

# **VERDAD RESOURCES**

**WATTENBERG FIELD**

**9N-59W-17 TIMBRO 1717 PAD**

**TIMBRO 1717-14H**

**Wellbore #1**

**Plan: Design #2**

## **Standard Planning Report**

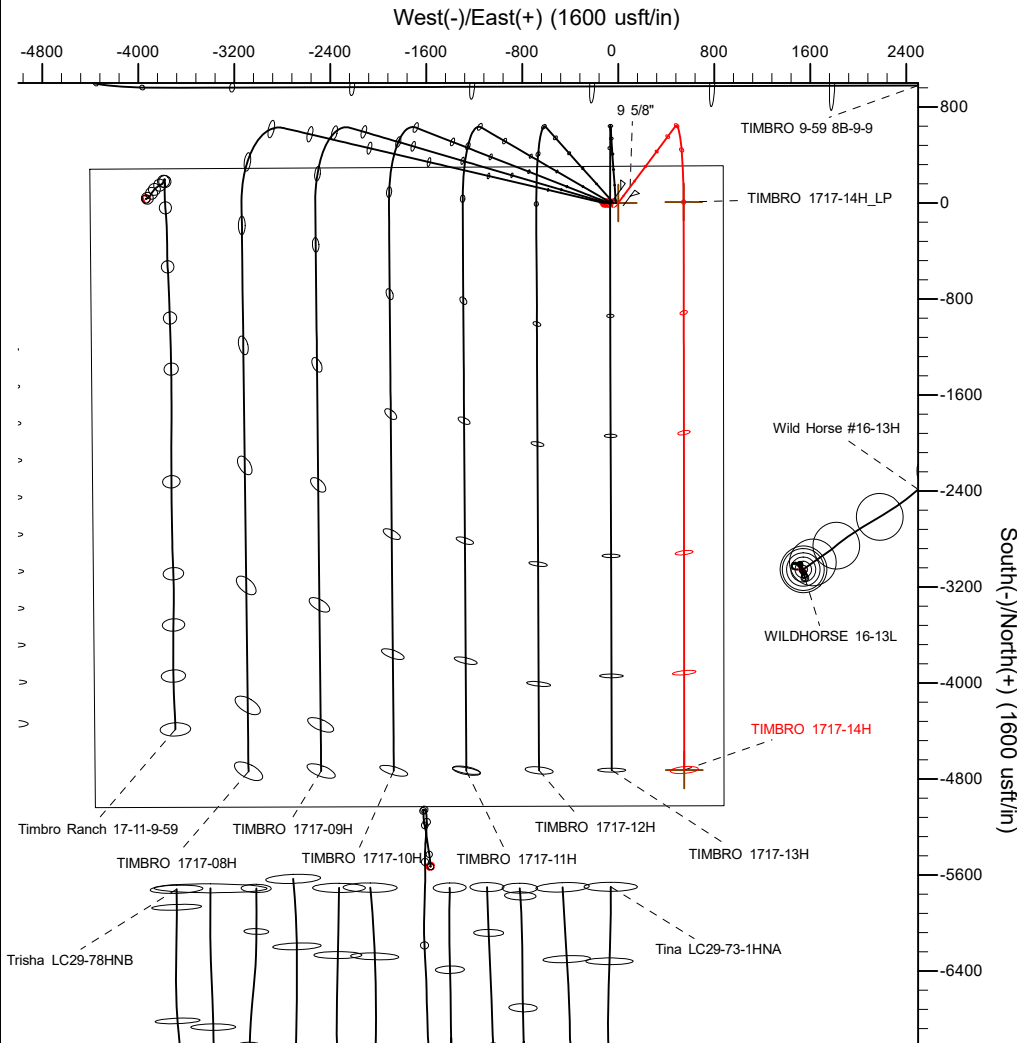
**24 February, 2020**

Project: WATTENBERG FIELD  
 Site: 9N-59W-17 TIMBRO 1717 PAD  
 Well: TIMBRO 1717-14H  
 Wellbore: Wellbore #1  
 Design: Design #2

# VERDAD RESOURCES

## CASING DETAILS

| TVD     | MD      | Name   | Size  |
|---------|---------|--------|-------|
| 1500.00 | 1512.18 | 9 5/8" | 9-5/8 |

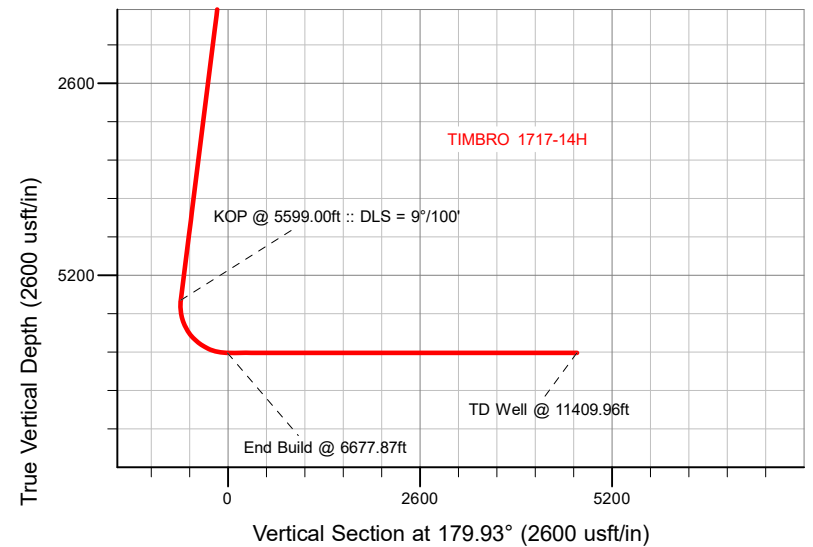


## SECTION DETAILS

| Sec | MD       | Inc   | Azi    | TVD     | +N/-S    | +E/-W  | Dieg | TFace  | VSec    | Target              |
|-----|----------|-------|--------|---------|----------|--------|------|--------|---------|---------------------|
| 1   | 0.00     | 0.00  | 0.00   | 0.00    | 0.00     | 0.00   | 0.00 | 0.00   | 0.00    |                     |
| 2   | 200.00   | 0.00  | 0.00   | 200.00  | 0.00     | 0.00   | 0.00 | 0.00   | 0.00    |                     |
| 3   | 644.00   | 8.88  | 36.75  | 642.22  | 27.51    | 20.55  | 2.00 | 36.75  | -27.49  |                     |
| 4   | 5599.00  | 8.88  | 36.75  | 5537.83 | 640.38   | 478.19 | 0.00 | 0.00   | -639.79 |                     |
| 5   | 6677.87  | 90.00 | 179.93 | 6250.00 | 8.72     | 545.69 | 9.00 | 142.84 | -8.06   |                     |
| 6   | 11409.96 | 90.00 | 179.93 | 6250.00 | -4723.36 | 551.78 | 0.00 | 0.00   | 4724.03 | TIMBRO 1717-14H_BHL |

## WELLBORE TARGET DETAILS (LAT/LONG)

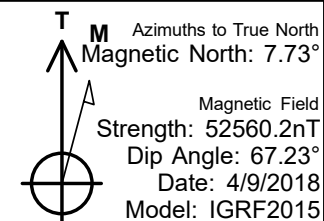
| Name                | TVD     | +N/-S    | +E/-W  | Latitude  | Longitude   |
|---------------------|---------|----------|--------|-----------|-------------|
| TIMBRO 1717-14H_SHL | 0.00    | 0.00     | 0.00   | 40.756952 | -103.995769 |
| TIMBRO 1717-14H_BHL | 6250.00 | -4723.36 | 551.78 | 40.743987 | -103.993778 |



**SHL**  
**306' FNL**  
**876' FEL**

**LP**  
**300' FNL**  
**330' FEL**

**BHL**  
**300' FSL**  
**330' FEL**



## WELL DETAILS: TIMBRO 1717-14H

GL = 5011'

RKB = 20' @ 5031.00usft (RIG)

Plan: Design #2 (TIMBRO 1717-14H/Wellbore #1)

Date: 2/24/2020

# HP

## Planning Report

|                  |                            |                                     |                               |
|------------------|----------------------------|-------------------------------------|-------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db | <b>Local Co-ordinate Reference:</b> | Well TIMBRO 1717-14H          |
| <b>Company:</b>  | VERDAD RESOURCES           | <b>TVD Reference:</b>               | RKB = 20' @ 5031.00usft (RIG) |
| <b>Project:</b>  | WATTENBERG FIELD           | <b>MD Reference:</b>                | RKB = 20' @ 5031.00usft (RIG) |
| <b>Site:</b>     | 9N-59W-17 TIMBRO 1717 PAD  | <b>North Reference:</b>             | True                          |
| <b>Well:</b>     | TIMBRO 1717-14H            | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | Wellbore #1                |                                     |                               |
| <b>Design:</b>   | Design #2                  |                                     |                               |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <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    |                      |                |

|                       |           |                           |                   |            |             |
|-----------------------|-----------|---------------------------|-------------------|------------|-------------|
| Site                  |           | 9N-59W-17 TIMBRO 1717 PAD |                   |            |             |
| Site Position:        |           | Northing:                 | 1,522,135.25 usft | Latitude:  | 40.756951   |
| From:                 | Lat/Long  | Easting:                  | 3,416,606.55 usft | Longitude: | -103.996171 |
| Position Uncertainty: | 0.00 usft | Slot Radius:              | 13-3/16 "         |            |             |

| Well                 |       | TIMBRO 1717-14H |                     |                   |               |               |
|----------------------|-------|-----------------|---------------------|-------------------|---------------|---------------|
| Well Position        | +N/-S | 0.00 usft       | Northing:           | 1,522,137.24 usft | Latitude:     | 40.756952     |
|                      | +E/-W | 0.00 usft       | Easting:            | 3,416,717.87 usft | Longitude:    | -103.995770   |
| Position Uncertainty |       | 3.28 usft       | Wellhead Elevation: | usft              | Ground Level: | 5,011.00 usft |
| Grid Convergence:    |       | 0.97 °          |                     |                   |               |               |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <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          | 4/9/2018           | 7.73                   | 67.23                | 52,560.17919042            |

|                          |                                |                     |                     |                      |      |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|------|
| <b>Design</b>            | Design #2                      |                     |                     |                      |      |
| <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                | 179.93               |      |

|                                 |                        |                          |                         |                               |  |
|---------------------------------|------------------------|--------------------------|-------------------------|-------------------------------|--|
| <b>Plan Survey Tool Program</b> |                        | <b>Date</b>              | 2/24/2020               |                               |  |
| <b>Depth From (usft)</b>        | <b>Depth To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b>        | <b>Remarks</b>                |  |
| 1                               | 0.00                   | 1,500.00                 | Design #2 (Wellbore #1) | ISCWSA REV 2 MWD              |  |
|                                 |                        |                          |                         | Fixed:v2:standard declination |  |
| 2                               | 1,500.00               | 11,409.96                | Design #2 (Wellbore #1) | ISCWSA REV 2 MWD              |  |
|                                 |                        |                          |                         | Fixed:v2:standard declination |  |

HP  
Planning Report

|           |                            |                              |                               |
|-----------|----------------------------|------------------------------|-------------------------------|
| Database: | EDM 5000.16 Single User Db | Local Co-ordinate Reference: | Well TIMBRO 1717-14H          |
| Company:  | VERDAD RESOURCES           | TVD Reference:               | RKB = 20' @ 5031.00usft (RIG) |
| Project:  | WATTENBERG FIELD           | MD Reference:                | RKB = 20' @ 5031.00usft (RIG) |
| Site:     | 9N-59W-17 TIMBRO 1717 PAD  | North Reference:             | True                          |
| Well:     | TIMBRO 1717-14H            | Survey Calculation Method:   | Minimum Curvature             |
| Wellbore: | Wellbore #1                |                              |                               |
| Design:   | Design #2                  |                              |                               |

| Plan Sections         |                 |             |                       |              |              |                         |                        |                       |         |                   |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|-------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target            |
| 0.00                  | 0.00            | 0.00        | 0.00                  | 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    |                   |
| 644.00                | 8.88            | 36.75       | 642.22                | 27.51        | 20.55        | 2.00                    | 2.00                   | 0.00                  | 36.75   |                   |
| 5,599.00              | 8.88            | 36.75       | 5,537.83              | 640.38       | 478.19       | 0.00                    | 0.00                   | 0.00                  | 0.00    |                   |
| 6,677.87              | 90.00           | 179.93      | 6,250.00              | 8.72         | 545.69       | 9.00                    | 7.52                   | 13.27                 | 142.84  |                   |
| 11,409.96             | 90.00           | 179.93      | 6,250.00              | -4,723.36    | 551.78       | 0.00                    | 0.00                   | 0.00                  | 0.00    | TIMBRO 1717-14H_E |

# HP

## Planning Report

|                  |                            |                                     |                               |
|------------------|----------------------------|-------------------------------------|-------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db | <b>Local Co-ordinate Reference:</b> | Well TIMBRO 1717-14H          |
| <b>Company:</b>  | VERDAD RESOURCES           | <b>TVD Reference:</b>               | RKB = 20' @ 5031.00usft (RIG) |
| <b>Project:</b>  | WATTENBERG FIELD           | <b>MD Reference:</b>                | RKB = 20' @ 5031.00usft (RIG) |
| <b>Site:</b>     | 9N-59W-17 TIMBRO 1717 PAD  | <b>North Reference:</b>             | True                          |
| <b>Well:</b>     | TIMBRO 1717-14H            | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | Wellbore #1                |                                     |                               |
| <b>Design:</b>   | Design #2                  |                                     |                               |

| 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                  |
| Begin Nudge @ 200.00ft  |                 |             |                       |              |              |                         |                         |                        |                       |
| 300.00                  | 2.00            | 36.75       | 299.98                | 1.40         | 1.04         | -1.40                   | 2.00                    | 2.00                   | 0.00                  |
| 400.00                  | 4.00            | 36.75       | 399.84                | 5.59         | 4.18         | -5.59                   | 2.00                    | 2.00                   | 0.00                  |
| 500.00                  | 6.00            | 36.75       | 499.45                | 12.57        | 9.39         | -12.56                  | 2.00                    | 2.00                   | 0.00                  |
| 600.00                  | 8.00            | 36.75       | 598.70                | 22.34        | 16.68        | -22.32                  | 2.00                    | 2.00                   | 0.00                  |
| 644.00                  | 8.88            | 36.75       | 642.22                | 27.51        | 20.55        | -27.49                  | 2.00                    | 2.00                   | 0.00                  |
| Hold Tangent @ 644.00ft |                 |             |                       |              |              |                         |                         |                        |                       |
| 700.00                  | 8.88            | 36.75       | 697.55                | 34.44        | 25.72        | -34.41                  | 0.00                    | 0.00                   | 0.00                  |
| 800.00                  | 8.88            | 36.75       | 796.35                | 46.81        | 34.95        | -46.77                  | 0.00                    | 0.00                   | 0.00                  |
| 900.00                  | 8.88            | 36.75       | 895.16                | 59.18        | 44.19        | -59.12                  | 0.00                    | 0.00                   | 0.00                  |
| 1,000.00                | 8.88            | 36.75       | 993.96                | 71.55        | 53.43        | -71.48                  | 0.00                    | 0.00                   | 0.00                  |
| 1,100.00                | 8.88            | 36.75       | 1,092.76              | 83.91        | 62.66        | -83.84                  | 0.00                    | 0.00                   | 0.00                  |
| 1,200.00                | 8.88            | 36.75       | 1,191.56              | 96.28        | 71.90        | -96.19                  | 0.00                    | 0.00                   | 0.00                  |
| 1,300.00                | 8.88            | 36.75       | 1,290.36              | 108.65       | 81.13        | -108.55                 | 0.00                    | 0.00                   | 0.00                  |
| 1,400.00                | 8.88            | 36.75       | 1,389.16              | 121.02       | 90.37        | -120.91                 | 0.00                    | 0.00                   | 0.00                  |
| 1,500.00                | 8.88            | 36.75       | 1,487.96              | 133.39       | 99.61        | -133.27                 | 0.00                    | 0.00                   | 0.00                  |
| 1,512.18                | 8.88            | 36.75       | 1,500.00              | 134.90       | 100.73       | -134.77                 | 0.00                    | 0.00                   | 0.00                  |
| 9 5/8"                  |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,600.00                | 8.88            | 36.75       | 1,586.77              | 145.76       | 108.84       | -145.62                 | 0.00                    | 0.00                   | 0.00                  |
| 1,700.00                | 8.88            | 36.75       | 1,685.57              | 158.13       | 118.08       | -157.98                 | 0.00                    | 0.00                   | 0.00                  |
| 1,800.00                | 8.88            | 36.75       | 1,784.37              | 170.49       | 127.31       | -170.34                 | 0.00                    | 0.00                   | 0.00                  |
| 1,900.00                | 8.88            | 36.75       | 1,883.17              | 182.86       | 136.55       | -182.70                 | 0.00                    | 0.00                   | 0.00                  |
| 2,000.00                | 8.88            | 36.75       | 1,981.97              | 195.23       | 145.79       | -195.05                 | 0.00                    | 0.00                   | 0.00                  |
| 2,100.00                | 8.88            | 36.75       | 2,080.77              | 207.60       | 155.02       | -207.41                 | 0.00                    | 0.00                   | 0.00                  |
| 2,200.00                | 8.88            | 36.75       | 2,179.57              | 219.97       | 164.26       | -219.77                 | 0.00                    | 0.00                   | 0.00                  |
| 2,300.00                | 8.88            | 36.75       | 2,278.38              | 232.34       | 173.49       | -232.13                 | 0.00                    | 0.00                   | 0.00                  |
| 2,400.00                | 8.88            | 36.75       | 2,377.18              | 244.71       | 182.73       | -244.48                 | 0.00                    | 0.00                   | 0.00                  |
| 2,500.00                | 8.88            | 36.75       | 2,475.98              | 257.07       | 191.97       | -256.84                 | 0.00                    | 0.00                   | 0.00                  |
| 2,600.00                | 8.88            | 36.75       | 2,574.78              | 269.44       | 201.20       | -269.20                 | 0.00                    | 0.00                   | 0.00                  |
| 2,700.00                | 8.88            | 36.75       | 2,673.58              | 281.81       | 210.44       | -281.55                 | 0.00                    | 0.00                   | 0.00                  |
| 2,800.00                | 8.88            | 36.75       | 2,772.38              | 294.18       | 219.67       | -293.91                 | 0.00                    | 0.00                   | 0.00                  |
| 2,900.00                | 8.88            | 36.75       | 2,871.18              | 306.55       | 228.91       | -306.27                 | 0.00                    | 0.00                   | 0.00                  |
| 3,000.00                | 8.88            | 36.75       | 2,969.99              | 318.92       | 238.15       | -318.63                 | 0.00                    | 0.00                   | 0.00                  |
| 3,100.00                | 8.88            | 36.75       | 3,068.79              | 331.29       | 247.38       | -330.98                 | 0.00                    | 0.00                   | 0.00                  |
| 3,200.00                | 8.88            | 36.75       | 3,167.59              | 343.65       | 256.62       | -343.34                 | 0.00                    | 0.00                   | 0.00                  |
| 3,300.00                | 8.88            | 36.75       | 3,266.39              | 356.02       | 265.86       | -355.70                 | 0.00                    | 0.00                   | 0.00                  |
| 3,400.00                | 8.88            | 36.75       | 3,365.19              | 368.39       | 275.09       | -368.06                 | 0.00                    | 0.00                   | 0.00                  |
| 3,500.00                | 8.88            | 36.75       | 3,463.99              | 380.76       | 284.33       | -380.41                 | 0.00                    | 0.00                   | 0.00                  |
| 3,600.00                | 8.88            | 36.75       | 3,562.79              | 393.13       | 293.56       | -392.77                 | 0.00                    | 0.00                   | 0.00                  |
| 3,700.00                | 8.88            | 36.75       | 3,661.59              | 405.50       | 302.80       | -405.13                 | 0.00                    | 0.00                   | 0.00                  |
| 3,800.00                | 8.88            | 36.75       | 3,760.40              | 417.87       | 312.04       | -417.48                 | 0.00                    | 0.00                   | 0.00                  |
| 3,900.00                | 8.88            | 36.75       | 3,859.20              | 430.23       | 321.27       | -429.84                 | 0.00                    | 0.00                   | 0.00                  |
| 4,000.00                | 8.88            | 36.75       | 3,958.00              | 442.60       | 330.51       | -442.20                 | 0.00                    | 0.00                   | 0.00                  |
| 4,100.00                | 8.88            | 36.75       | 4,056.80              | 454.97       | 339.74       | -454.56                 | 0.00                    | 0.00                   | 0.00                  |
| 4,200.00                | 8.88            | 36.75       | 4,155.60              | 467.34       | 348.98       | -466.91                 | 0.00                    | 0.00                   | 0.00                  |
| 4,300.00                | 8.88            | 36.75       | 4,254.40              | 479.71       | 358.22       | -479.27                 | 0.00                    | 0.00                   | 0.00                  |
| 4,400.00                | 8.88            | 36.75       | 4,353.20              | 492.08       | 367.45       | -491.63                 | 0.00                    | 0.00                   | 0.00                  |
| 4,500.00                | 8.88            | 36.75       | 4,452.01              | 504.45       | 376.69       | -503.99                 | 0.00                    | 0.00                   | 0.00                  |
| 4,600.00                | 8.88            | 36.75       | 4,550.81              | 516.82       | 385.92       | -516.34                 | 0.00                    | 0.00                   | 0.00                  |
| 4,700.00                | 8.88            | 36.75       | 4,649.61              | 529.18       | 395.16       | -528.70                 | 0.00                    | 0.00                   | 0.00                  |

# HP

## Planning Report

|                  |                            |                                     |                               |
|------------------|----------------------------|-------------------------------------|-------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db | <b>Local Co-ordinate Reference:</b> | Well TIMBRO 1717-14H          |
| <b>Company:</b>  | VERDAD RESOURCES           | <b>TVD Reference:</b>               | RKB = 20' @ 5031.00usft (RIG) |
| <b>Project:</b>  | WATTENBERG FIELD           | <b>MD Reference:</b>                | RKB = 20' @ 5031.00usft (RIG) |
| <b>Site:</b>     | 9N-59W-17 TIMBRO 1717 PAD  | <b>North Reference:</b>             | True                          |
| <b>Well:</b>     | TIMBRO 1717-14H            | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | Wellbore #1                |                                     |                               |
| <b>Design:</b>   | Design #2                  |                                     |                               |

| 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) |
| 4,800.00                                | 8.88            | 36.75       | 4,748.41              | 541.55       | 404.40       | -541.06                 | 0.00                    | 0.00                   | 0.00                  |
| 4,900.00                                | 8.88            | 36.75       | 4,847.21              | 553.92       | 413.63       | -553.42                 | 0.00                    | 0.00                   | 0.00                  |
| 5,000.00                                | 8.88            | 36.75       | 4,946.01              | 566.29       | 422.87       | -565.77                 | 0.00                    | 0.00                   | 0.00                  |
| 5,100.00                                | 8.88            | 36.75       | 5,044.81              | 578.66       | 432.10       | -578.13                 | 0.00                    | 0.00                   | 0.00                  |
| 5,200.00                                | 8.88            | 36.75       | 5,143.62              | 591.03       | 441.34       | -590.49                 | 0.00                    | 0.00                   | 0.00                  |
| 5,300.00                                | 8.88            | 36.75       | 5,242.42              | 603.40       | 450.58       | -602.84                 | 0.00                    | 0.00                   | 0.00                  |
| 5,400.00                                | 8.88            | 36.75       | 5,341.22              | 615.76       | 459.81       | -615.20                 | 0.00                    | 0.00                   | 0.00                  |
| 5,500.00                                | 8.88            | 36.75       | 5,440.02              | 628.13       | 469.05       | -627.56                 | 0.00                    | 0.00                   | 0.00                  |
| 5,599.00                                | 8.88            | 36.75       | 5,537.83              | 640.38       | 478.19       | -639.79                 | 0.00                    | 0.00                   | 0.00                  |
| <b>KOP @ 5599.00ft :: DLS = 9°/100'</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,600.00                                | 8.81            | 37.10       | 5,538.82              | 640.50       | 478.28       | -639.92                 | 9.00                    | -7.16                  | 35.50                 |
| 5,700.00                                | 5.71            | 110.38      | 5,638.19              | 644.88       | 487.58       | -644.29                 | 9.00                    | -3.10                  | 73.28                 |
| 5,800.00                                | 12.21           | 154.28      | 5,737.01              | 633.60       | 496.85       | -632.99                 | 9.00                    | 6.50                   | 43.90                 |
| 5,900.00                                | 20.67           | 165.55      | 5,832.86              | 606.93       | 505.86       | -606.31                 | 9.00                    | 8.46                   | 11.27                 |
| 6,000.00                                | 29.44           | 170.38      | 5,923.37              | 565.53       | 514.39       | -564.90                 | 9.00                    | 8.77                   | 4.82                  |
| 6,100.00                                | 38.31           | 173.12      | 6,006.32              | 510.41       | 522.23       | -509.77                 | 9.00                    | 8.87                   | 2.74                  |
| 6,200.00                                | 47.22           | 174.96      | 6,079.66              | 442.94       | 529.18       | -442.29                 | 9.00                    | 8.91                   | 1.84                  |
| 6,300.00                                | 56.16           | 176.33      | 6,141.59              | 364.78       | 535.08       | -364.12                 | 9.00                    | 8.94                   | 1.37                  |
| 6,400.00                                | 65.11           | 177.44      | 6,190.58              | 277.84       | 539.78       | -277.18                 | 9.00                    | 8.95                   | 1.11                  |
| 6,500.00                                | 74.06           | 178.39      | 6,225.42              | 184.28       | 543.17       | -183.62                 | 9.00                    | 8.96                   | 0.96                  |
| 6,600.00                                | 83.02           | 179.27      | 6,245.27              | 86.39        | 545.15       | -85.73                  | 9.00                    | 8.96                   | 0.88                  |
| 6,677.87                                | 90.00           | 179.93      | 6,250.00              | 8.72         | 545.69       | -8.06                   | 9.00                    | 8.96                   | 0.84                  |
| <b>End Build @ 6677.87ft</b>            |                 |             |                       |              |              |                         |                         |                        |                       |
| 6,700.00                                | 90.00           | 179.93      | 6,250.00              | -13.41       | 545.72       | 14.08                   | 0.00                    | 0.00                   | 0.00                  |
| 6,800.00                                | 90.00           | 179.93      | 6,250.00              | -113.41      | 545.85       | 114.08                  | 0.00                    | 0.00                   | 0.00                  |
| 6,900.00                                | 90.00           | 179.93      | 6,250.00              | -213.41      | 545.98       | 214.08                  | 0.00                    | 0.00                   | 0.00                  |
| 7,000.00                                | 90.00           | 179.93      | 6,250.00              | -313.41      | 546.11       | 314.08                  | 0.00                    | 0.00                   | 0.00                  |
| 7,100.00                                | 90.00           | 179.93      | 6,250.00              | -413.41      | 546.24       | 414.08                  | 0.00                    | 0.00                   | 0.00                  |
| 7,200.00                                | 90.00           | 179.93      | 6,250.00              | -513.41      | 546.37       | 514.08                  | 0.00                    | 0.00                   | 0.00                  |
| 7,300.00                                | 90.00           | 179.93      | 6,250.00              | -613.41      | 546.49       | 614.08                  | 0.00                    | 0.00                   | 0.00                  |
| 7,400.00                                | 90.00           | 179.93      | 6,250.00              | -713.41      | 546.62       | 714.08                  | 0.00                    | 0.00                   | 0.00                  |
| 7,500.00                                | 90.00           | 179.93      | 6,250.00              | -813.41      | 546.75       | 814.08                  | 0.00                    | 0.00                   | 0.00                  |
| 7,600.00                                | 90.00           | 179.93      | 6,250.00              | -913.41      | 546.88       | 914.08                  | 0.00                    | 0.00                   | 0.00                  |
| 7,700.00                                | 90.00           | 179.93      | 6,250.00              | -1,013.41    | 547.01       | 1,014.08                | 0.00                    | 0.00                   | 0.00                  |
| 7,800.00                                | 90.00           | 179.93      | 6,250.00              | -1,113.41    | 547.14       | 1,114.08                | 0.00                    | 0.00                   | 0.00                  |
| 7,900.00                                | 90.00           | 179.93      | 6,250.00              | -1,213.41    | 547.27       | 1,214.08                | 0.00                    | 0.00                   | 0.00                  |
| 8,000.00                                | 90.00           | 179.93      | 6,250.00              | -1,313.41    | 547.40       | 1,314.08                | 0.00                    | 0.00                   | 0.00                  |
| 8,100.00                                | 90.00           | 179.93      | 6,250.00              | -1,413.41    | 547.52       | 1,414.08                | 0.00                    | 0.00                   | 0.00                  |
| 8,200.00                                | 90.00           | 179.93      | 6,250.00              | -1,513.41    | 547.65       | 1,514.08                | 0.00                    | 0.00                   | 0.00                  |
| 8,300.00                                | 90.00           | 179.93      | 6,250.00              | -1,613.41    | 547.78       | 1,614.08                | 0.00                    | 0.00                   | 0.00                  |
| 8,400.00                                | 90.00           | 179.93      | 6,250.00              | -1,713.41    | 547.91       | 1,714.08                | 0.00                    | 0.00                   | 0.00                  |
| 8,500.00                                | 90.00           | 179.93      | 6,250.00              | -1,813.41    | 548.04       | 1,814.08                | 0.00                    | 0.00                   | 0.00                  |
| 8,600.00                                | 90.00           | 179.93      | 6,250.00              | -1,913.41    | 548.17       | 1,914.08                | 0.00                    | 0.00                   | 0.00                  |
| 8,700.00                                | 90.00           | 179.93      | 6,250.00              | -2,013.41    | 548.30       | 2,014.08                | 0.00                    | 0.00                   | 0.00                  |
| 8,800.00                                | 90.00           | 179.93      | 6,250.00              | -2,113.41    | 548.43       | 2,114.08                | 0.00                    | 0.00                   | 0.00                  |
| 8,900.00                                | 90.00           | 179.93      | 6,250.00              | -2,213.41    | 548.55       | 2,214.08                | 0.00                    | 0.00                   | 0.00                  |
| 9,000.00                                | 90.00           | 179.93      | 6,250.00              | -2,313.41    | 548.68       | 2,314.08                | 0.00                    | 0.00                   | 0.00                  |
| 9,100.00                                | 90.00           | 179.93      | 6,250.00              | -2,413.41    | 548.81       | 2,414.08                | 0.00                    | 0.00                   | 0.00                  |
| 9,200.00                                | 90.00           | 179.93      | 6,250.00              | -2,513.41    | 548.94       | 2,514.08                | 0.00                    | 0.00                   | 0.00                  |
| 9,300.00                                | 90.00           | 179.93      | 6,250.00              | -2,613.41    | 549.07       | 2,614.08                | 0.00                    | 0.00                   | 0.00                  |
| 9,400.00                                | 90.00           | 179.93      | 6,250.00              | -2,713.41    | 549.20       | 2,714.08                | 0.00                    | 0.00                   | 0.00                  |
| 9,500.00                                | 90.00           | 179.93      | 6,250.00              | -2,813.41    | 549.33       | 2,814.08                | 0.00                    | 0.00                   | 0.00                  |
| 9,600.00                                | 90.00           | 179.93      | 6,250.00              | -2,913.41    | 549.45       | 2,914.08                | 0.00                    | 0.00                   | 0.00                  |
| 9,700.00                                | 90.00           | 179.93      | 6,250.00              | -3,013.41    | 549.58       | 3,014.08                | 0.00                    | 0.00                   | 0.00                  |

# HP

## Planning Report

|                  |                            |                                     |                               |
|------------------|----------------------------|-------------------------------------|-------------------------------|
| <b>Database:</b> | EDM 5000.16 Single User Db | <b>Local Co-ordinate Reference:</b> | Well TIMBRO 1717-14H          |
| <b>Company:</b>  | VERDAD RESOURCES           | <b>TVD Reference:</b>               | RKB = 20' @ 5031.00usft (RIG) |
| <b>Project:</b>  | WATTENBERG FIELD           | <b>MD Reference:</b>                | RKB = 20' @ 5031.00usft (RIG) |
| <b>Site:</b>     | 9N-59W-17 TIMBRO 1717 PAD  | <b>North Reference:</b>             | True                          |
| <b>Well:</b>     | TIMBRO 1717-14H            | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | Wellbore #1                |                                     |                               |
| <b>Design:</b>   | Design #2                  |                                     |                               |

| 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) |  |
| 9,800.00              | 90.00           | 179.93      | 6,250.00              | -3,113.41    | 549.71       | 3,114.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 9,900.00              | 90.00           | 179.93      | 6,250.00              | -3,213.41    | 549.84       | 3,214.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,000.00             | 90.00           | 179.93      | 6,250.00              | -3,313.41    | 549.97       | 3,314.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,100.00             | 90.00           | 179.93      | 6,250.00              | -3,413.41    | 550.10       | 3,414.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,200.00             | 90.00           | 179.93      | 6,250.00              | -3,513.41    | 550.23       | 3,514.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,300.00             | 90.00           | 179.93      | 6,250.00              | -3,613.41    | 550.36       | 3,614.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,400.00             | 90.00           | 179.93      | 6,250.00              | -3,713.41    | 550.48       | 3,714.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,500.00             | 90.00           | 179.93      | 6,250.00              | -3,813.41    | 550.61       | 3,814.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,600.00             | 90.00           | 179.93      | 6,250.00              | -3,913.41    | 550.74       | 3,914.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,700.00             | 90.00           | 179.93      | 6,250.00              | -4,013.41    | 550.87       | 4,014.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,800.00             | 90.00           | 179.93      | 6,250.00              | -4,113.41    | 551.00       | 4,114.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 10,900.00             | 90.00           | 179.93      | 6,250.00              | -4,213.41    | 551.13       | 4,214.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,000.00             | 90.00           | 179.93      | 6,250.00              | -4,313.41    | 551.26       | 4,314.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,100.00             | 90.00           | 179.93      | 6,250.00              | -4,413.41    | 551.38       | 4,414.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,200.00             | 90.00           | 179.93      | 6,250.00              | -4,513.41    | 551.51       | 4,514.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,300.00             | 90.00           | 179.93      | 6,250.00              | -4,613.41    | 551.64       | 4,614.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,400.00             | 90.00           | 179.93      | 6,250.00              | -4,713.41    | 551.77       | 4,714.08                | 0.00                    | 0.00                   | 0.00                  |  |
| 11,409.96             | 90.00           | 179.93      | 6,250.00              | -4,723.36    | 551.78       | 4,724.03                | 0.00                    | 0.00                   | 0.00                  |  |
| TD Well @ 11409.96ft  |                 |             |                       |              |              |                         |                         |                        |                       |  |

| Casing Points         |                       |        |                     |                   |  |
|-----------------------|-----------------------|--------|---------------------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name   | Casing Diameter (") | Hole Diameter (") |  |
| 1,512.18              | 1,500.00              | 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                          |  |
| 200.00                | 200.00                | 0.00              | 0.00         | Begin Nudge @ 200.00ft           |  |
| 644.00                | 642.22                | 27.51             | 20.55        | Hold Tangent @ 644.00ft          |  |
| 5,599.00              | 5,537.83              | 640.38            | 478.19       | KOP @ 5599.00ft :: DLS = 9°/100' |  |
| 6,677.87              | 6,250.00              | 8.72              | 545.69       | End Build @ 6677.87ft            |  |
| 11,409.96             | 6,250.00              | -4,723.36         | 551.78       | TD Well @ 11409.96ft             |  |