## SECTION DETAILS

| MD       | Inc   | Azi    | TVD     | +N/-S    | +E/-W    | Dleg | TFace   | VSec    | Target              |
|----------|-------|--------|---------|----------|----------|------|---------|---------|---------------------|
| 0.00     | 0.00  | 0.00   | 0.00    | 0.00     | 0.00     | 0.00 | 0.00    | 0.00    |                     |
| 320.00   | 0.00  | 0.00   | 320.00  | 0.00     | 0.00     | 0.00 | 0.00    | 0.00    |                     |
| 1181.00  | 17.22 | 296.80 | 1168.10 | 57.90    | -114.62  | 2.00 | 296.80  | -59.63  |                     |
| 5770.32  | 17.22 | 296.80 | 5551.70 | 670.47   | -1327.31 | 0.00 | 0.00    | -690.55 |                     |
| 6858.11  | 90.00 | 179.13 | 6250.00 | 37.07    | -1509.43 | 9.00 | -116.60 | -59.98  |                     |
| 11567.36 | 90.00 | 179.13 | 6250.00 | -4671.64 | -1438.14 | 0.00 | 0.00    | 4649.26 | TIMBRO 0101-05H_BHL |

## WELLBORE TARGET DETAILS (LAT/LONG)

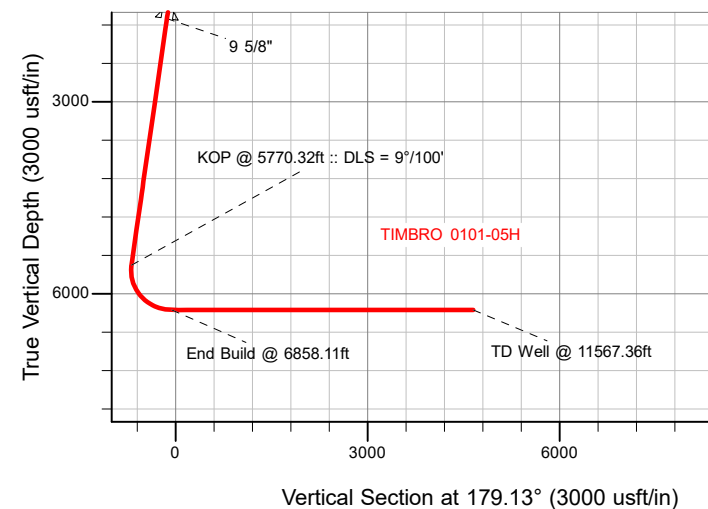
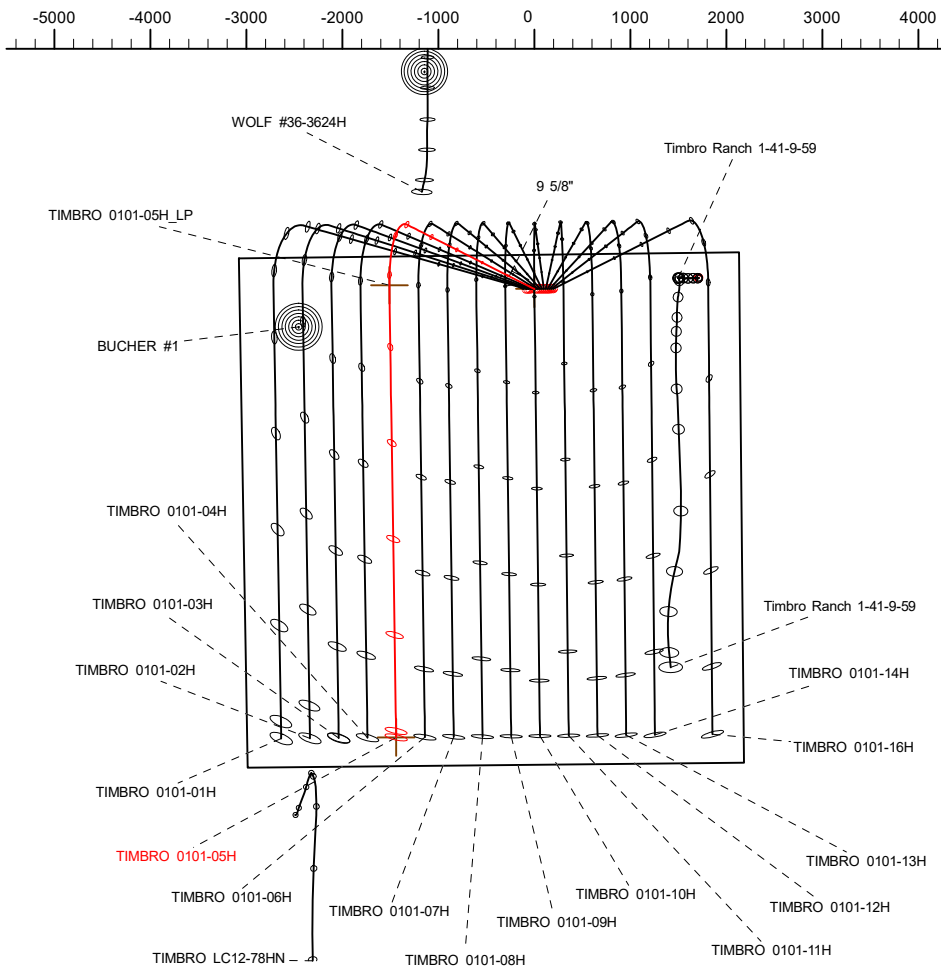
| Name                | TVD     | +N/-S    | +E/-W    | Latitude  | Longitude   |
|---------------------|---------|----------|----------|-----------|-------------|
| TIMBRO 0101-05H_SHL | 0.00    | 0.00     | 0.00     | 40.786477 | -103.925037 |
| TIMBRO 0101-05H_BHL | 6250.00 | -4671.64 | -1438.14 | 40.773654 | -103.930229 |

**SHL**  
**356' FNL**  
**2137' FEL**

**LP**  
**300' FNL**  
**1559' FWL**

**BHL**  
**300' FSL**  
**1549' FWL**

West(-)/East(+) (2000 usft/in)



**T**  
**M** Azimuths to True North  
 Magnetic North: 7.58°  
 Magnetic Field  
 Strength: 52455.0snT  
 Dip Angle: 67.24°  
 Date: 5/20/2019  
 Model: IGRF2015

## WELL DETAILS: TIMBRO 0101-05H

GL = 4944'

RKB = 24' @ 4968.00usft (RIG)

Plan: Design #1 (TIMBRO 0101-05H/Wellbore #1)

Date: 5/21/2019

# Hewlett-Packard

## Planning Report

|                  |                            |                                     |                               |
|------------------|----------------------------|-------------------------------------|-------------------------------|
| <b>Database:</b> | EDM 5000.14 Single User Db | <b>Local Co-ordinate Reference:</b> | Well TIMBRO 0101-05H          |
| <b>Company:</b>  | VERDAD RESOURCES           | <b>TVD Reference:</b>               | RKB = 24' @ 4968.00usft (RIG) |
| <b>Project:</b>  | WATTENBERG FIELD           | <b>MD Reference:</b>                | RKB = 24' @ 4968.00usft (RIG) |
| <b>Site:</b>     | 9N-59W-01 TIMBRO 0101 PAD  | <b>North Reference:</b>             | True                          |
| <b>Well:</b>     | TIMBRO 0101-05H            | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | Wellbore #1                |                                     |                               |
| <b>Design:</b>   | Design #1                  |                                     |                               |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | WATTENBERG FIELD          |                      |                |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |                |
| <b>Map Zone:</b>   | Colorado Northern Zone    |                      |                |

|                              |                           |                     |                   |                                 |
|------------------------------|---------------------------|---------------------|-------------------|---------------------------------|
| <b>Site</b>                  | 9N-59W-01 TIMBRO 0101 PAD |                     |                   |                                 |
| <b>Site Position:</b>        |                           | <b>Northing:</b>    | 1,533,230.40 usft | <b>Latitude:</b> 40.786474      |
| <b>From:</b>                 | Lat/Long                  | <b>Easting:</b>     | 3,436,039.96 usft | <b>Longitude:</b> -103.925326   |
| <b>Position Uncertainty:</b> | 0.00 usft                 | <b>Slot Radius:</b> | 13-3/16 "         | <b>Grid Convergence:</b> 1.02 ° |

|                             |                 |            |                            |                                    |
|-----------------------------|-----------------|------------|----------------------------|------------------------------------|
| <b>Well</b>                 | TIMBRO 0101-05H |            |                            |                                    |
| <b>Well Position</b>        | <b>+N/-S</b>    | 0.94 usft  | <b>Northing:</b>           | 1,533,232.76 usft                  |
|                             | <b>+E/-W</b>    | 80.00 usft | <b>Easting:</b>            | 3,436,119.93 usft                  |
| <b>Position Uncertainty</b> |                 | 3.28 usft  | <b>Wellhead Elevation:</b> | <b>Ground Level:</b> 4,944.00 usft |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | Wellbore #1       |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2015          | 5/20/2019          | 7.58                   | 67.24                | 52,454.98533036            |

|                          |                                |                     |                      |                      |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|
| <b>Design</b>            | Design #1                      |                     |                      |                      |
| <b>Audit Notes:</b>      |                                |                     |                      |                      |
| <b>Version:</b>          | <b>Phase:</b>                  | PLAN                | <b>Tie On Depth:</b> | 0.00                 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b>  | <b>Direction (°)</b> |
|                          | 0.00                           | 0.00                | 0.00                 | 179.13               |

|                                 |                        |                          |                         |   |
|---------------------------------|------------------------|--------------------------|-------------------------|---|
| <b>Plan Survey Tool Program</b> | <b>Date</b>            | 5/21/2019                |                         |   |
| <b>Depth From (usft)</b>        | <b>Depth To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b>        | <b>Remarks</b>                                    |
| 1                               | 0.00                   | 1,700.00                 | Design #1 (Wellbore #1) | ISCWSA REV 2 MWD<br>Fixed:v2:standard declination |
| 2                               | 1,700.00               | 11,567.36                | Design #1 (Wellbore #1) | ISCWSA REV 2 MWD<br>Fixed:v2:standard declination |

|                              |                        |                    |                              |                     |                     |                                |                               |                              |                |                   |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|-------------------------------|------------------------------|----------------|-------------------|
| <b>Plan Sections</b>         |                        |                    |                              |                     |                     |                                |                               |                              |                |                   |
| <b>Measured Depth (usft)</b> | <b>Inclination (°)</b> | <b>Azimuth (°)</b> | <b>Vertical Depth (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Dogleg Rate (°/100usft)</b> | <b>Build Rate (°/100usft)</b> | <b>Turn Rate (°/100usft)</b> | <b>TFO (°)</b> | <b>Target</b>     |
| 0.00                         | 0.00                   | 0.00               | 0.00                         | 0.00                | 0.00                | 0.00                           | 0.00                          | 0.00                         | 0.00           |                   |
| 320.00                       | 0.00                   | 0.00               | 320.00                       | 0.00                | 0.00                | 0.00                           | 0.00                          | 0.00                         | 0.00           |                   |
| 1,181.00                     | 17.22                  | 296.80             | 1,168.10                     | 57.90               | -114.62             | 2.00                           | 2.00                          | 0.00                         | 296.80         |                   |
| 5,770.32                     | 17.22                  | 296.80             | 5,551.70                     | 670.47              | -1,327.31           | 0.00                           | 0.00                          | 0.00                         | 0.00           |                   |
| 6,858.11                     | 90.00                  | 179.13             | 6,250.00                     | 37.07               | -1,509.43           | 9.00                           | 6.69                          | -10.82                       | -116.60        |                   |
| 11,567.36                    | 90.00                  | 179.13             | 6,250.00                     | -4,671.64           | -1,438.14           | 0.00                           | 0.00                          | 0.00                         | 0.00           | TIMBRO 0101-05H_E |

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## Planning Report

|                  |                            |                                     |                               |
|------------------|----------------------------|-------------------------------------|-------------------------------|
| <b>Database:</b> | EDM 5000.14 Single User Db | <b>Local Co-ordinate Reference:</b> | Well TIMBRO 0101-05H          |
| <b>Company:</b>  | VERDAD RESOURCES           | <b>TVD Reference:</b>               | RKB = 24' @ 4968.00usft (RIG) |
| <b>Project:</b>  | WATTENBERG FIELD           | <b>MD Reference:</b>                | RKB = 24' @ 4968.00usft (RIG) |
| <b>Site:</b>     | 9N-59W-01 TIMBRO 0101 PAD  | <b>North Reference:</b>             | True                          |
| <b>Well:</b>     | TIMBRO 0101-05H            | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | Wellbore #1                |                                     |                               |
| <b>Design:</b>   | Design #1                  |                                     |                               |

| Planned Survey           |                 |             |                       |              |              |                         |                         |                        |                       |
|--------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)    | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 0.00                     | 0.00            | 0.00        | 0.00                  | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 100.00                   | 0.00            | 0.00        | 100.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 200.00                   | 0.00            | 0.00        | 200.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 300.00                   | 0.00            | 0.00        | 300.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 320.00                   | 0.00            | 0.00        | 320.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| Begin Nudge @ 320.00ft   |                 |             |                       |              |              |                         |                         |                        |                       |
| 400.00                   | 1.60            | 296.80      | 399.99                | 0.50         | -1.00        | -0.52                   | 2.00                    | 2.00                   | 0.00                  |
| 500.00                   | 3.60            | 296.80      | 499.88                | 2.55         | -5.05        | -2.63                   | 2.00                    | 2.00                   | 0.00                  |
| 600.00                   | 5.60            | 296.80      | 599.55                | 6.16         | -12.20       | -6.35                   | 2.00                    | 2.00                   | 0.00                  |
| 700.00                   | 7.60            | 296.80      | 698.89                | 11.35        | -22.46       | -11.69                  | 2.00                    | 2.00                   | 0.00                  |
| 800.00                   | 9.60            | 296.80      | 797.76                | 18.09        | -35.81       | -18.63                  | 2.00                    | 2.00                   | 0.00                  |
| 900.00                   | 11.60           | 296.80      | 896.05                | 26.38        | -52.23       | -27.17                  | 2.00                    | 2.00                   | 0.00                  |
| 1,000.00                 | 13.60           | 296.80      | 993.63                | 36.22        | -71.70       | -37.30                  | 2.00                    | 2.00                   | 0.00                  |
| 1,100.00                 | 15.60           | 296.80      | 1,090.40              | 47.58        | -94.20       | -49.01                  | 2.00                    | 2.00                   | 0.00                  |
| 1,181.00                 | 17.22           | 296.80      | 1,168.10              | 57.90        | -114.62      | -59.63                  | 2.00                    | 2.00                   | 0.00                  |
| Hold Tangent @ 1181.00ft |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,200.00                 | 17.22           | 296.80      | 1,186.24              | 60.44        | -119.64      | -62.24                  | 0.00                    | 0.00                   | 0.00                  |
| 1,300.00                 | 17.22           | 296.80      | 1,281.76              | 73.78        | -146.07      | -75.99                  | 0.00                    | 0.00                   | 0.00                  |
| 1,400.00                 | 17.22           | 296.80      | 1,377.28              | 87.13        | -172.49      | -89.74                  | 0.00                    | 0.00                   | 0.00                  |
| 1,500.00                 | 17.22           | 296.80      | 1,472.80              | 100.48       | -198.91      | -103.49                 | 0.00                    | 0.00                   | 0.00                  |
| 1,600.00                 | 17.22           | 296.80      | 1,568.31              | 113.83       | -225.34      | -117.23                 | 0.00                    | 0.00                   | 0.00                  |
| 1,700.00                 | 17.22           | 296.80      | 1,663.83              | 127.17       | -251.76      | -130.98                 | 0.00                    | 0.00                   | 0.00                  |
| 1,737.87                 | 17.22           | 296.80      | 1,700.00              | 132.23       | -261.77      | -136.19                 | 0.00                    | 0.00                   | 0.00                  |
| 9 5/8"                   |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,800.00                 | 17.22           | 296.80      | 1,759.35              | 140.52       | -278.19      | -144.73                 | 0.00                    | 0.00                   | 0.00                  |
| 1,900.00                 | 17.22           | 296.80      | 1,854.87              | 153.87       | -304.61      | -158.48                 | 0.00                    | 0.00                   | 0.00                  |
| 2,000.00                 | 17.22           | 296.80      | 1,950.38              | 167.22       | -331.04      | -172.22                 | 0.00                    | 0.00                   | 0.00                  |
| 2,100.00                 | 17.22           | 296.80      | 2,045.90              | 180.57       | -357.46      | -185.97                 | 0.00                    | 0.00                   | 0.00                  |
| 2,200.00                 | 17.22           | 296.80      | 2,141.42              | 193.91       | -383.88      | -199.72                 | 0.00                    | 0.00                   | 0.00                  |
| 2,300.00                 | 17.22           | 296.80      | 2,236.94              | 207.26       | -410.31      | -213.47                 | 0.00                    | 0.00                   | 0.00                  |
| 2,400.00                 | 17.22           | 296.80      | 2,332.45              | 220.61       | -436.73      | -227.22                 | 0.00                    | 0.00                   | 0.00                  |
| 2,500.00                 | 17.22           | 296.80      | 2,427.97              | 233.96       | -463.16      | -240.96                 | 0.00                    | 0.00                   | 0.00                  |
| 2,600.00                 | 17.22           | 296.80      | 2,523.49              | 247.30       | -489.58      | -254.71                 | 0.00                    | 0.00                   | 0.00                  |
| 2,700.00                 | 17.22           | 296.80      | 2,619.01              | 260.65       | -516.00      | -268.46                 | 0.00                    | 0.00                   | 0.00                  |
| 2,800.00                 | 17.22           | 296.80      | 2,714.52              | 274.00       | -542.43      | -282.21                 | 0.00                    | 0.00                   | 0.00                  |
| 2,900.00                 | 17.22           | 296.80      | 2,810.04              | 287.35       | -568.85      | -295.95                 | 0.00                    | 0.00                   | 0.00                  |
| 3,000.00                 | 17.22           | 296.80      | 2,905.56              | 300.70       | -595.28      | -309.70                 | 0.00                    | 0.00                   | 0.00                  |
| 3,100.00                 | 17.22           | 296.80      | 3,001.08              | 314.04       | -621.70      | -323.45                 | 0.00                    | 0.00                   | 0.00                  |
| 3,200.00                 | 17.22           | 296.80      | 3,096.59              | 327.39       | -648.13      | -337.20                 | 0.00                    | 0.00                   | 0.00                  |
| 3,300.00                 | 17.22           | 296.80      | 3,192.11              | 340.74       | -674.55      | -350.94                 | 0.00                    | 0.00                   | 0.00                  |
| 3,400.00                 | 17.22           | 296.80      | 3,287.63              | 354.09       | -700.97      | -364.69                 | 0.00                    | 0.00                   | 0.00                  |
| 3,500.00                 | 17.22           | 296.80      | 3,383.15              | 367.44       | -727.40      | -378.44                 | 0.00                    | 0.00                   | 0.00                  |
| 3,600.00                 | 17.22           | 296.80      | 3,478.66              | 380.78       | -753.82      | -392.19                 | 0.00                    | 0.00                   | 0.00                  |
| 3,700.00                 | 17.22           | 296.80      | 3,574.18              | 394.13       | -780.25      | -405.93                 | 0.00                    | 0.00                   | 0.00                  |
| 3,800.00                 | 17.22           | 296.80      | 3,669.70              | 407.48       | -806.67      | -419.68                 | 0.00                    | 0.00                   | 0.00                  |
| 3,900.00                 | 17.22           | 296.80      | 3,765.22              | 420.83       | -833.10      | -433.43                 | 0.00                    | 0.00                   | 0.00                  |
| 4,000.00                 | 17.22           | 296.80      | 3,860.74              | 434.17       | -859.52      | -447.18                 | 0.00                    | 0.00                   | 0.00                  |
| 4,100.00                 | 17.22           | 296.80      | 3,956.25              | 447.52       | -885.94      | -460.92                 | 0.00                    | 0.00                   | 0.00                  |
| 4,200.00                 | 17.22           | 296.80      | 4,051.77              | 460.87       | -912.37      | -474.67                 | 0.00                    | 0.00                   | 0.00                  |
| 4,300.00                 | 17.22           | 296.80      | 4,147.29              | 474.22       | -938.79      | -488.42                 | 0.00                    | 0.00                   | 0.00                  |
| 4,400.00                 | 17.22           | 296.80      | 4,242.81              | 487.57       | -965.22      | -502.17                 | 0.00                    | 0.00                   | 0.00                  |
| 4,500.00                 | 17.22           | 296.80      | 4,338.32              | 500.91       | -991.64      | -515.91                 | 0.00                    | 0.00                   | 0.00                  |
| 4,600.00                 | 17.22           | 296.80      | 4,433.84              | 514.26       | -1,018.07    | -529.66                 | 0.00                    | 0.00                   | 0.00                  |

# Hewlett-Packard

## Planning Report

|                  |                            |                                     |                               |
|------------------|----------------------------|-------------------------------------|-------------------------------|
| <b>Database:</b> | EDM 5000.14 Single User Db | <b>Local Co-ordinate Reference:</b> | Well TIMBRO 0101-05H          |
| <b>Company:</b>  | VERDAD RESOURCES           | <b>TVD Reference:</b>               | RKB = 24' @ 4968.00usft (RIG) |
| <b>Project:</b>  | WATTENBERG FIELD           | <b>MD Reference:</b>                | RKB = 24' @ 4968.00usft (RIG) |
| <b>Site:</b>     | 9N-59W-01 TIMBRO 0101 PAD  | <b>North Reference:</b>             | True                          |
| <b>Well:</b>     | TIMBRO 0101-05H            | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | Wellbore #1                |                                     |                               |
| <b>Design:</b>   | Design #1                  |                                     |                               |

| Planned Survey                   |                 |             |                       |              |              |                         |                         |                        |                       |
|----------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)            | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 4,700.00                         | 17.22           | 296.80      | 4,529.36              | 527.61       | -1,044.49    | -543.41                 | 0.00                    | 0.00                   | 0.00                  |
| 4,800.00                         | 17.22           | 296.80      | 4,624.88              | 540.96       | -1,070.91    | -557.16                 | 0.00                    | 0.00                   | 0.00                  |
| 4,900.00                         | 17.22           | 296.80      | 4,720.39              | 554.31       | -1,097.34    | -570.90                 | 0.00                    | 0.00                   | 0.00                  |
| 5,000.00                         | 17.22           | 296.80      | 4,815.91              | 567.65       | -1,123.76    | -584.65                 | 0.00                    | 0.00                   | 0.00                  |
| 5,100.00                         | 17.22           | 296.80      | 4,911.43              | 581.00       | -1,150.19    | -598.40                 | 0.00                    | 0.00                   | 0.00                  |
| 5,200.00                         | 17.22           | 296.80      | 5,006.95              | 594.35       | -1,176.61    | -612.15                 | 0.00                    | 0.00                   | 0.00                  |
| 5,300.00                         | 17.22           | 296.80      | 5,102.46              | 607.70       | -1,203.04    | -625.89                 | 0.00                    | 0.00                   | 0.00                  |
| 5,400.00                         | 17.22           | 296.80      | 5,197.98              | 621.04       | -1,229.46    | -639.64                 | 0.00                    | 0.00                   | 0.00                  |
| 5,500.00                         | 17.22           | 296.80      | 5,293.50              | 634.39       | -1,255.88    | -653.39                 | 0.00                    | 0.00                   | 0.00                  |
| 5,600.00                         | 17.22           | 296.80      | 5,389.02              | 647.74       | -1,282.31    | -667.14                 | 0.00                    | 0.00                   | 0.00                  |
| 5,700.00                         | 17.22           | 296.80      | 5,484.53              | 661.09       | -1,308.73    | -680.88                 | 0.00                    | 0.00                   | 0.00                  |
| 5,770.32                         | 17.22           | 296.80      | 5,551.70              | 670.47       | -1,327.31    | -690.55                 | 0.00                    | 0.00                   | 0.00                  |
| KOP @ 5770.32ft :: DLS = 9°/100' |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,800.00                         | 16.20           | 288.21      | 5,580.13              | 673.75       | -1,335.17    | -693.94                 | 9.00                    | -3.45                  | -28.95                |
| 5,900.00                         | 15.79           | 255.15      | 5,676.46              | 674.62       | -1,361.63    | -695.22                 | 9.00                    | -0.40                  | -33.05                |
| 6,000.00                         | 19.87           | 228.56      | 5,771.79              | 659.86       | -1,387.57    | -680.85                 | 9.00                    | 4.07                   | -26.59                |
| 6,100.00                         | 26.42           | 212.67      | 5,863.78              | 629.82       | -1,412.37    | -651.19                 | 9.00                    | 6.55                   | -15.89                |
| 6,200.00                         | 34.05           | 203.10      | 5,950.16              | 585.25       | -1,435.41    | -606.98                 | 9.00                    | 7.63                   | -9.57                 |
| 6,300.00                         | 42.17           | 196.78      | 6,028.82              | 527.25       | -1,456.13    | -549.30                 | 9.00                    | 8.12                   | -6.33                 |
| 6,400.00                         | 50.54           | 192.19      | 6,097.80              | 457.24       | -1,474.00    | -479.57                 | 9.00                    | 8.37                   | -4.58                 |
| 6,500.00                         | 59.05           | 188.61      | 6,155.41              | 376.94       | -1,488.60    | -399.50                 | 9.00                    | 8.51                   | -3.59                 |
| 6,600.00                         | 67.64           | 185.61      | 6,200.23              | 288.34       | -1,499.57    | -311.08                 | 9.00                    | 8.59                   | -2.99                 |
| 6,700.00                         | 76.29           | 182.97      | 6,231.17              | 193.62       | -1,506.63    | -216.47                 | 9.00                    | 8.64                   | -2.64                 |
| 6,800.00                         | 84.96           | 180.52      | 6,247.45              | 95.10        | -1,509.60    | -118.01                 | 9.00                    | 8.67                   | -2.45                 |
| 6,858.11                         | 90.00           | 179.13      | 6,250.00              | 37.07        | -1,509.43    | -59.98                  | 9.00                    | 8.68                   | -2.39                 |
| End Build @ 6858.11ft            |                 |             |                       |              |              |                         |                         |                        |                       |
| 6,900.00                         | 90.00           | 179.13      | 6,250.00              | -4.82        | -1,508.79    | -18.09                  | 0.00                    | 0.00                   | 0.00                  |
| 7,000.00                         | 90.00           | 179.13      | 6,250.00              | -104.81      | -1,507.28    | 81.91                   | 0.00                    | 0.00                   | 0.00                  |
| 7,100.00                         | 90.00           | 179.13      | 6,250.00              | -204.79      | -1,505.77    | 181.91                  | 0.00                    | 0.00                   | 0.00                  |
| 7,200.00                         | 90.00           | 179.13      | 6,250.00              | -304.78      | -1,504.25    | 281.91                  | 0.00                    | 0.00                   | 0.00                  |
| 7,300.00                         | 90.00           | 179.13      | 6,250.00              | -404.77      | -1,502.74    | 381.91                  | 0.00                    | 0.00                   | 0.00                  |
| 7,400.00                         | 90.00           | 179.13      | 6,250.00              | -504.76      | -1,501.22    | 481.91                  | 0.00                    | 0.00                   | 0.00                  |
| 7,500.00                         | 90.00           | 179.13      | 6,250.00              | -604.75      | -1,499.71    | 581.91                  | 0.00                    | 0.00                   | 0.00                  |
| 7,600.00                         | 90.00           | 179.13      | 6,250.00              | -704.74      | -1,498.20    | 681.91                  | 0.00                    | 0.00                   | 0.00                  |
| 7,700.00                         | 90.00           | 179.13      | 6,250.00              | -804.73      | -1,496.68    | 781.91                  | 0.00                    | 0.00                   | 0.00                  |
| 7,800.00                         | 90.00           | 179.13      | 6,250.00              | -904.71      | -1,495.17    | 881.91                  | 0.00                    | 0.00                   | 0.00                  |
| 7,900.00                         | 90.00           | 179.13      | 6,250.00              | -1,004.70    | -1,493.65    | 981.91                  | 0.00                    | 0.00                   | 0.00                  |
| 8,000.00                         | 90.00           | 179.13      | 6,250.00              | -1,104.69    | -1,492.14    | 1,081.91                | 0.00                    | 0.00                   | 0.00                  |
| 8,100.00                         | 90.00           | 179.13      | 6,250.00              | -1,204.68    | -1,490.63    | 1,181.91                | 0.00                    | 0.00                   | 0.00                  |
| 8,200.00                         | 90.00           | 179.13      | 6,250.00              | -1,304.67    | -1,489.11    | 1,281.91                | 0.00                    | 0.00                   | 0.00                  |
| 8,300.00                         | 90.00           | 179.13      | 6,250.00              | -1,404.66    | -1,487.60    | 1,381.91                | 0.00                    | 0.00                   | 0.00                  |
| 8,400.00                         | 90.00           | 179.13      | 6,250.00              | -1,504.64    | -1,486.09    | 1,481.91                | 0.00                    | 0.00                   | 0.00                  |
| 8,500.00                         | 90.00           | 179.13      | 6,250.00              | -1,604.63    | -1,484.57    | 1,581.91                | 0.00                    | 0.00                   | 0.00                  |
| 8,600.00                         | 90.00           | 179.13      | 6,250.00              | -1,704.62    | -1,483.06    | 1,681.91                | 0.00                    | 0.00                   | 0.00                  |
| 8,700.00                         | 90.00           | 179.13      | 6,250.00              | -1,804.61    | -1,481.54    | 1,781.91                | 0.00                    | 0.00                   | 0.00                  |
| 8,800.00                         | 90.00           | 179.13      | 6,250.00              | -1,904.60    | -1,480.03    | 1,881.91                | 0.00                    | 0.00                   | 0.00                  |
| 8,900.00                         | 90.00           | 179.13      | 6,250.00              | -2,004.59    | -1,478.52    | 1,981.91                | 0.00                    | 0.00                   | 0.00                  |
| 9,000.00                         | 90.00           | 179.13      | 6,250.00              | -2,104.58    | -1,477.00    | 2,081.91                | 0.00                    | 0.00                   | 0.00                  |
| 9,100.00                         | 90.00           | 179.13      | 6,250.00              | -2,204.56    | -1,475.49    | 2,181.91                | 0.00                    | 0.00                   | 0.00                  |
| 9,200.00                         | 90.00           | 179.13      | 6,250.00              | -2,304.55    | -1,473.98    | 2,281.91                | 0.00                    | 0.00                   | 0.00                  |
| 9,300.00                         | 90.00           | 179.13      | 6,250.00              | -2,404.54    | -1,472.46    | 2,381.91                | 0.00                    | 0.00                   | 0.00                  |
| 9,400.00                         | 90.00           | 179.13      | 6,250.00              | -2,504.53    | -1,470.95    | 2,481.91                | 0.00                    | 0.00                   | 0.00                  |
| 9,500.00                         | 90.00           | 179.13      | 6,250.00              | -2,604.52    | -1,469.43    | 2,581.91                | 0.00                    | 0.00                   | 0.00                  |
| 9,600.00                         | 90.00           | 179.13      | 6,250.00              | -2,704.51    | -1,467.92    | 2,681.91                | 0.00                    | 0.00                   | 0.00                  |

# Hewlett-Packard

## Planning Report

|                  |                            |                                     |                               |
|------------------|----------------------------|-------------------------------------|-------------------------------|
| <b>Database:</b> | EDM 5000.14 Single User Db | <b>Local Co-ordinate Reference:</b> | Well TIMBRO 0101-05H          |
| <b>Company:</b>  | VERDAD RESOURCES           | <b>TVD Reference:</b>               | RKB = 24' @ 4968.00usft (RIG) |
| <b>Project:</b>  | WATTENBERG FIELD           | <b>MD Reference:</b>                | RKB = 24' @ 4968.00usft (RIG) |
| <b>Site:</b>     | 9N-59W-01 TIMBRO 0101 PAD  | <b>North Reference:</b>             | True                          |
| <b>Well:</b>     | TIMBRO 0101-05H            | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | Wellbore #1                |                                     |                               |
| <b>Design:</b>   | Design #1                  |                                     |                               |

| Planned Survey        |                 |             |                       |              |              |                         |                         |                        |                       |  |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 9,700.00              | 90.00           | 179.13      | 6,250.00              | -2,804.50    | -1,466.41    | 2,781.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 9,800.00              | 90.00           | 179.13      | 6,250.00              | -2,904.48    | -1,464.89    | 2,881.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 9,900.00              | 90.00           | 179.13      | 6,250.00              | -3,004.47    | -1,463.38    | 2,981.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,000.00             | 90.00           | 179.13      | 6,250.00              | -3,104.46    | -1,461.87    | 3,081.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,100.00             | 90.00           | 179.13      | 6,250.00              | -3,204.45    | -1,460.35    | 3,181.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,200.00             | 90.00           | 179.13      | 6,250.00              | -3,304.44    | -1,458.84    | 3,281.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,300.00             | 90.00           | 179.13      | 6,250.00              | -3,404.43    | -1,457.32    | 3,381.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,400.00             | 90.00           | 179.13      | 6,250.00              | -3,504.42    | -1,455.81    | 3,481.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,500.00             | 90.00           | 179.13      | 6,250.00              | -3,604.40    | -1,454.30    | 3,581.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,600.00             | 90.00           | 179.13      | 6,250.00              | -3,704.39    | -1,452.78    | 3,681.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,700.00             | 90.00           | 179.13      | 6,250.00              | -3,804.38    | -1,451.27    | 3,781.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,800.00             | 90.00           | 179.13      | 6,250.00              | -3,904.37    | -1,449.75    | 3,881.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,900.00             | 90.00           | 179.13      | 6,250.00              | -4,004.36    | -1,448.24    | 3,981.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,000.00             | 90.00           | 179.13      | 6,250.00              | -4,104.35    | -1,446.73    | 4,081.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,100.00             | 90.00           | 179.13      | 6,250.00              | -4,204.34    | -1,445.21    | 4,181.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,200.00             | 90.00           | 179.13      | 6,250.00              | -4,304.32    | -1,443.70    | 4,281.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,300.00             | 90.00           | 179.13      | 6,250.00              | -4,404.31    | -1,442.19    | 4,381.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,400.00             | 90.00           | 179.13      | 6,250.00              | -4,504.30    | -1,440.67    | 4,481.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,500.00             | 90.00           | 179.13      | 6,250.00              | -4,604.29    | -1,439.16    | 4,581.91                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,567.36             | 90.00           | 179.13      | 6,250.00              | -4,671.64    | -1,438.14    | 4,649.26                | 0.00                    | 0.00                   | 0.00                  |  |
| TD Well @ 11567.36ft  |                 |             |                       |              |              |                         |                         |                        |                       |  |

| Casing Points         |                       |        |                     |                   |  |
|-----------------------|-----------------------|--------|---------------------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name   | Casing Diameter (") | Hole Diameter (") |  |
| 1,737.87              | 1,700.00              | 9 5/8" | 9-5/8               | 13-1/2            |  |

| Plan Annotations      |                       |                   |              |                                  |  |
|-----------------------|-----------------------|-------------------|--------------|----------------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              |                                  |  |
|                       |                       | +N/-S (usft)      | +E/-W (usft) | Comment                          |  |
| 320.00                | 320.00                | 0.00              | 0.00         | Begin Nudge @ 320.00ft           |  |
| 1,181.00              | 1,168.10              | 57.90             | -114.62      | Hold Tangent @ 1181.00ft         |  |
| 5,770.32              | 5,551.70              | 670.47            | -1,327.31    | KOP @ 5770.32ft :: DLS = 9°/100' |  |
| 6,858.11              | 6,250.00              | 37.07             | -1,509.43    | End Build @ 6858.11ft            |  |
| 11,567.36             | 6,250.00              | -4,671.64         | -1,438.14    | TD Well @ 11567.36ft             |  |