

NICKEL ROAD OPERATING

WELD COUNTY

SEC 5-T6N-R65W

REEMAN 5X-HNA-04-06-65

OWB

Plan: PROPOSAL 1

Standard Planning Report

08 January, 2022



WELL DETAILS: REEMAN 5X-HNA-04-06-65

| +N/-S | +E/-W | Northing | Easting | 4816.00 Latitude | 104.691846°W Longitude | Slot |
|-------|-------|------------|------------|---------------------|---------------------------|------|
| 0.00 | 0.00 | 1432794.08 | 3224682.35 | 40.518610°N | 104.691846°W | |

SECTION DETAILS

| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | VSect | Target |
|-----|----------|-------|--------|---------|---------|----------|-------|---------|----------|--------------------|
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2 | 900.00 | 0.00 | 0.00 | 900.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 3 | 1790.52 | 17.81 | 250.32 | 1776.25 | -46.24 | -129.28 | 2.00 | 250.32 | -121.99 | |
| 4 | 6473.87 | 17.81 | 250.32 | 6235.14 | -528.72 | -1478.07 | 0.00 | 0.00 | -1394.79 | |
| 5 | 7547.04 | 90.78 | 91.76 | 6966.00 | -632.84 | -924.00 | 10.00 | -157.49 | -831.80 | REEMAN 5X-HNA-LP |
| 6 | 14878.86 | 90.78 | 91.76 | 6866.00 | -857.80 | 6403.69 | 0.00 | 0.00 | 6460.88 | REEMAN 5X-HNA-PBHL |

ANNOTATIONS

| MD | Inc | Azi | TVD | +N/-S | +E/-W | VSect | Departure | Annotation |
|----------|-------|--------|---------|---------|----------|----------|-----------|----------------------------------|
| 900.00 | 0.00 | 0.00 | 900.00 | 0.00 | 0.00 | 0.00 | 0.00 | Start Build 2.00 |
| 1790.52 | 17.81 | 250.32 | 1776.25 | -46.24 | -129.28 | -121.99 | 137.30 | Start 4683.35 hold at 1790.52 MD |
| 6473.87 | 17.81 | 250.32 | 6235.14 | -528.72 | -1478.07 | -1394.79 | 1569.79 | Start DLS 10.00 TFO -157.49 |
| 7547.04 | 90.78 | 91.76 | 6966.00 | -632.84 | -924.00 | -831.80 | 2195.13 | Start 7331.82 hold at 7547.04 MD |
| 14878.86 | 90.78 | 91.76 | 6866.00 | -857.80 | 6403.69 | 6460.88 | 9526.27 | TD at 14878.86 |

DESIGN TARGET DETAILS

| Name | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude | Shape |
|---------------------------|---------|---------|------------|------------|-------------|--------------|-----------|-------|
| REEMAN 5X-HNA-PBHL6866.00 | -857.80 | 6403.69 | 1431936.28 | 3231086.03 | 40.516093°N | 104.668843°W | Point | |
| - plan hits target center | | | | | | | | |
| REEMAN 5X-HNA-LP 6966.00 | -632.84 | -924.00 | 1432161.23 | 3223758.34 | 40.516896°N | 104.695190°W | Point | |
| - plan hits target center | | | | | | | | |

FORMATION TOP DETAILS

| TVDPath | MDPath | Formation |
|---------|---------|----------------------|
| 0.00 | 0.00 | Laramie-Fox Hills |
| 333.00 | 333.00 | Upper Pierre Aquifer |
| 1347.00 | 1348.83 | Pierre Shale |
| 4528.00 | 4680.79 | Sussex |
| 5064.00 | 5243.77 | Shannon |
| 5093.00 | 5274.23 | Pierre Shale |
| 6956.00 | 7431.31 | Nio A |

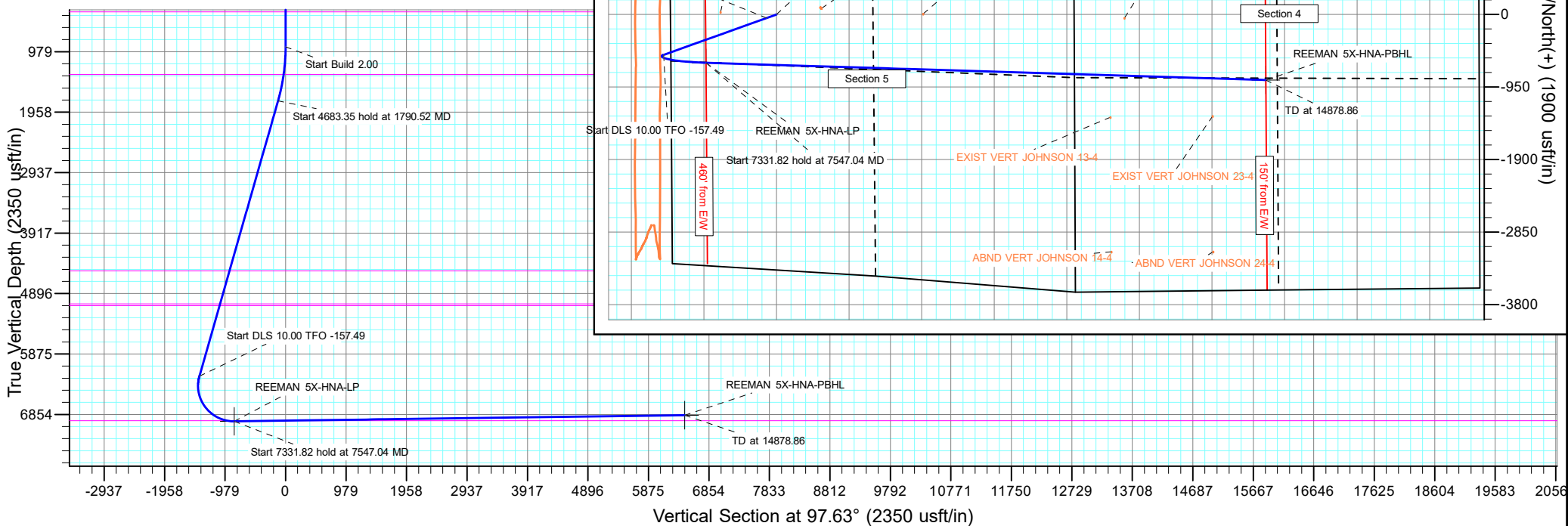
PROJECT DETAILS: WELD COUNTY

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level

SHL:
2014' FNL, 1390' FWL
Sec 5-T6N-R65W

LP:
2651' FSL, 460' FWL
Sec 5-T6N-R65W

BHL:
2751' FSL, 2505' FWL
Sec 4-T6N-R65W



Planning Report

| | | | |
|------------------|----------------------------|-------------------------------------|-----------------------------|
| Database: | EDM 5000.16 Single User Db | Local Co-ordinate Reference: | Well REEMAN 5X-HNA-04-06-65 |
| Company: | NICKEL ROAD OPERATING | TVD Reference: | KB 17' @ 4833.00usft |
| Project: | WELD COUNTY | MD Reference: | KB 17' @ 4833.00usft |
| Site: | SEC 5-T6N-R65W | North Reference: | Grid |
| Well: | REEMAN 5X-HNA-04-06-65 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | OWB | | |
| Design: | PROPOSAL 1 | | |

| | | | |
|--------------------|---------------------------|----------------------|----------------|
| Project | WELD COUNTY | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | |

| | | | | | | |
|-----------------------|----------|----------------|--------------|--------------|------------|--------------|
| Site | | SEC 5-T6N-R65W | | | | |
| Site Position: | | Northing: | 1,434,834.96 | usft | Latitude: | 40.524247°N |
| From: | Lat/Long | Easting: | 3,223,272.58 | usft | Longitude: | 104.696850°W |
| Position Uncertainty: | | 0.00 | usft | Slot Radius: | 13.200 | in |

| Well | | REEMAN 5X-HNA-04-06-65 | | | | |
|----------------------|-------|------------------------|---------------------|-------------------|---------------|---------------|
| Well Position | +N/-S | 0.00 usft | Northing: | 1,432,794.08 usft | Latitude: | 40.518610°N |
| | +E/-W | 0.00 usft | Easting: | 3,224,682.35 usft | Longitude: | 104.691846°W |
| Position Uncertainty | | 0.00 usft | Wellhead Elevation: | usft | Ground Level: | 4,816.00 usft |
| Grid Convergence: | | 0.52 ° | | | | |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | OWB | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2020 | 1/7/2022 | 7.76 | 66.73 | 51,963.70087753 |

| | | | | | |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|--|
| Design | PROPOSAL 1 | | | | |
| Audit Notes: | | | | | |
| Version: | Phase: | PROTOTYPE | Tie On Depth: | 0.00 | |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) | |
| | 0.00 | 0.00 | 0.00 | 97.63 | |

| | | | | | |
|---------------------------------|------------------------|----------------------------|---------------------|----------------|--|
| Plan Survey Tool Program | Date | 1/8/2022 | | | |
| Depth From (usft) | Depth To (usft) | Survey (Wellbore) | Tool Name | Remarks | |
| 1 | 0.00 | 14,878.87 PROPOSAL 1 (OWB) | MWD | | |
| | | | OWSG MWD - Standard | | |

| | | | | | | | | | | |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|------------------------------|-----------------------------|----------------------------|----------------|------------------|
| Plan Sections | | | | | | | | | | |
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 900.00 | 0.00 | 0.00 | 900.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,790.52 | 17.81 | 250.32 | 1,776.25 | -46.24 | -129.28 | 2.00 | 2.00 | 0.00 | 250.32 | |
| 6,473.87 | 17.81 | 250.32 | 6,235.14 | -528.72 | -1,478.08 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7,547.04 | 90.78 | 91.76 | 6,966.00 | -632.84 | -924.00 | 10.00 | 6.80 | -14.77 | -157.49 | REEMAN 5X-HNA-LF |
| 14,878.87 | 90.78 | 91.76 | 6,866.00 | -857.80 | 6,403.69 | 0.00 | 0.00 | 0.00 | 0.00 | REEMAN 5X-HNA-PE |

Planning Report

| | | | |
|------------------|----------------------------|-------------------------------------|-----------------------------|
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| Company: | NICKEL ROAD OPERATING | TVD Reference: | KB 17' @ 4833.00usft |
| Project: | WELD COUNTY | MD Reference: | KB 17' @ 4833.00usft |
| Site: | SEC 5-T6N-R65W | North Reference: | Grid |
| Well: | REEMAN 5X-HNA-04-06-65 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | OWB | | |
| Design: | PROPOSAL 1 | | |

| Planned Survey | | | | | | | | | |
|-----------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Laramie-Fox Hills | | | | | | | | | |
| 333.00 | 0.00 | 0.00 | 333.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Upper Pierre Aquifer | | | | | | | | | |
| 900.00 | 0.00 | 0.00 | 900.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Start Build 2.00 | | | | | | | | | |
| 1,000.00 | 2.00 | 250.32 | 999.98 | -0.59 | -1.64 | -1.55 | 2.00 | 2.00 | 0.00 |
| 1,100.00 | 4.00 | 250.32 | 1,099.84 | -2.35 | -6.57 | -6.20 | 2.00 | 2.00 | 0.00 |
| 1,200.00 | 6.00 | 250.32 | 1,199.45 | -5.29 | -14.78 | -13.94 | 2.00 | 2.00 | 0.00 |
| 1,300.00 | 8.00 | 250.32 | 1,298.70 | -9.39 | -26.25 | -24.77 | 2.00 | 2.00 | 0.00 |
| 1,348.83 | 8.98 | 250.32 | 1,347.00 | -11.82 | -33.04 | -31.18 | 2.00 | 2.00 | 0.00 |
| Pierre Shale | | | | | | | | | |
| 1,400.00 | 10.00 | 250.32 | 1,397.47 | -14.66 | -40.98 | -38.67 | 2.00 | 2.00 | 0.00 |
| 1,500.00 | 12.00 | 250.32 | 1,495.62 | -21.09 | -58.94 | -55.62 | 2.00 | 2.00 | 0.00 |
| 1,600.00 | 14.00 | 250.32 | 1,593.06 | -28.66 | -80.12 | -75.61 | 2.00 | 2.00 | 0.00 |
| 1,700.00 | 16.00 | 250.32 | 1,689.64 | -37.38 | -104.49 | -98.61 | 2.00 | 2.00 | 0.00 |
| 1,790.52 | 17.81 | 250.32 | 1,776.25 | -46.24 | -129.28 | -121.99 | 2.00 | 2.00 | 0.00 |
| Start 4683.35 hold at 1790.52 MD | | | | | | | | | |
| 1,800.00 | 17.81 | 250.32 | 1,785.27 | -47.22 | -132.01 | -124.57 | 0.00 | 0.00 | 0.00 |
| 1,900.00 | 17.81 | 250.32 | 1,880.48 | -57.52 | -160.81 | -151.75 | 0.00 | 0.00 | 0.00 |
| 2,000.00 | 17.81 | 250.32 | 1,975.69 | -67.82 | -189.61 | -178.92 | 0.00 | 0.00 | 0.00 |
| 2,100.00 | 17.81 | 250.32 | 2,070.90 | -78.13 | -218.41 | -206.10 | 0.00 | 0.00 | 0.00 |
| 2,200.00 | 17.81 | 250.32 | 2,166.10 | -88.43 | -247.21 | -233.28 | 0.00 | 0.00 | 0.00 |
| 2,300.00 | 17.81 | 250.32 | 2,261.31 | -98.73 | -276.01 | -260.45 | 0.00 | 0.00 | 0.00 |
| 2,400.00 | 17.81 | 250.32 | 2,356.52 | -109.03 | -304.81 | -287.63 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 17.81 | 250.32 | 2,451.72 | -119.33 | -333.61 | -314.81 | 0.00 | 0.00 | 0.00 |
| 2,600.00 | 17.81 | 250.32 | 2,546.93 | -129.63 | -362.41 | -341.99 | 0.00 | 0.00 | 0.00 |
| 2,700.00 | 17.81 | 250.32 | 2,642.14 | -139.94 | -391.21 | -369.16 | 0.00 | 0.00 | 0.00 |
| 2,800.00 | 17.81 | 250.32 | 2,737.35 | -150.24 | -420.01 | -396.34 | 0.00 | 0.00 | 0.00 |
| 2,900.00 | 17.81 | 250.32 | 2,832.55 | -160.54 | -448.81 | -423.52 | 0.00 | 0.00 | 0.00 |
| 3,000.00 | 17.81 | 250.32 | 2,927.76 | -170.84 | -477.61 | -450.69 | 0.00 | 0.00 | 0.00 |
| 3,100.00 | 17.81 | 250.32 | 3,022.97 | -181.14 | -506.40 | -477.87 | 0.00 | 0.00 | 0.00 |
| 3,200.00 | 17.81 | 250.32 | 3,118.18 | -191.45 | -535.20 | -505.05 | 0.00 | 0.00 | 0.00 |
| 3,300.00 | 17.81 | 250.32 | 3,213.38 | -201.75 | -564.00 | -532.23 | 0.00 | 0.00 | 0.00 |
| 3,400.00 | 17.81 | 250.32 | 3,308.59 | -212.05 | -592.80 | -559.40 | 0.00 | 0.00 | 0.00 |
| 3,500.00 | 17.81 | 250.32 | 3,403.80 | -222.35 | -621.60 | -586.58 | 0.00 | 0.00 | 0.00 |
| 3,600.00 | 17.81 | 250.32 | 3,499.01 | -232.65 | -650.40 | -613.76 | 0.00 | 0.00 | 0.00 |
| 3,700.00 | 17.81 | 250.32 | 3,594.21 | -242.96 | -679.20 | -640.93 | 0.00 | 0.00 | 0.00 |
| 3,800.00 | 17.81 | 250.32 | 3,689.42 | -253.26 | -708.00 | -668.11 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 17.81 | 250.32 | 3,784.63 | -263.56 | -736.80 | -695.29 | 0.00 | 0.00 | 0.00 |
| 4,000.00 | 17.81 | 250.32 | 3,879.84 | -273.86 | -765.60 | -722.47 | 0.00 | 0.00 | 0.00 |
| 4,100.00 | 17.81 | 250.32 | 3,975.04 | -284.16 | -794.40 | -749.64 | 0.00 | 0.00 | 0.00 |
| 4,200.00 | 17.81 | 250.32 | 4,070.25 | -294.47 | -823.20 | -776.82 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 17.81 | 250.32 | 4,165.46 | -304.77 | -852.00 | -804.00 | 0.00 | 0.00 | 0.00 |
| 4,400.00 | 17.81 | 250.32 | 4,260.66 | -315.07 | -880.80 | -831.17 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 17.81 | 250.32 | 4,355.87 | -325.37 | -909.60 | -858.35 | 0.00 | 0.00 | 0.00 |
| 4,600.00 | 17.81 | 250.32 | 4,451.08 | -335.67 | -938.40 | -885.53 | 0.00 | 0.00 | 0.00 |
| 4,680.79 | 17.81 | 250.32 | 4,528.00 | -344.00 | -961.67 | -907.49 | 0.00 | 0.00 | 0.00 |
| Sussex | | | | | | | | | |
| 4,700.00 | 17.81 | 250.32 | 4,546.29 | -345.97 | -967.20 | -912.71 | 0.00 | 0.00 | 0.00 |
| 4,800.00 | 17.81 | 250.32 | 4,641.49 | -356.28 | -996.00 | -939.88 | 0.00 | 0.00 | 0.00 |
| 4,900.00 | 17.81 | 250.32 | 4,736.70 | -366.58 | -1,024.80 | -967.06 | 0.00 | 0.00 | 0.00 |
| 5,000.00 | 17.81 | 250.32 | 4,831.91 | -376.88 | -1,053.60 | -994.24 | 0.00 | 0.00 | 0.00 |

Planning Report

| | | | |
|------------------|----------------------------|-------------------------------------|-----------------------------|
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| Company: | NICKEL ROAD OPERATING | TVD Reference: | KB 17' @ 4833.00usft |
| Project: | WELD COUNTY | MD Reference: | KB 17' @ 4833.00usft |
| Site: | SEC 5-T6N-R65W | North Reference: | Grid |
| Well: | REEMAN 5X-HNA-04-06-65 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | OWB | | |
| Design: | PROPOSAL 1 | | |

| Planned Survey | | | | | | | | | |
|-----------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 5,100.00 | 17.81 | 250.32 | 4,927.12 | -387.18 | -1,082.40 | -1,021.41 | 0.00 | 0.00 | 0.00 |
| 5,200.00 | 17.81 | 250.32 | 5,022.32 | -397.48 | -1,111.20 | -1,048.59 | 0.00 | 0.00 | 0.00 |
| 5,243.77 | 17.81 | 250.32 | 5,064.00 | -401.99 | -1,123.81 | -1,060.49 | 0.00 | 0.00 | 0.00 |
| Shannon | | | | | | | | | |
| 5,274.23 | 17.81 | 250.32 | 5,093.00 | -405.13 | -1,132.58 | -1,068.77 | 0.00 | 0.00 | 0.00 |
| Pierre Shale | | | | | | | | | |
| 5,300.00 | 17.81 | 250.32 | 5,117.53 | -407.79 | -1,140.00 | -1,075.77 | 0.00 | 0.00 | 0.00 |
| 5,400.00 | 17.81 | 250.32 | 5,212.74 | -418.09 | -1,168.80 | -1,102.95 | 0.00 | 0.00 | 0.00 |
| 5,500.00 | 17.81 | 250.32 | 5,307.95 | -428.39 | -1,197.60 | -1,130.12 | 0.00 | 0.00 | 0.00 |
| 5,600.00 | 17.81 | 250.32 | 5,403.15 | -438.69 | -1,226.40 | -1,157.30 | 0.00 | 0.00 | 0.00 |
| 5,700.00 | 17.81 | 250.32 | 5,498.36 | -448.99 | -1,255.20 | -1,184.48 | 0.00 | 0.00 | 0.00 |
| 5,800.00 | 17.81 | 250.32 | 5,593.57 | -459.30 | -1,284.00 | -1,211.65 | 0.00 | 0.00 | 0.00 |
| 5,900.00 | 17.81 | 250.32 | 5,688.77 | -469.60 | -1,312.80 | -1,238.83 | 0.00 | 0.00 | 0.00 |
| 6,000.00 | 17.81 | 250.32 | 5,783.98 | -479.90 | -1,341.60 | -1,266.01 | 0.00 | 0.00 | 0.00 |
| 6,100.00 | 17.81 | 250.32 | 5,879.19 | -490.20 | -1,370.40 | -1,293.19 | 0.00 | 0.00 | 0.00 |
| 6,200.00 | 17.81 | 250.32 | 5,974.40 | -500.50 | -1,399.20 | -1,320.36 | 0.00 | 0.00 | 0.00 |
| 6,300.00 | 17.81 | 250.32 | 6,069.60 | -510.80 | -1,428.00 | -1,347.54 | 0.00 | 0.00 | 0.00 |
| 6,400.00 | 17.81 | 250.32 | 6,164.81 | -521.11 | -1,456.80 | -1,374.72 | 0.00 | 0.00 | 0.00 |
| 6,473.87 | 17.81 | 250.32 | 6,235.14 | -528.72 | -1,478.08 | -1,394.79 | 0.00 | 0.00 | 0.00 |
| Start DLS 10.00 TFO -157.49 | | | | | | | | | |
| 6,500.00 | 15.43 | 246.56 | 6,260.18 | -531.45 | -1,485.03 | -1,401.32 | 10.00 | -9.12 | -14.40 |
| 6,550.00 | 11.15 | 235.12 | 6,308.84 | -536.86 | -1,495.10 | -1,410.59 | 10.00 | -8.55 | -22.88 |
| 6,600.00 | 7.78 | 212.17 | 6,358.17 | -542.49 | -1,500.87 | -1,415.56 | 10.00 | -6.75 | -45.89 |
| 6,650.00 | 6.81 | 172.68 | 6,407.79 | -548.30 | -1,502.30 | -1,416.20 | 10.00 | -1.93 | -78.97 |
| 6,700.00 | 9.06 | 139.55 | 6,457.33 | -554.24 | -1,499.37 | -1,412.51 | 10.00 | 4.49 | -66.27 |
| 6,750.00 | 12.94 | 122.72 | 6,506.42 | -560.27 | -1,492.10 | -1,404.50 | 10.00 | 7.77 | -33.65 |
| 6,800.00 | 17.40 | 113.96 | 6,554.67 | -566.33 | -1,480.55 | -1,392.25 | 10.00 | 8.91 | -17.53 |
| 6,850.00 | 22.08 | 108.75 | 6,601.72 | -572.39 | -1,464.81 | -1,375.84 | 10.00 | 9.37 | -10.42 |
| 6,900.00 | 26.88 | 105.30 | 6,647.22 | -578.40 | -1,444.99 | -1,355.41 | 10.00 | 9.59 | -6.89 |
| 6,950.00 | 31.73 | 102.84 | 6,690.81 | -584.31 | -1,421.26 | -1,331.10 | 10.00 | 9.71 | -4.92 |
| 7,000.00 | 36.62 | 100.98 | 6,732.16 | -590.08 | -1,393.78 | -1,303.10 | 10.00 | 9.78 | -3.73 |
| 7,050.00 | 41.53 | 99.50 | 6,770.97 | -595.66 | -1,362.77 | -1,271.62 | 10.00 | 9.83 | -2.96 |
| 7,100.00 | 46.46 | 98.28 | 6,806.92 | -601.01 | -1,328.47 | -1,236.91 | 10.00 | 9.86 | -2.43 |
| 7,150.00 | 51.40 | 97.25 | 6,839.76 | -606.09 | -1,291.13 | -1,199.23 | 10.00 | 9.88 | -2.06 |
| 7,200.00 | 56.35 | 96.35 | 6,869.23 | -610.86 | -1,251.04 | -1,158.86 | 10.00 | 9.89 | -1.80 |
| 7,250.00 | 61.30 | 95.55 | 6,895.11 | -615.29 | -1,208.50 | -1,116.12 | 10.00 | 9.91 | -1.60 |
| 7,300.00 | 66.26 | 94.82 | 6,917.19 | -619.34 | -1,163.85 | -1,071.32 | 10.00 | 9.91 | -1.46 |
| 7,350.00 | 71.22 | 94.15 | 6,935.32 | -622.98 | -1,117.41 | -1,024.80 | 10.00 | 9.92 | -1.35 |
| 7,400.00 | 76.18 | 93.51 | 6,949.35 | -626.18 | -1,069.54 | -976.94 | 10.00 | 9.93 | -1.27 |
| 7,431.31 | 79.29 | 93.13 | 6,956.00 | -627.95 | -1,039.00 | -946.43 | 10.00 | 9.93 | -1.23 |
| Nio A | | | | | | | | | |
| 7,450.00 | 81.14 | 92.90 | 6,959.18 | -628.92 | -1,020.61 | -928.07 | 10.00 | 9.93 | -1.21 |
| 7,500.00 | 86.11 | 92.31 | 6,964.72 | -631.18 | -970.98 | -878.59 | 10.00 | 9.93 | -1.19 |
| 7,547.04 | 90.78 | 91.76 | 6,966.00 | -632.84 | -924.00 | -831.80 | 10.00 | 9.93 | -1.17 |
| Start 7331.82 hold at 7547.04 MD | | | | | | | | | |
| 7,600.00 | 90.78 | 91.76 | 6,965.28 | -634.47 | -871.07 | -779.13 | 0.00 | 0.00 | 0.00 |
| 7,700.00 | 90.78 | 91.76 | 6,963.91 | -637.54 | -771.13 | -679.66 | 0.00 | 0.00 | 0.00 |
| 7,800.00 | 90.78 | 91.76 | 6,962.55 | -640.61 | -671.19 | -580.19 | 0.00 | 0.00 | 0.00 |
| 7,900.00 | 90.78 | 91.76 | 6,961.19 | -643.67 | -571.24 | -480.73 | 0.00 | 0.00 | 0.00 |
| 8,000.00 | 90.78 | 91.76 | 6,959.82 | -646.74 | -471.30 | -381.26 | 0.00 | 0.00 | 0.00 |
| 8,100.00 | 90.78 | 91.76 | 6,958.46 | -649.81 | -371.36 | -281.79 | 0.00 | 0.00 | 0.00 |
| 8,200.00 | 90.78 | 91.76 | 6,957.09 | -652.88 | -271.41 | -182.33 | 0.00 | 0.00 | 0.00 |
| 8,300.00 | 90.78 | 91.76 | 6,955.73 | -655.95 | -171.47 | -82.86 | 0.00 | 0.00 | 0.00 |

Planning Report

| | | | |
|------------------|----------------------------|-------------------------------------|-----------------------------|
| Database: | EDM 5000.16 Single User Db | Local Co-ordinate Reference: | Well REEMAN 5X-HNA-04-06-65 |
| Company: | NICKEL ROAD OPERATING | TVD Reference: | KB 17' @ 4833.00usft |
| Project: | WELD COUNTY | MD Reference: | KB 17' @ 4833.00usft |
| Site: | SEC 5-T6N-R65W | North Reference: | Grid |
| Well: | REEMAN 5X-HNA-04-06-65 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | OWB | | |
| Design: | PROPOSAL 1 | | |

| Planned Survey | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 8,400.00 | 90.78 | 91.76 | 6,954.37 | -659.01 | -71.53 | 16.60 | 0.00 | 0.00 | 0.00 |
| 8,500.00 | 90.78 | 91.76 | 6,953.00 | -662.08 | 28.42 | 116.07 | 0.00 | 0.00 | 0.00 |
| 8,600.00 | 90.78 | 91.76 | 6,951.64 | -665.15 | 128.36 | 215.54 | 0.00 | 0.00 | 0.00 |
| 8,700.00 | 90.78 | 91.76 | 6,950.27 | -668.22 | 228.31 | 315.00 | 0.00 | 0.00 | 0.00 |
| 8,800.00 | 90.78 | 91.76 | 6,948.91 | -671.29 | 328.25 | 414.47 | 0.00 | 0.00 | 0.00 |
| 8,900.00 | 90.78 | 91.76 | 6,947.55 | -674.36 | 428.19 | 513.93 | 0.00 | 0.00 | 0.00 |
| 9,000.00 | 90.78 | 91.76 | 6,946.18 | -677.42 | 528.14 | 613.40 | 0.00 | 0.00 | 0.00 |
| 9,100.00 | 90.78 | 91.76 | 6,944.82 | -680.49 | 628.08 | 712.87 | 0.00 | 0.00 | 0.00 |
| 9,200.00 | 90.78 | 91.76 | 6,943.46 | -683.56 | 728.02 | 812.33 | 0.00 | 0.00 | 0.00 |
| 9,300.00 | 90.78 | 91.76 | 6,942.09 | -686.63 | 827.97 | 911.80 | 0.00 | 0.00 | 0.00 |
| 9,400.00 | 90.78 | 91.76 | 6,940.73 | -689.70 | 927.91 | 1,011.27 | 0.00 | 0.00 | 0.00 |
| 9,500.00 | 90.78 | 91.76 | 6,939.36 | -692.76 | 1,027.85 | 1,110.73 | 0.00 | 0.00 | 0.00 |
| 9,600.00 | 90.78 | 91.76 | 6,938.00 | -695.83 | 1,127.80 | 1,210.20 | 0.00 | 0.00 | 0.00 |
| 9,700.00 | 90.78 | 91.76 | 6,936.64 | -698.90 | 1,227.74 | 1,309.66 | 0.00 | 0.00 | 0.00 |
| 9,800.00 | 90.78 | 91.76 | 6,935.27 | -701.97 | 1,327.69 | 1,409.13 | 0.00 | 0.00 | 0.00 |
| 9,900.00 | 90.78 | 91.76 | 6,933.91 | -705.04 | 1,427.63 | 1,508.60 | 0.00 | 0.00 | 0.00 |
| 10,000.00 | 90.78 | 91.76 | 6,932.54 | -708.11 | 1,527.57 | 1,608.06 | 0.00 | 0.00 | 0.00 |
| 10,100.00 | 90.78 | 91.76 | 6,931.18 | -711.17 | 1,627.52 | 1,707.53 | 0.00 | 0.00 | 0.00 |
| 10,200.00 | 90.78 | 91.76 | 6,929.82 | -714.24 | 1,727.46 | 1,807.00 | 0.00 | 0.00 | 0.00 |
| 10,300.00 | 90.78 | 91.76 | 6,928.45 | -717.31 | 1,827.40 | 1,906.46 | 0.00 | 0.00 | 0.00 |
| 10,400.00 | 90.78 | 91.76 | 6,927.09 | -720.38 | 1,927.35 | 2,005.93 | 0.00 | 0.00 | 0.00 |
| 10,500.00 | 90.78 | 91.76 | 6,925.72 | -723.45 | 2,027.29 | 2,105.39 | 0.00 | 0.00 | 0.00 |
| 10,600.00 | 90.78 | 91.76 | 6,924.36 | -726.51 | 2,127.23 | 2,204.86 | 0.00 | 0.00 | 0.00 |
| 10,700.00 | 90.78 | 91.76 | 6,923.00 | -729.58 | 2,227.18 | 2,304.33 | 0.00 | 0.00 | 0.00 |
| 10,800.00 | 90.78 | 91.76 | 6,921.63 | -732.65 | 2,327.12 | 2,403.79 | 0.00 | 0.00 | 0.00 |
| 10,900.00 | 90.78 | 91.76 | 6,920.27 | -735.72 | 2,427.06 | 2,503.26 | 0.00 | 0.00 | 0.00 |
| 11,000.00 | 90.78 | 91.76 | 6,918.90 | -738.79 | 2,527.01 | 2,602.72 | 0.00 | 0.00 | 0.00 |
| 11,100.00 | 90.78 | 91.76 | 6,917.54 | -741.86 | 2,626.95 | 2,702.19 | 0.00 | 0.00 | 0.00 |
| 11,200.00 | 90.78 | 91.76 | 6,916.18 | -744.92 | 2,726.90 | 2,801.66 | 0.00 | 0.00 | 0.00 |
| 11,300.00 | 90.78 | 91.76 | 6,914.81 | -747.99 | 2,826.84 | 2,901.12 | 0.00 | 0.00 | 0.00 |
| 11,400.00 | 90.78 | 91.76 | 6,913.45 | -751.06 | 2,926.78 | 3,000.59 | 0.00 | 0.00 | 0.00 |
| 11,500.00 | 90.78 | 91.76 | 6,912.09 | -754.13 | 3,026.73 | 3,100.06 | 0.00 | 0.00 | 0.00 |
| 11,600.00 | 90.78 | 91.76 | 6,910.72 | -757.20 | 3,126.67 | 3,199.52 | 0.00 | 0.00 | 0.00 |
| 11,700.00 | 90.78 | 91.76 | 6,909.36 | -760.26 | 3,226.61 | 3,298.99 | 0.00 | 0.00 | 0.00 |
| 11,800.00 | 90.78 | 91.76 | 6,907.99 | -763.33 | 3,326.56 | 3,398.45 | 0.00 | 0.00 | 0.00 |
| 11,900.00 | 90.78 | 91.76 | 6,906.63 | -766.40 | 3,426.50 | 3,497.92 | 0.00 | 0.00 | 0.00 |
| 12,000.00 | 90.78 | 91.76 | 6,905.27 | -769.47 | 3,526.44 | 3,597.39 | 0.00 | 0.00 | 0.00 |
| 12,100.00 | 90.78 | 91.76 | 6,903.90 | -772.54 | 3,626.39 | 3,696.85 | 0.00 | 0.00 | 0.00 |
| 12,200.00 | 90.78 | 91.76 | 6,902.54 | -775.61 | 3,726.33 | 3,796.32 | 0.00 | 0.00 | 0.00 |
| 12,300.00 | 90.78 | 91.76 | 6,901.17 | -778.67 | 3,826.28 | 3,895.78 | 0.00 | 0.00 | 0.00 |
| 12,400.00 | 90.78 | 91.76 | 6,899.81 | -781.74 | 3,926.22 | 3,995.25 | 0.00 | 0.00 | 0.00 |
| 12,500.00 | 90.78 | 91.76 | 6,898.45 | -784.81 | 4,026.16 | 4,094.72 | 0.00 | 0.00 | 0.00 |
| 12,600.00 | 90.78 | 91.76 | 6,897.08 | -787.88 | 4,126.11 | 4,194.18 | 0.00 | 0.00 | 0.00 |
| 12,700.00 | 90.78 | 91.76 | 6,895.72 | -790.95 | 4,226.05 | 4,293.65 | 0.00 | 0.00 | 0.00 |
| 12,800.00 | 90.78 | 91.76 | 6,894.35 | -794.01 | 4,325.99 | 4,393.12 | 0.00 | 0.00 | 0.00 |
| 12,900.00 | 90.78 | 91.76 | 6,892.99 | -797.08 | 4,425.94 | 4,492.58 | 0.00 | 0.00 | 0.00 |
| 13,000.00 | 90.78 | 91.76 | 6,891.63 | -800.15 | 4,525.88 | 4,592.05 | 0.00 | 0.00 | 0.00 |
| 13,100.00 | 90.78 | 91.76 | 6,890.26 | -803.22 | 4,625.82 | 4,691.51 | 0.00 | 0.00 | 0.00 |
| 13,200.00 | 90.78 | 91.76 | 6,888.90 | -806.29 | 4,725.77 | 4,790.98 | 0.00 | 0.00 | 0.00 |
| 13,300.00 | 90.78 | 91.76 | 6,887.53 | -809.36 | 4,825.71 | 4,890.45 | 0.00 | 0.00 | 0.00 |
| 13,400.00 | 90.78 | 91.76 | 6,886.17 | -812.42 | 4,925.66 | 4,989.91 | 0.00 | 0.00 | 0.00 |
| 13,500.00 | 90.78 | 91.76 | 6,884.81 | -815.49 | 5,025.60 | 5,089.38 | 0.00 | 0.00 | 0.00 |
| 13,600.00 | 90.78 | 91.76 | 6,883.44 | -818.56 | 5,125.54 | 5,188.85 | 0.00 | 0.00 | 0.00 |
| 13,700.00 | 90.78 | 91.76 | 6,882.08 | -821.63 | 5,225.49 | 5,288.31 | 0.00 | 0.00 | 0.00 |

Planning Report

| | | | |
|------------------|----------------------------|-------------------------------------|-----------------------------|
| Database: | EDM 5000.16 Single User Db | Local Co-ordinate Reference: | Well REEMAN 5X-HNA-04-06-65 |
| Company: | NICKEL ROAD OPERATING | TVD Reference: | KB 17' @ 4833.00usft |
| Project: | WELD COUNTY | MD Reference: | KB 17' @ 4833.00usft |
| Site: | SEC 5-T6N-R65W | North Reference: | Grid |
| Well: | REEMAN 5X-HNA-04-06-65 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | OWB | | |
| Design: | PROPOSAL 1 | | |

| Planned Survey | | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
| 13,800.00 | 90.78 | 91.76 | 6,880.71 | -824.70 | 5,325.43 | 5,387.78 | 0.00 | 0.00 | 0.00 | |
| 13,900.00 | 90.78 | 91.76 | 6,879.35 | -827.76 | 5,425.37 | 5,487.24 | 0.00 | 0.00 | 0.00 | |
| 14,000.00 | 90.78 | 91.76 | 6,877.99 | -830.83 | 5,525.32 | 5,586.71 | 0.00 | 0.00 | 0.00 | |
| 14,100.00 | 90.78 | 91.76 | 6,876.62 | -833.90 | 5,625.26 | 5,686.18 | 0.00 | 0.00 | 0.00 | |
| 14,200.00 | 90.78 | 91.76 | 6,875.26 | -836.97 | 5,725.20 | 5,785.64 | 0.00 | 0.00 | 0.00 | |
| 14,300.00 | 90.78 | 91.76 | 6,873.90 | -840.04 | 5,825.15 | 5,885.11 | 0.00 | 0.00 | 0.00 | |
| 14,400.00 | 90.78 | 91.76 | 6,872.53 | -843.11 | 5,925.09 | 5,984.57 | 0.00 | 0.00 | 0.00 | |
| 14,500.00 | 90.78 | 91.76 | 6,871.17 | -846.17 | 6,025.04 | 6,084.04 | 0.00 | 0.00 | 0.00 | |
| 14,600.00 | 90.78 | 91.76 | 6,869.80 | -849.24 | 6,124.98 | 6,183.51 | 0.00 | 0.00 | 0.00 | |
| 14,700.00 | 90.78 | 91.76 | 6,868.44 | -852.31 | 6,224.92 | 6,282.97 | 0.00 | 0.00 | 0.00 | |
| 14,800.00 | 90.78 | 91.76 | 6,867.08 | -855.38 | 6,324.87 | 6,382.44 | 0.00 | 0.00 | 0.00 | |
| 14,878.87 | 90.78 | 91.76 | 6,866.00 | -857.80 | 6,403.69 | 6,460.88 | 0.00 | 0.00 | 0.00 | |
| TD at 14878.86 | | | | | | | | | | |

| Design Targets | | | | | | | | | |
|---------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-------------|--------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| - hit/miss target | | | | | | | | | |
| - Shape | | | | | | | | | |
| REEMAN 5X-HNA-PBHI | 0.00 | 0.00 | 6,866.00 | -857.80 | 6,403.69 | 1,431,936.28 | 3,231,086.04 | 40.516093°N | 104.668843°W |
| - plan hits target center | | | | | | | | | |
| - Point | | | | | | | | | |
| REEMAN 5X-HNA-LP | 0.00 | 0.00 | 6,966.00 | -632.84 | -924.00 | 1,432,161.24 | 3,223,758.35 | 40.516896°N | 104.695190°W |
| - plan hits target center | | | | | | | | | |
| - Point | | | | | | | | | |

| Formations | | | | | | |
|-----------------------|-----------------------|----------------------|-----------|---------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 0.00 | 0.00 | Laramie-Fox Hills | | | | |
| 333.00 | 333.00 | Upper Pierre Aquifer | | | | |
| 1,348.83 | 1,347.00 | Pierre Shale | | | | |
| 4,680.79 | 4,528.00 | Sussex | | | | |
| 5,243.77 | 5,064.00 | Shannon | | | | |
| 5,274.23 | 5,093.00 | Pierre Shale | | | | |
| 7,431.31 | 6,956.00 | Nio A | | | | |

| Plan Annotations | | | | | |
|-----------------------|-----------------------|-------------------|--------------|----------------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | | |
| | | +N/-S (usft) | +E/-W (usft) | Comment | |
| 900.00 | 900.00 | 0.00 | 0.00 | Start Build 2.00 | |
| 1,790.52 | 1,776.25 | -46.24 | -129.28 | Start 4683.35 hold at 1790.52 MD | |
| 6,473.87 | 6,235.14 | -528.72 | -1,478.08 | Start DLS 10.00 TFO -157.49 | |
| 7,547.04 | 6,966.00 | -632.84 | -924.00 | Start 7331.82 hold at 7547.04 MD | |
| 14,878.87 | 6,866.00 | -857.80 | 6,403.69 | TD at 14878.86 | |