

# **Nickel Road Operating**

**Weld Co., CO (NAD-83)**

**Sec.5-T6N-R65W**

**REEMAN 6X-HNC-04-06-65**

**OH**

**Plan: Plan #2**

## **Standard Planning Report**

**22 July, 2022**

Project: Weld Co., CO (NAD-83)  
Site: Sec.5-T6N-R65W  
Well: REEMAN 6X-HNC-04-06-65  
Wellbore: OH  
Design: Plan #2  
Lat: 40.518500  
Long: -104.691629  
GL: 4816.00  
KB: KB=17 @ 4833.00usft



Azimuths to Grid North  
True North: -0.52°  
Magnetic North: 7.19°  
  
Magnetic Field  
Strength: 51932.7nT  
Dip Angle: 66.77°  
Date: 4/25/2022  
Model: HDGM2022

## WELL DETAILS: REEMAN 6X-HNC-04-06-65

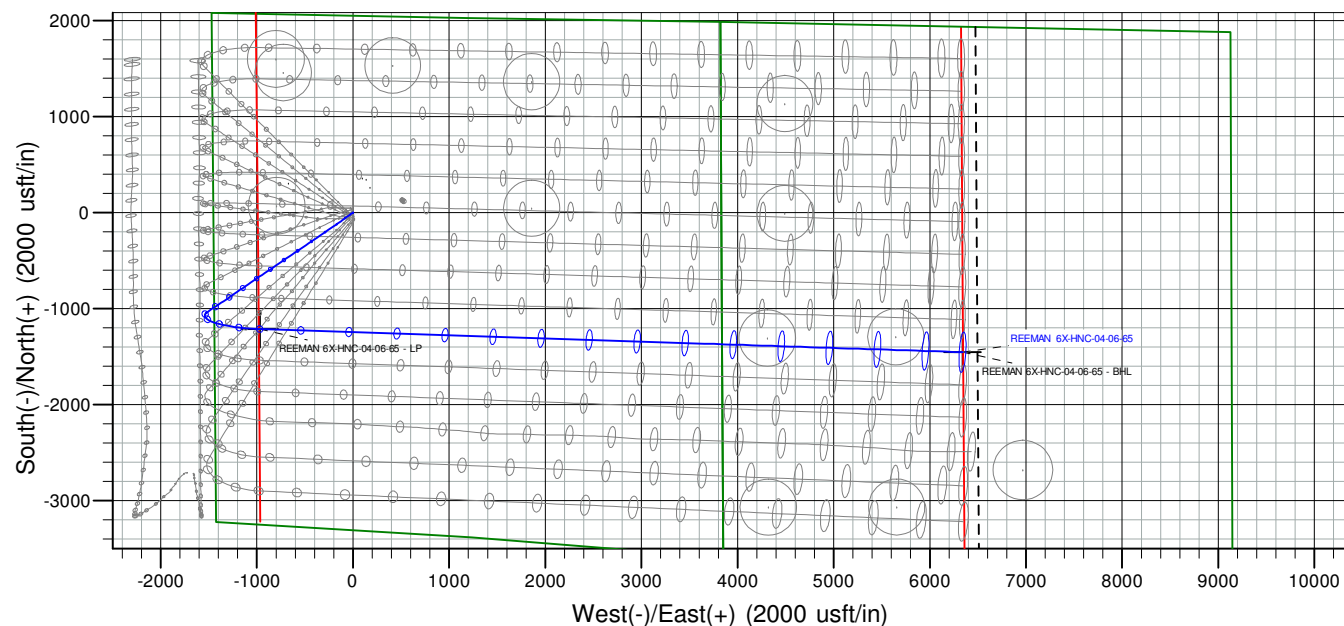
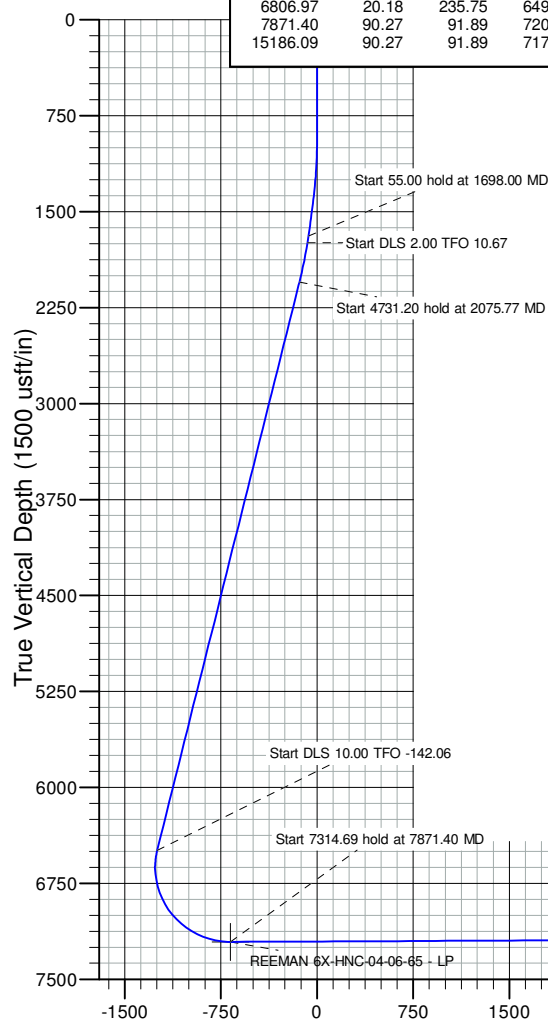
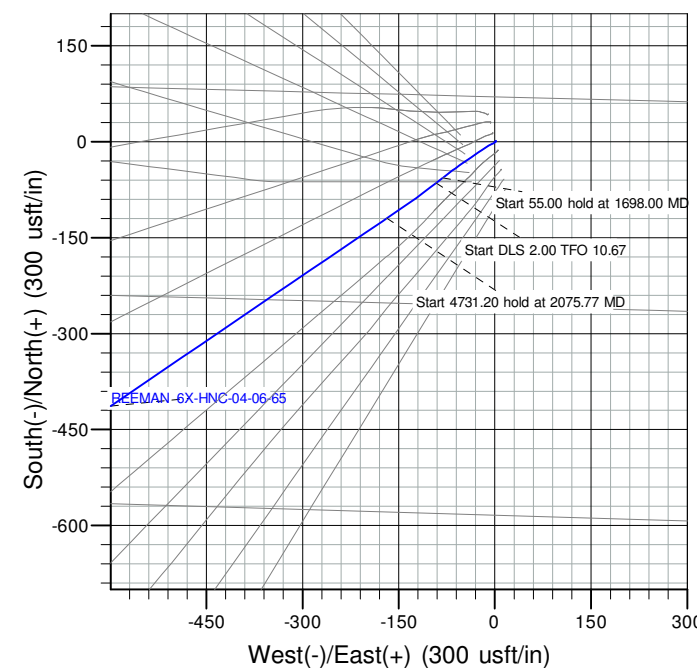
| +N/-S | +E/-W | Northing   | Easting    | Latitude  | Longitude   |
|-------|-------|------------|------------|-----------|-------------|
| 0.00  | 0.00  | 1432754.54 | 3224743.04 | 40.518500 | -104.691629 |

## WELLBORE TARGET DETAILS (LAT/LONG)

| Name                                | TVD | +N/-S    | +E/-W   | Northing   | Easting    | Shape |
|-------------------------------------|-----|----------|---------|------------|------------|-------|
| REEMAN 6X-HNC-04-06-65 - BHL7173.00 |     | -1453.17 | 6340.65 | 1431301.37 | 3231083.69 | Point |
| REEMAN 6X-HNC-04-06-65 - LP 7208.00 |     | -1212.20 | -969.99 | 1431542.34 | 3223773.05 | Point |

## SECTION DETAILS

| MD       | Inc   | Azi    | TVD     | +N/-S    | +E/-W    | Dleg  | TFace   | Vsect    | Annotation                       |
|----------|-------|--------|---------|----------|----------|-------|---------|----------|----------------------------------|
| 1698.00  | 13.80 | 232.29 | 1689.47 | -56.66   | -81.59   | 0.00  | 0.00    | -66.87   | Start 55.00 hold at 1698.00 MD   |
| 1753.00  | 13.80 | 232.29 | 1742.88 | -64.69   | -91.97   | 0.00  | 0.00    | -75.19   | Start DLS 2.00 TFO 10.67         |
| 2075.77  | 20.18 | 235.75 | 2051.41 | -119.62  | -168.52  | 2.00  | 10.67   | -137.54  | Start 4731.20 hold at 2075.77 MD |
| 6806.97  | 20.18 | 235.75 | 6492.22 | -1038.14 | -1517.51 | 0.00  | 0.00    | -1247.25 | Start DLS 10.00 TFO -142.06      |
| 7871.40  | 90.27 | 91.89  | 7208.00 | -1212.20 | -969.99  | 10.00 | -142.06 | -674.68  | Start 7314.69 hold at 7871.40 MD |
| 15186.09 | 90.27 | 91.89  | 7173.00 | -1453.17 | 6340.65  | 0.00  | 0.00    | 6505.04  | TD at 15186.09                   |



Vertical Section at 102.91° (1500 usft/in)

## Planning Report

|                  |                        |                                     |                             |
|------------------|------------------------|-------------------------------------|-----------------------------|
| <b>Database:</b> | FHartmann              | <b>Local Co-ordinate Reference:</b> | Well REEMAN 6X-HNC-04-06-65 |
| <b>Company:</b>  | Nickel Road Operating  | <b>TVD Reference:</b>               | KB=17 @ 4833.00usft         |
| <b>Project:</b>  | Weld Co., CO (NAD-83)  | <b>MD Reference:</b>                | KB=17 @ 4833.00usft         |
| <b>Site:</b>     | Sec.5-T6N-R65W         | <b>North Reference:</b>             | Grid                        |
| <b>Well:</b>     | REEMAN 6X-HNC-04-06-65 | <b>Survey Calculation Method:</b>   | Minimum Curvature           |
| <b>Wellbore:</b> | OH                     |                                     |                             |
| <b>Design:</b>   | Plan #2                |                                     |                             |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | Weld Co., CO (NAD-83)     |                      |                |
| <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                  |          | Sec.5-T6N-R65W |              |              |            |             |
| Site Position:        |          | Northing:      | 1,432,798.19 | usft         | Latitude:  | 40.518620   |
| From:                 | Lat/Long | Easting:       | 3,224,732.64 | usft         | Longitude: | -104.691665 |
| Position Uncertainty: |          | 0.00           | usft         | Slot Radius: | 13-3/16    | "           |

| Well                 |       | REEMAN 6X-HNC-04-06-65 |                     |                   |               |               |
|----------------------|-------|------------------------|---------------------|-------------------|---------------|---------------|
| Well Position        | +N/-S | 0.00 usft              | Northing:           | 1,432,754.54 usft | Latitude:     | 40.518500     |
|                      | +E/-W | 0.00 usft              | Easting:            | 3,224,743.04 usft | Longitude:    | -104.691629   |
| Position Uncertainty |       | 0.00 usft              | Wellhead Elevation: | usft              | Ground Level: | 4,816.00 usft |
| Grid Convergence:    |       | 0.52 °                 |                     |                   |               |               |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | OH                |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | HDGM2022          | 4/25/2022          | 7.72                   | 66.77                | 51,932.70000000            |

|                          |                                |                     |                     |                      |          |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|----------|
| <b>Design</b>            | Plan #2                        |                     |                     |                      |          |
| <b>Audit Notes:</b>      |                                |                     |                     |                      |          |
| <b>Version:</b>          |                                | <b>Phase:</b>       | PLAN                | <b>Tie On Depth:</b> | 1,698.00 |
| <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                | 102.91               |          |

|                                 |                        |                          |                     |                     |  |
|---------------------------------|------------------------|--------------------------|---------------------|---------------------|--|
| <b>Plan Survey Tool Program</b> | <b>Date</b>            | 7/22/2022                |                     |                     |  |
| <b>Depth From (usft)</b>        | <b>Depth To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b>    | <b>Remarks</b>      |  |
| 1                               | 82.00                  | 1,698.00                 | Surface Survey (OH) | MWD                 |  |
|                                 |                        |                          |                     | OWSG MWD - Standard |  |
| 2                               | 1,698.00               | 15,186.09                | Plan #2 (OH)        | MWD                 |  |
|                                 |                        |                          |                     | OWSG MWD - Standard |  |

## Planning Report

|                  |                        |                                     |                             |
|------------------|------------------------|-------------------------------------|-----------------------------|
| <b>Database:</b> | FHartmann              | <b>Local Co-ordinate Reference:</b> | Well REEMAN 6X-HNC-04-06-65 |
| <b>Company:</b>  | Nickel Road Operating  | <b>TVD Reference:</b>               | KB=17 @ 4833.00usft         |
| <b>Project:</b>  | Weld Co., CO (NAD-83)  | <b>MD Reference:</b>                | KB=17 @ 4833.00usft         |
| <b>Site:</b>     | Sec.5-T6N-R65W         | <b>North Reference:</b>             | Grid                        |
| <b>Well:</b>     | REEMAN 6X-HNC-04-06-65 | <b>Survey Calculation Method:</b>   | Minimum Curvature           |
| <b>Wellbore:</b> | OH                     |                                     |                             |
| <b>Design:</b>   | Plan #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           |
| 1,698.00              | 13.80           | 232.29      | 1,689.47              | -56.66       | -81.59       | 0.00                    | 0.00                   | 0.00                  | 0.00    |                  |
| 1,753.00              | 13.80           | 232.29      | 1,742.88              | -64.69       | -91.97       | 0.00                    | 0.00                   | 0.00                  | 0.00    |                  |
| 2,075.77              | 20.18           | 235.75      | 2,051.41              | -119.62      | -168.52      | 2.00                    | 1.98                   | 1.07                  | 10.67   |                  |
| 6,806.97              | 20.18           | 235.75      | 6,492.22              | -1,038.14    | -1,517.51    | 0.00                    | 0.00                   | 0.00                  | 0.00    |                  |
| 7,871.40              | 90.27           | 91.89       | 7,208.00              | -1,212.20    | -969.99      | 10.00                   | 6.59                   | -13.52                | -142.06 | REEMAN 6X-HNC-04 |
| 15,186.09             | 90.27           | 91.89       | 7,173.00              | -1,453.17    | 6,340.65     | 0.00                    | 0.00                   | 0.00                  | 0.00    | REEMAN 6X-HNC-04 |

# Planning Report

|                  |                        |                                     |                             |
|------------------|------------------------|-------------------------------------|-----------------------------|
| <b>Database:</b> | FHartmann              | <b>Local Co-ordinate Reference:</b> | Well REEMAN 6X-HNC-04-06-65 |
| <b>Company:</b>  | Nickel Road Operating  | <b>TVD Reference:</b>               | KB=17 @ 4833.00usft         |
| <b>Project:</b>  | Weld Co., CO (NAD-83)  | <b>MD Reference:</b>                | KB=17 @ 4833.00usft         |
| <b>Site:</b>     | Sec.5-T6N-R65W         | <b>North Reference:</b>             | Grid                        |
| <b>Well:</b>     | REEMAN 6X-HNC-04-06-65 | <b>Survey Calculation Method:</b>   | Minimum Curvature           |
| <b>Wellbore:</b> | OH                     |                                     |                             |
| <b>Design:</b>   | Plan #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                  |
| 82.00                            | 0.79            | 105.64      | 82.00                 | -0.15        | 0.54         | 0.56                    | 0.96                    | 0.96                   | 0.00                  |
| 173.00                           | 0.66            | 19.68       | 172.99                | 0.17         | 1.33         | 1.25                    | 1.09                    | -0.14                  | -94.46                |
| 265.00                           | 0.40            | 18.80       | 264.99                | 0.97         | 1.61         | 1.35                    | 0.28                    | -0.28                  | -0.96                 |
| 357.00                           | 0.09            | 161.18      | 356.99                | 1.21         | 1.73         | 1.42                    | 0.52                    | -0.34                  | 154.76                |
| 447.00                           | 0.40            | 240.29      | 446.99                | 0.99         | 1.48         | 1.23                    | 0.44                    | 0.34                   | 87.90                 |
| 537.00                           | 0.04            | 233.69      | 536.99                | 0.81         | 1.19         | 0.97                    | 0.40                    | -0.40                  | -7.33                 |
| 627.00                           | 0.09            | 0.61        | 626.99                | 0.87         | 1.16         | 0.94                    | 0.13                    | 0.06                   | 141.02                |
| 717.00                           | 0.22            | 222.00      | 716.99                | 0.81         | 1.05         | 0.84                    | 0.33                    | 0.14                   | -154.01               |
| 807.00                           | 0.26            | 134.73      | 806.99                | 0.54         | 1.08         | 0.93                    | 0.37                    | 0.04                   | -96.97                |
| 897.00                           | 0.04            | 97.20       | 896.98                | 0.39         | 1.25         | 1.13                    | 0.26                    | -0.24                  | -41.70                |
| 987.00                           | 1.71            | 229.04      | 986.97                | -0.50        | 0.27         | 0.37                    | 1.93                    | 1.86                   | 146.49                |
| 1,077.00                         | 2.72            | 244.50      | 1,076.90              | -2.30        | -2.67        | -2.09                   | 1.29                    | 1.12                   | 17.18                 |
| 1,167.00                         | 4.66            | 239.93      | 1,166.71              | -5.05        | -7.76        | -6.44                   | 2.18                    | 2.16                   | -5.08                 |
| 1,257.00                         | 7.12            | 238.18      | 1,256.23              | -9.82        | -15.67       | -13.08                  | 2.74                    | 2.73                   | -1.94                 |
| 1,347.00                         | 8.35            | 235.28      | 1,345.41              | -16.48       | -25.78       | -21.45                  | 1.43                    | 1.37                   | -3.22                 |
| 1,437.00                         | 10.37           | 234.66      | 1,434.21              | -24.89       | -37.76       | -31.25                  | 2.25                    | 2.24                   | -0.69                 |
| 1,527.00                         | 10.90           | 236.51      | 1,522.66              | -34.27       | -51.46       | -42.51                  | 0.70                    | 0.59                   | 2.06                  |
| 1,617.00                         | 13.10           | 232.55      | 1,610.69              | -45.17       | -66.66       | -54.88                  | 2.61                    | 2.44                   | -4.40                 |
| 1,698.00                         | 13.80           | 232.29      | 1,689.47              | -56.66       | -81.59       | -66.87                  | 0.87                    | 0.86                   | -0.32                 |
| Start 55.00 hold at 1698.00 MD   |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,700.00                         | 13.80           | 232.29      | 1,691.41              | -56.95       | -81.97       | -67.17                  | 0.00                    | 0.00                   | 0.00                  |
| 1,753.00                         | 13.80           | 232.29      | 1,742.88              | -64.69       | -91.97       | -75.19                  | 0.00                    | 0.00                   | 0.00                  |
| Start DLS 2.00 TFO 10.67         |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,800.00                         | 14.72           | 232.97      | 1,788.43              | -71.71       | -101.17      | -82.60                  | 2.00                    | 1.97                   | 1.46                  |
| 1,900.00                         | 16.70           | 234.18      | 1,884.69              | -87.77       | -122.97      | -100.26                 | 2.00                    | 1.97                   | 1.21                  |
| 2,000.00                         | 18.68           | 235.14      | 1,979.96              | -105.33      | -147.76      | -120.50                 | 2.00                    | 1.98                   | 0.96                  |
| 2,075.77                         | 20.18           | 235.75      | 2,051.41              | -119.62      | -168.52      | -137.54                 | 2.00                    | 1.98                   | 0.80                  |
| Start 4731.20 hold at 2075.77 MD |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,100.00                         | 20.18           | 235.75      | 2,074.16              | -124.33      | -175.43      | -143.22                 | 0.00                    | 0.00                   | 0.00                  |
| 2,200.00                         | 20.18           | 235.75      | 2,168.02              | -143.74      | -203.94      | -166.68                 | 0.00                    | 0.00                   | 0.00                  |
| 2,300.00                         | 20.18           | 235.75      | 2,261.88              | -163.16      | -232.45      | -190.13                 | 0.00                    | 0.00                   | 0.00                  |
| 2,400.00                         | 20.18           | 235.75      | 2,355.74              | -182.57      | -260.97      | -213.59                 | 0.00                    | 0.00                   | 0.00                  |
| 2,500.00                         | 20.18           | 235.75      | 2,449.61              | -201.98      | -289.48      | -237.04                 | 0.00                    | 0.00                   | 0.00                  |
| 2,600.00                         | 20.18           | 235.75      | 2,543.47              | -221.40      | -317.99      | -260.50                 | 0.00                    | 0.00                   | 0.00                  |
| 2,700.00                         | 20.18           | 235.75      | 2,637.33              | -240.81      | -346.51      | -283.95                 | 0.00                    | 0.00                   | 0.00                  |
| 2,800.00                         | 20.18           | 235.75      | 2,731.19              | -260.23      | -375.02      | -307.41                 | 0.00                    | 0.00                   | 0.00                  |
| 2,900.00                         | 20.18           | 235.75      | 2,825.06              | -279.64      | -403.53      | -330.86                 | 0.00                    | 0.00                   | 0.00                  |
| 3,000.00                         | 20.18           | 235.75      | 2,918.92              | -299.05      | -432.04      | -354.32                 | 0.00                    | 0.00                   | 0.00                  |
| 3,100.00                         | 20.18           | 235.75      | 3,012.78              | -318.47      | -460.56      | -377.77                 | 0.00                    | 0.00                   | 0.00                  |
| 3,200.00                         | 20.18           | 235.75      | 3,106.64              | -337.88      | -489.07      | -401.23                 | 0.00                    | 0.00                   | 0.00                  |
| 3,300.00                         | 20.18           | 235.75      | 3,200.50              | -357.30      | -517.58      | -424.68                 | 0.00                    | 0.00                   | 0.00                  |
| 3,400.00                         | 20.18           | 235.75      | 3,294.37              | -376.71      | -546.09      | -448.14                 | 0.00                    | 0.00                   | 0.00                  |
| 3,500.00                         | 20.18           | 235.75      | 3,388.23              | -396.13      | -574.61      | -471.59                 | 0.00                    | 0.00                   | 0.00                  |
| 3,600.00                         | 20.18           | 235.75      | 3,482.09              | -415.54      | -603.12      | -495.05                 | 0.00                    | 0.00                   | 0.00                  |
| 3,700.00                         | 20.18           | 235.75      | 3,575.95              | -434.95      | -631.63      | -518.50                 | 0.00                    | 0.00                   | 0.00                  |
| 3,800.00                         | 20.18           | 235.75      | 3,669.82              | -454.37      | -660.14      | -541.96                 | 0.00                    | 0.00                   | 0.00                  |
| 3,898.21                         | 20.18           | 235.75      | 3,762.00              | -473.43      | -688.15      | -565.00                 | 0.00                    | 0.00                   | 0.00                  |
| Parkman                          |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,900.00                         | 20.18           | 235.75      | 3,763.68              | -473.78      | -688.66      | -565.41                 | 0.00                    | 0.00                   | 0.00                  |
| 4,000.00                         | 20.18           | 235.75      | 3,857.54              | -493.20      | -717.17      | -588.87                 | 0.00                    | 0.00                   | 0.00                  |
| 4,100.00                         | 20.18           | 235.75      | 3,951.40              | -512.61      | -745.68      | -612.32                 | 0.00                    | 0.00                   | 0.00                  |
| 4,200.00                         | 20.18           | 235.75      | 4,045.26              | -532.02      | -774.19      | -635.78                 | 0.00                    | 0.00                   | 0.00                  |
| 4,300.00                         | 20.18           | 235.75      | 4,139.13              | -551.44      | -802.71      | -659.24                 | 0.00                    | 0.00                   | 0.00                  |

# Planning Report

|                  |                        |                                     |                             |
|------------------|------------------------|-------------------------------------|-----------------------------|
| <b>Database:</b> | FHartmann              | <b>Local Co-ordinate Reference:</b> | Well REEMAN 6X-HNC-04-06-65 |
| <b>Company:</b>  | Nickel Road Operating  | <b>TVD Reference:</b>               | KB=17 @ 4833.00usft         |
| <b>Project:</b>  | Weld Co., CO (NAD-83)  | <b>MD Reference:</b>                | KB=17 @ 4833.00usft         |
| <b>Site:</b>     | Sec.5-T6N-R65W         | <b>North Reference:</b>             | Grid                        |
| <b>Well:</b>     | REEMAN 6X-HNC-04-06-65 | <b>Survey Calculation Method:</b>   | Minimum Curvature           |
| <b>Wellbore:</b> | OH                     |                                     |                             |
| <b>Design:</b>   | Plan #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) |
| 4,400.00                           | 20.18           | 235.75      | 4,232.99              | -570.85      | -831.22      | -682.69                 | 0.00                    | 0.00                   | 0.00                  |
| 4,500.00                           | 20.18           | 235.75      | 4,326.85              | -590.27      | -859.73      | -706.15                 | 0.00                    | 0.00                   | 0.00                  |
| 4,600.00                           | 20.18           | 235.75      | 4,420.71              | -609.68      | -888.25      | -729.60                 | 0.00                    | 0.00                   | 0.00                  |
| 4,681.28                           | 20.18           | 235.75      | 4,497.00              | -625.46      | -911.42      | -748.66                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Sussex</b>                      |                 |             |                       |              |              |                         |                         |                        |                       |
| 4,700.00                           | 20.18           | 235.75      | 4,514.58              | -629.10      | -916.76      | -753.06                 | 0.00                    | 0.00                   | 0.00                  |
| 4,800.00                           | 20.18           | 235.75      | 4,608.44              | -648.51      | -945.27      | -776.51                 | 0.00                    | 0.00                   | 0.00                  |
| 4,900.00                           | 20.18           | 235.75      | 4,702.30              | -667.92      | -973.78      | -799.97                 | 0.00                    | 0.00                   | 0.00                  |
| 5,000.00                           | 20.18           | 235.75      | 4,796.16              | -687.34      | -1,002.30    | -823.42                 | 0.00                    | 0.00                   | 0.00                  |
| 5,100.00                           | 20.18           | 235.75      | 4,890.02              | -706.75      | -1,030.81    | -846.88                 | 0.00                    | 0.00                   | 0.00                  |
| 5,200.00                           | 20.18           | 235.75      | 4,983.89              | -726.17      | -1,059.32    | -870.33                 | 0.00                    | 0.00                   | 0.00                  |
| 5,300.00                           | 20.18           | 235.75      | 5,077.75              | -745.58      | -1,087.83    | -893.79                 | 0.00                    | 0.00                   | 0.00                  |
| 5,330.10                           | 20.18           | 235.75      | 5,106.00              | -751.42      | -1,096.42    | -900.85                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Shannon</b>                     |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,400.00                           | 20.18           | 235.75      | 5,171.61              | -764.99      | -1,116.35    | -917.24                 | 0.00                    | 0.00                   | 0.00                  |
| 5,500.00                           | 20.18           | 235.75      | 5,265.47              | -784.41      | -1,144.86    | -940.70                 | 0.00                    | 0.00                   | 0.00                  |
| 5,503.76                           | 20.18           | 235.75      | 5,269.00              | -785.14      | -1,145.93    | -941.58                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Pierre Shale</b>                |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,600.00                           | 20.18           | 235.75      | 5,359.34              | -803.82      | -1,173.37    | -964.15                 | 0.00                    | 0.00                   | 0.00                  |
| 5,700.00                           | 20.18           | 235.75      | 5,453.20              | -823.24      | -1,201.88    | -987.61                 | 0.00                    | 0.00                   | 0.00                  |
| 5,800.00                           | 20.18           | 235.75      | 5,547.06              | -842.65      | -1,230.40    | -1,011.06               | 0.00                    | 0.00                   | 0.00                  |
| 5,900.00                           | 20.18           | 235.75      | 5,640.92              | -862.06      | -1,258.91    | -1,034.52               | 0.00                    | 0.00                   | 0.00                  |
| 6,000.00                           | 20.18           | 235.75      | 5,734.78              | -881.48      | -1,287.42    | -1,057.97               | 0.00                    | 0.00                   | 0.00                  |
| 6,100.00                           | 20.18           | 235.75      | 5,828.65              | -900.89      | -1,315.94    | -1,081.43               | 0.00                    | 0.00                   | 0.00                  |
| 6,200.00                           | 20.18           | 235.75      | 5,922.51              | -920.31      | -1,344.45    | -1,104.88               | 0.00                    | 0.00                   | 0.00                  |
| 6,300.00                           | 20.18           | 235.75      | 6,016.37              | -939.72      | -1,372.96    | -1,128.34               | 0.00                    | 0.00                   | 0.00                  |
| 6,400.00                           | 20.18           | 235.75      | 6,110.23              | -959.14      | -1,401.47    | -1,151.79               | 0.00                    | 0.00                   | 0.00                  |
| 6,500.00                           | 20.18           | 235.75      | 6,204.10              | -978.55      | -1,429.99    | -1,175.25               | 0.00                    | 0.00                   | 0.00                  |
| 6,600.00                           | 20.18           | 235.75      | 6,297.96              | -997.96      | -1,458.50    | -1,198.70               | 0.00                    | 0.00                   | 0.00                  |
| 6,700.00                           | 20.18           | 235.75      | 6,391.82              | -1,017.38    | -1,487.01    | -1,222.16               | 0.00                    | 0.00                   | 0.00                  |
| 6,806.97                           | 20.18           | 235.75      | 6,492.22              | -1,038.14    | -1,517.51    | -1,247.25               | 0.00                    | 0.00                   | 0.00                  |
| <b>Start DLS 10.00 TFO -142.06</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 6,850.00                           | 16.98           | 226.66      | 6,533.02              | -1,046.64    | -1,528.22    | -1,255.79               | 10.00                   | -7.42                  | -21.12                |
| 6,900.00                           | 14.01           | 211.51      | 6,581.21              | -1,056.82    | -1,536.70    | -1,261.78               | 10.00                   | -5.95                  | -30.31                |
| 6,950.00                           | 12.38           | 190.65      | 6,629.92              | -1,067.25    | -1,540.86    | -1,263.50               | 10.00                   | -3.25                  | -41.72                |
| 7,000.00                           | 12.64           | 167.44      | 6,678.76              | -1,077.87    | -1,540.66    | -1,260.94               | 10.00                   | 0.50                   | -46.41                |
| 7,050.00                           | 14.67           | 147.95      | 6,727.37              | -1,088.58    | -1,536.11    | -1,254.11               | 10.00                   | 4.07                   | -38.98                |
| 7,100.00                           | 17.89           | 134.20      | 6,775.38              | -1,099.31    | -1,527.24    | -1,243.07               | 10.00                   | 6.44                   | -27.49                |
| 7,150.00                           | 21.77           | 124.87      | 6,822.42              | -1,109.97    | -1,514.12    | -1,227.90               | 10.00                   | 7.77                   | -18.68                |
| 7,200.00                           | 26.02           | 118.34      | 6,868.13              | -1,120.48    | -1,496.84    | -1,208.71               | 10.00                   | 8.50                   | -13.05                |
| 7,208.79                           | 26.80           | 117.40      | 6,876.00              | -1,122.31    | -1,493.39    | -1,204.93               | 10.00                   | 8.79                   | -10.72                |
| <b>Sharon Springs</b>              |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,242.87                           | 29.84           | 114.18      | 6,906.00              | -1,129.32    | -1,478.83    | -1,189.18               | 10.00                   | 8.94                   | -9.45                 |
| <b>Niobrara</b>                    |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,250.00                           | 30.49           | 113.58      | 6,912.16              | -1,130.77    | -1,475.55    | -1,185.66               | 10.00                   | 9.07                   | -8.40                 |
| 7,300.00                           | 35.09           | 109.94      | 6,954.19              | -1,140.75    | -1,450.40    | -1,158.91               | 10.00                   | 9.20                   | -7.27                 |
| 7,350.00                           | 39.77           | 107.06      | 6,993.89              | -1,150.35    | -1,421.59    | -1,128.68               | 10.00                   | 9.37                   | -5.76                 |
| 7,400.00                           | 44.51           | 104.70      | 7,030.95              | -1,159.50    | -1,389.32    | -1,095.19               | 10.00                   | 9.49                   | -4.72                 |
| 7,450.00                           | 49.30           | 102.71      | 7,065.11              | -1,168.12    | -1,353.86    | -1,058.70               | 10.00                   | 9.57                   | -3.99                 |
| 7,500.00                           | 54.11           | 100.98      | 7,096.08              | -1,176.15    | -1,315.46    | -1,019.48               | 10.00                   | 9.63                   | -3.45                 |
| 7,550.00                           | 58.95           | 99.46       | 7,123.65              | -1,183.53    | -1,274.43    | -977.83                 | 10.00                   | 9.67                   | -3.05                 |
| 7,600.00                           | 63.80           | 98.08       | 7,147.60              | -1,190.21    | -1,231.06    | -934.07                 | 10.00                   | 9.70                   | -2.76                 |
| 7,647.95                           | 68.46           | 96.86       | 7,167.00              | -1,195.90    | -1,187.60    | -890.43                 | 10.00                   | 9.73                   | -2.54                 |

# Planning Report

|                  |                        |                                     |                             |
|------------------|------------------------|-------------------------------------|-----------------------------|
| <b>Database:</b> | FHartmann              | <b>Local Co-ordinate Reference:</b> | Well REEMAN 6X-HNC-04-06-65 |
| <b>Company:</b>  | Nickel Road Operating  | <b>TVD Reference:</b>               | KB=17 @ 4833.00usft         |
| <b>Project:</b>  | Weld Co., CO (NAD-83)  | <b>MD Reference:</b>                | KB=17 @ 4833.00usft         |
| <b>Site:</b>     | Sec.5-T6N-R65W         | <b>North Reference:</b>             | Grid                        |
| <b>Well:</b>     | REEMAN 6X-HNC-04-06-65 | <b>Survey Calculation Method:</b>   | Minimum Curvature           |
| <b>Wellbore:</b> | OH                     |                                     |                             |
| <b>Design:</b>   | Plan #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) |
| <b>Ft Hays</b>                          |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,650.00                                | 68.66           | 96.81       | 7,167.75              | -1,196.13    | -1,185.70    | -888.54                 | 10.00                   | 9.74                   | -2.45                 |
| 7,700.00                                | 73.54           | 95.63       | 7,183.94              | -1,201.24    | -1,138.69    | -841.57                 | 10.00                   | 9.75                   | -2.37                 |
| 7,750.00                                | 78.41           | 94.50       | 7,196.06              | -1,205.52    | -1,090.39    | -793.53                 | 10.00                   | 9.76                   | -2.25                 |
| 7,800.00                                | 83.30           | 93.41       | 7,204.00              | -1,208.91    | -1,041.16    | -744.78                 | 10.00                   | 9.77                   | -2.18                 |
| 7,809.19                                | 84.20           | 93.21       | 7,205.00              | -1,209.44    | -1,032.04    | -735.78                 | 10.00                   | 9.77                   | -2.15                 |
| <b>Codell</b>                           |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,850.00                                | 88.18           | 92.34       | 7,207.71              | -1,211.41    | -991.37      | -695.70                 | 10.00                   | 9.77                   | -2.13                 |
| 7,871.40                                | 90.27           | 91.89       | 7,208.00              | -1,212.20    | -969.99      | -674.68                 | 10.00                   | 9.77                   | -2.12                 |
| <b>Start 7314.69 hold at 7871.40 MD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,900.00                                | 90.27           | 91.89       | 7,207.86              | -1,213.15    | -941.41      | -646.61                 | 0.00                    | 0.00                   | 0.00                  |
| 8,000.00                                | 90.27           | 91.89       | 7,207.38              | -1,216.44    | -841.46      | -548.45                 | 0.00                    | 0.00                   | 0.00                  |
| 8,100.00                                | 90.27           | 91.89       | 7,206.91              | -1,219.73    | -741.52      | -450.30                 | 0.00                    | 0.00                   | 0.00                  |
| 8,200.00                                | 90.27           | 91.89       | 7,206.43              | -1,223.03    | -641.57      | -352.15                 | 0.00                    | 0.00                   | 0.00                  |
| 8,300.00                                | 90.27           | 91.89       | 7,205.95              | -1,226.32    | -541.63      | -253.99                 | 0.00                    | 0.00                   | 0.00                  |
| 8,400.00                                | 90.27           | 91.89       | 7,205.47              | -1,229.62    | -441.68      | -155.84                 | 0.00                    | 0.00                   | 0.00                  |
| 8,500.00                                | 90.27           | 91.89       | 7,204.99              | -1,232.91    | -341.74      | -57.68                  | 0.00                    | 0.00                   | 0.00                  |
| 8,600.00                                | 90.27           | 91.89       | 7,204.51              | -1,236.21    | -241.79      | 40.47                   | 0.00                    | 0.00                   | 0.00                  |
| 8,700.00                                | 90.27           | 91.89       | 7,204.04              | -1,239.50    | -141.85      | 138.63                  | 0.00                    | 0.00                   | 0.00                  |
| 8,800.00                                | 90.27           | 91.89       | 7,203.56              | -1,242.79    | -41.91       | 236.78                  | 0.00                    | 0.00                   | 0.00                  |
| 8,900.00                                | 90.27           | 91.89       | 7,203.08              | -1,246.09    | 58.04        | 334.94                  | 0.00                    | 0.00                   | 0.00                  |
| 9,000.00                                | 90.27           | 91.89       | 7,202.60              | -1,249.38    | 157.98       | 433.09                  | 0.00                    | 0.00                   | 0.00                  |
| 9,100.00                                | 90.27           | 91.89       | 7,202.12              | -1,252.68    | 257.93       | 531.25                  | 0.00                    | 0.00                   | 0.00                  |
| 9,200.00                                | 90.27           | 91.89       | 7,201.64              | -1,255.97    | 357.87       | 629.40                  | 0.00                    | 0.00                   | 0.00                  |
| 9,300.00                                | 90.27           | 91.89       | 7,201.16              | -1,259.27    | 457.82       | 727.56                  | 0.00                    | 0.00                   | 0.00                  |
| 9,400.00                                | 90.27           | 91.89       | 7,200.69              | -1,262.56    | 557.76       | 825.71                  | 0.00                    | 0.00                   | 0.00                  |
| 9,500.00                                | 90.27           | 91.89       | 7,200.21              | -1,265.85    | 657.71       | 923.87                  | 0.00                    | 0.00                   | 0.00                  |
| 9,600.00                                | 90.27           | 91.89       | 7,199.73              | -1,269.15    | 757.65       | 1,022.02                | 0.00                    | 0.00                   | 0.00                  |
| 9,700.00                                | 90.27           | 91.89       | 7,199.25              | -1,272.44    | 857.60       | 1,120.18                | 0.00                    | 0.00                   | 0.00                  |
| 9,800.00                                | 90.27           | 91.89       | 7,198.77              | -1,275.74    | 957.54       | 1,218.33                | 0.00                    | 0.00                   | 0.00                  |
| 9,900.00                                | 90.27           | 91.89       | 7,198.29              | -1,279.03    | 1,057.48     | 1,316.49                | 0.00                    | 0.00                   | 0.00                  |
| 10,000.00                               | 90.27           | 91.89       | 7,197.82              | -1,282.33    | 1,157.43     | 1,414.64                | 0.00                    | 0.00                   | 0.00                  |
| 10,100.00                               | 90.27           | 91.89       | 7,197.34              | -1,285.62    | 1,257.37     | 1,512.80                | 0.00                    | 0.00                   | 0.00                  |
| 10,200.00                               | 90.27           | 91.89       | 7,196.86              | -1,288.91    | 1,357.32     | 1,610.95                | 0.00                    | 0.00                   | 0.00                  |
| 10,300.00                               | 90.27           | 91.89       | 7,196.38              | -1,292.21    | 1,457.26     | 1,709.10                | 0.00                    | 0.00                   | 0.00                  |
| 10,400.00                               | 90.27           | 91.89       | 7,195.90              | -1,295.50    | 1,557.21     | 1,807.26                | 0.00                    | 0.00                   | 0.00                  |
| 10,500.00                               | 90.27           | 91.89       | 7,195.42              | -1,298.80    | 1,657.15     | 1,905.41                | 0.00                    | 0.00                   | 0.00                  |
| 10,600.00                               | 90.27           | 91.89       | 7,194.94              | -1,302.09    | 1,757.10     | 2,003.57                | 0.00                    | 0.00                   | 0.00                  |
| 10,700.00                               | 90.27           | 91.89       | 7,194.47              | -1,305.39    | 1,857.04     | 2,101.72                | 0.00                    | 0.00                   | 0.00                  |
| 10,800.00                               | 90.27           | 91.89       | 7,193.99              | -1,308.68    | 1,956.99     | 2,199.88                | 0.00                    | 0.00                   | 0.00                  |
| 10,900.00                               | 90.27           | 91.89       | 7,193.51              | -1,311.98    | 2,056.93     | 2,298.03                | 0.00                    | 0.00                   | 0.00                  |
| 11,000.00                               | 90.27           | 91.89       | 7,193.03              | -1,315.27    | 2,156.87     | 2,396.19                | 0.00                    | 0.00                   | 0.00                  |
| 11,100.00                               | 90.27           | 91.89       | 7,192.55              | -1,318.56    | 2,256.82     | 2,494.34                | 0.00                    | 0.00                   | 0.00                  |
| 11,200.00                               | 90.27           | 91.89       | 7,192.07              | -1,321.86    | 2,356.76     | 2,592.50                | 0.00                    | 0.00                   | 0.00                  |
| 11,300.00                               | 90.27           | 91.89       | 7,191.59              | -1,325.15    | 2,456.71     | 2,690.65                | 0.00                    | 0.00                   | 0.00                  |
| 11,400.00                               | 90.27           | 91.89       | 7,191.12              | -1,328.45    | 2,556.65     | 2,788.81                | 0.00                    | 0.00                   | 0.00                  |
| 11,500.00                               | 90.27           | 91.89       | 7,190.64              | -1,331.74    | 2,656.60     | 2,886.96                | 0.00                    | 0.00                   | 0.00                  |
| 11,600.00                               | 90.27           | 91.89       | 7,190.16              | -1,335.04    | 2,756.54     | 2,985.12                | 0.00                    | 0.00                   | 0.00                  |
| 11,700.00                               | 90.27           | 91.89       | 7,189.68              | -1,338.33    | 2,856.49     | 3,083.27                | 0.00                    | 0.00                   | 0.00                  |
| 11,800.00                               | 90.27           | 91.89       | 7,189.20              | -1,341.62    | 2,956.43     | 3,181.43                | 0.00                    | 0.00                   | 0.00                  |
| 11,900.00                               | 90.27           | 91.89       | 7,188.72              | -1,344.92    | 3,056.38     | 3,279.58                | 0.00                    | 0.00                   | 0.00                  |
| 12,000.00                               | 90.27           | 91.89       | 7,188.25              | -1,348.21    | 3,156.32     | 3,377.74                | 0.00                    | 0.00                   | 0.00                  |
| 12,100.00                               | 90.27           | 91.89       | 7,187.77              | -1,351.51    | 3,256.27     | 3,475.89                | 0.00                    | 0.00                   | 0.00                  |

## Planning Report

|                  |                        |                                     |                             |
|------------------|------------------------|-------------------------------------|-----------------------------|
| <b>Database:</b> | FHartmann              | <b>Local Co-ordinate Reference:</b> | Well REEMAN 6X-HNC-04-06-65 |
| <b>Company:</b>  | Nickel Road Operating  | <b>TVD Reference:</b>               | KB=17 @ 4833.00usft         |
| <b>Project:</b>  | Weld Co., CO (NAD-83)  | <b>MD Reference:</b>                | KB=17 @ 4833.00usft         |
| <b>Site:</b>     | Sec.5-T6N-R65W         | <b>North Reference:</b>             | Grid                        |
| <b>Well:</b>     | REEMAN 6X-HNC-04-06-65 | <b>Survey Calculation Method:</b>   | Minimum Curvature           |
| <b>Wellbore:</b> | OH                     |                                     |                             |
| <b>Design:</b>   | Plan #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) |  |
| 12,200.00             | 90.27           | 91.89       | 7,187.29              | -1,354.80    | 3,356.21     | 3,574.05                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,300.00             | 90.27           | 91.89       | 7,186.81              | -1,358.10    | 3,456.15     | 3,672.20                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,400.00             | 90.27           | 91.89       | 7,186.33              | -1,361.39    | 3,556.10     | 3,770.36                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,500.00             | 90.27           | 91.89       | 7,185.85              | -1,364.68    | 3,656.04     | 3,868.51                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,600.00             | 90.27           | 91.89       | 7,185.37              | -1,367.98    | 3,755.99     | 3,966.66                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,700.00             | 90.27           | 91.89       | 7,184.90              | -1,371.27    | 3,855.93     | 4,064.82                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,800.00             | 90.27           | 91.89       | 7,184.42              | -1,374.57    | 3,955.88     | 4,162.97                | 0.00                    | 0.00                   | 0.00                  |  |
| 12,900.00             | 90.27           | 91.89       | 7,183.94              | -1,377.86    | 4,055.82     | 4,261.13                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,000.00             | 90.27           | 91.89       | 7,183.46              | -1,381.16    | 4,155.77     | 4,359.28                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,100.00             | 90.27           | 91.89       | 7,182.98              | -1,384.45    | 4,255.71     | 4,457.44                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,200.00             | 90.27           | 91.89       | 7,182.50              | -1,387.74    | 4,355.66     | 4,555.59                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,300.00             | 90.27           | 91.89       | 7,182.02              | -1,391.04    | 4,455.60     | 4,653.75                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,400.00             | 90.27           | 91.89       | 7,181.55              | -1,394.33    | 4,555.54     | 4,751.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,500.00             | 90.27           | 91.89       | 7,181.07              | -1,397.63    | 4,655.49     | 4,850.06                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,600.00             | 90.27           | 91.89       | 7,180.59              | -1,400.92    | 4,755.43     | 4,948.21                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,700.00             | 90.27           | 91.89       | 7,180.11              | -1,404.22    | 4,855.38     | 5,046.37                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,800.00             | 90.27           | 91.89       | 7,179.63              | -1,407.51    | 4,955.32     | 5,144.52                | 0.00                    | 0.00                   | 0.00                  |  |
| 13,900.00             | 90.27           | 91.89       | 7,179.15              | -1,410.80    | 5,055.27     | 5,242.68                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,000.00             | 90.27           | 91.89       | 7,178.68              | -1,414.10    | 5,155.21     | 5,340.83                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,100.00             | 90.27           | 91.89       | 7,178.20              | -1,417.39    | 5,255.16     | 5,438.99                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,200.00             | 90.27           | 91.89       | 7,177.72              | -1,420.69    | 5,355.10     | 5,537.14                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,300.00             | 90.27           | 91.89       | 7,177.24              | -1,423.98    | 5,455.05     | 5,635.30                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,400.00             | 90.27           | 91.89       | 7,176.76              | -1,427.28    | 5,554.99     | 5,733.45                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,500.00             | 90.27           | 91.89       | 7,176.28              | -1,430.57    | 5,654.94     | 5,831.61                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,600.00             | 90.27           | 91.89       | 7,175.80              | -1,433.87    | 5,754.88     | 5,929.76                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,700.00             | 90.27           | 91.89       | 7,175.33              | -1,437.16    | 5,854.82     | 6,027.92                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,800.00             | 90.27           | 91.89       | 7,174.85              | -1,440.45    | 5,954.77     | 6,126.07                | 0.00                    | 0.00                   | 0.00                  |  |
| 14,900.00             | 90.27           | 91.89       | 7,174.37              | -1,443.75    | 6,054.71     | 6,224.22                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,000.00             | 90.27           | 91.89       | 7,173.89              | -1,447.04    | 6,154.66     | 6,322.38                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,100.00             | 90.27           | 91.89       | 7,173.41              | -1,450.34    | 6,254.60     | 6,420.53                | 0.00                    | 0.00                   | 0.00                  |  |
| 15,186.09             | 90.27           | 91.89       | 7,173.00              | -1,453.17    | 6,340.65     | 6,505.04                | 0.00                    | 0.00                   | 0.00                  |  |
| TD at 15186.09        |                 |             |                       |              |              |                         |                         |                        |                       |  |

| Design Targets   |               |              |            |              |              |                 |                |           |             |  |
|--|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-----------|-------------|--|
| Target Name  | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude  | Longitude   |  |
| REEMAN 6X-HNC-04-01<br>- hit/miss target<br>- Shape<br>- Point | 0.00          | 0.00         | 7,173.00   | -1,453.17    | 6,340.65     | 1,431,301.37    | 3,231,083.69   | 40.514350 | -104.668873 |  |
| REEMAN 6X-HNC-04-01<br>- plan hits target center<br>- Point    | 0.00          | 0.00         | 7,208.00   | -1,212.20    | -969.99      | 1,431,542.34    | 3,223,773.05   | 40.515197 | -104.695158 |  |



## Planning Report

|                  |                        |                                     |                             |
|------------------|------------------------|-------------------------------------|-----------------------------|
| <b>Database:</b> | FHartmann              | <b>Local Co-ordinate Reference:</b> | Well REEMAN 6X-HNC-04-06-65 |
| <b>Company:</b>  | Nickel Road Operating  | <b>TVD Reference:</b>               | KB=17 @ 4833.00usft         |
| <b>Project:</b>  | Weld Co., CO (NAD-83)  | <b>MD Reference:</b>                | KB=17 @ 4833.00usft         |
| <b>Site:</b>     | Sec.5-T6N-R65W         | <b>North Reference:</b>             | Grid                        |
| <b>Well:</b>     | REEMAN 6X-HNC-04-06-65 | <b>Survey Calculation Method:</b>   | Minimum Curvature           |
| <b>Wellbore:</b> | OH                     |                                     |                             |
| <b>Design:</b>   | Plan #2                |                                     |                             |

| Formations            |                       |                   |           |         |                   |  |
|-----------------------|-----------------------|-------------------|-----------|---------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name              | Lithology | Dip (°) | Dip Direction (°) |  |
| 25.00                 | 25.00                 | Laramie/Fox Hills |           |         |                   |  |
| 440.01                | 440.00                | Upper Pierre      |           |         |                   |  |
| 1,600.90              | 1,595.00              | Pierre Shale      |           |         |                   |  |
| 3,898.21              | 3,762.00              | Parkman           |           |         |                   |  |
| 4,681.28              | 4,497.00              | Sussex            |           |         |                   |  |
| 5,330.10              | 5,106.00              | Shannon           |           |         |                   |  |
| 5,503.76              | 5,269.00              | Pierre Shale      |           |         |                   |  |
| 7,208.79              | 6,876.00              | Sharon Springs    |           |         |                   |  |
| 7,242.87              | 6,906.00              | Niobrara          |           |         |                   |  |
| 7,647.95              | 7,167.00              | Ft Hays           |           |         |                   |  |
| 7,809.19              | 7,205.00              | Codell            |           |         |                   |  |

| Plan Annotations      |                       |                   |              |                                  |  |
|-----------------------|-----------------------|-------------------|--------------|----------------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              |                                  |  |
|                       |                       | +N/-S (usft)      | +E/-W (usft) | Comment                          |  |
| 1,698.00              | 1,689.47              | -56.66            | -81.59       | Start 55.00 hold at 1698.00 MD   |  |
| 1,753.00              | 1,742.88              | -64.69            | -91.97       | Start DLS 2.00 TFO 10.67         |  |
| 2,075.77              | 2,051.41              | -119.62           | -168.52      | Start 4731.20 hold at 2075.77 MD |  |
| 6,806.97              | 6,492.22              | -1,038.14         | -1,517.51    | Start DLS 10.00 TFO -142.06      |  |
| 7,871.40              | 7,208.00              | -1,212.20         | -969.99      | Start 7314.69 hold at 7871.40 MD |  |
| 15,186.09             | 7,173.00              | -1,453.17         | 6,340.65     | TD at 15186.09                   |  |