

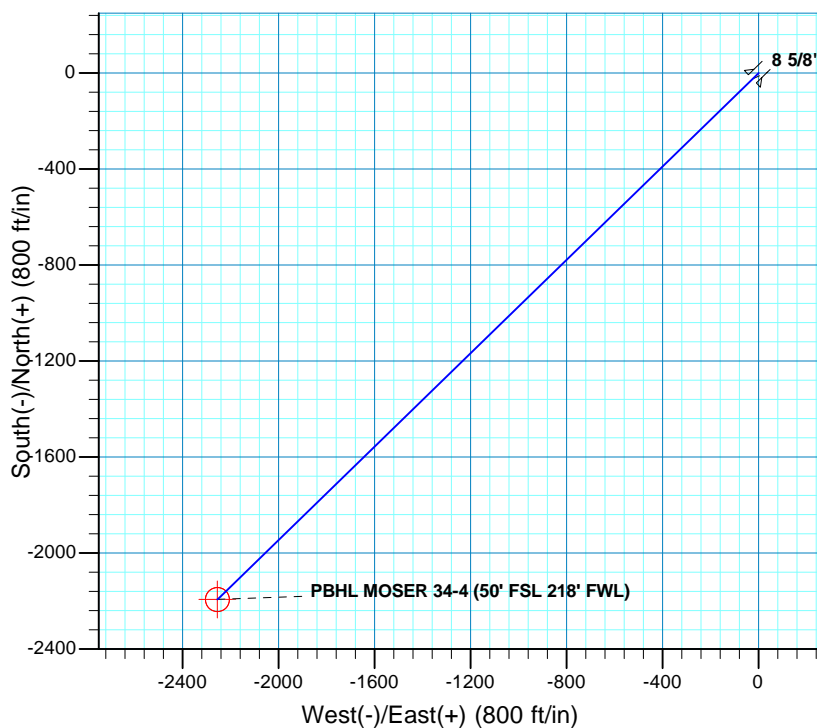
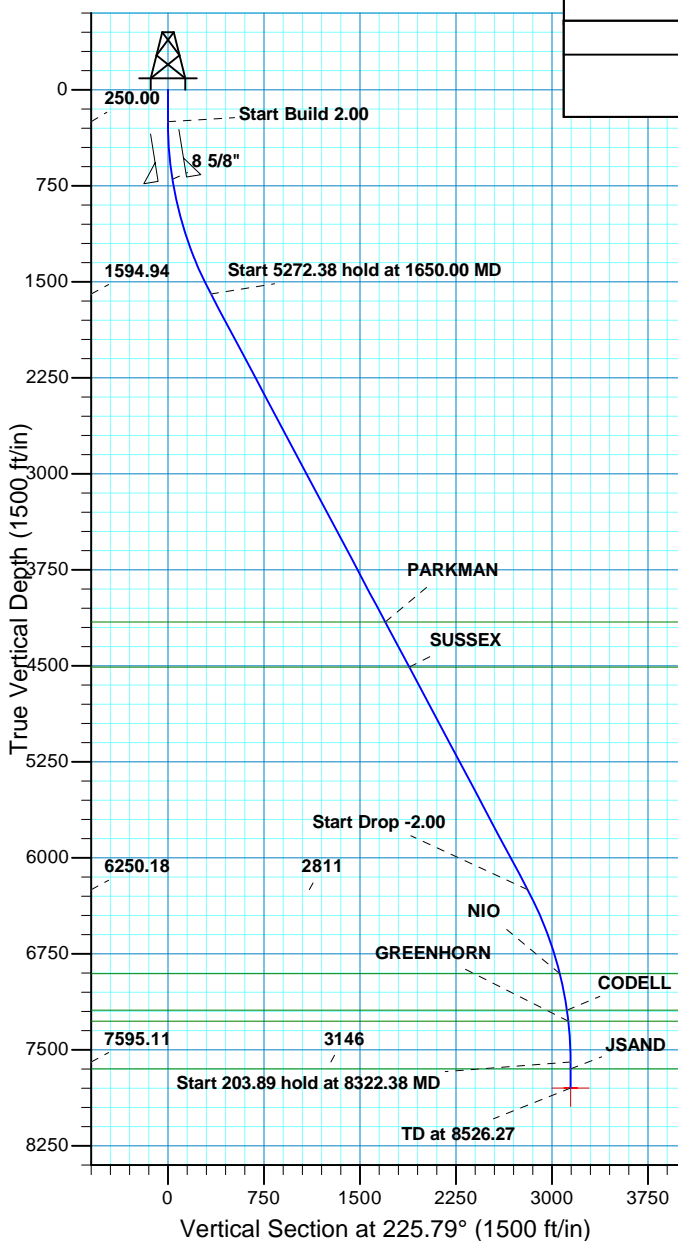
| WELL DETAILS: P_MOSER 34-4 | | | | | |
|---|--------------|------------------------|-----------------------|-----------------------------|-------------------------------|
| GL 4859' & RKB 15' @ 4874.00ft (ASSUMED) | | | | | |
| +N-S 0.00 | +E-W 0.00 | Northing 1304656.78 | Easting 3232122.00 | Latitude 40° 10' 0.098 N | Longitude 104° 40' 9.858 W |

| DESIGN TARGET DETAILS | | | | | | | | |
|-----------------------|----------------|------------------|------------------|------------------------|-----------------------|-----------------------------|--------------------------------|--|
| Name PBHL | TVD 7799.00 | +N-S -2193.59 | +E-W -2254.96 | Northing 1302442.18 | Easting 3229887.69 | Latitude 40° 9' 38.419 N | Longitude 104° 40' 38.903 W | Shape Circle (Radius: 50.00) - plan hits target center |

| SECTION DETAILS | | | | | | | | | | |
|-----------------|-------|--------|---------|----------|----------|------|--------|---------|------------------------------------|--|
| MD | Inc | Azi | TVD | +N-S | +E-W | Dleg | TFace | VSect | Target | |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 250.00 | 0.00 | 0.00 | 250.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1650.00 | 28.00 | 225.79 | 1594.94 | -233.82 | -240.36 | 2.00 | 225.79 | 335.33 | | |
| 6922.38 | 28.00 | 225.79 | 6250.18 | -1959.77 | -2014.60 | 0.00 | 0.00 | 2810.56 | | |
| 8322.38 | 0.00 | 0.00 | 7595.11 | -2193.59 | -2254.96 | 2.00 | 180.00 | 3145.90 | | |
| 8526.27 | 0.00 | 0.00 | 7799.00 | -2193.59 | -2254.96 | 0.00 | 0.00 | 3145.90 | PBHL MOSER 34-4 (50' FSL 218' FWL) | |

| PROJECT DETAILS: COLORADO NORTHERN ZONE - 83 | | | | FORMATION TOP DETAILS | | |
|--|---------------------------|---------|---------|-----------------------|---------|-----------|
| Geodetic System: | US State Plane 1983 | TVDPath | 4159.00 | MDPath | 4553.98 | Formation |
| Datum: | North American Datum 1983 | 4511.00 | 4952.65 | PARKMAN | | |
| Ellipsoid: | GRS 1980 | 6905.00 | 7625.42 | SUSSEX | | |
| Zone: | Colorado Northern Zone | 7190.00 | 7915.91 | NIO | | |
| Location: | SEC 4 T3N R65W | 7277.00 | 8003.61 | CODELL | | |
| System Datum: | Mean Sea Level | 7649.00 | 8376.27 | GREENHORN | | |
| | | | | JSAND | | |

| CASING DETAILS | | | |
|----------------|--------|--------|-------|
| TVD | MD | Name | Size |
| 700.00 | 701.87 | 8 5/8" | 8.625 |





Scientific Drilling
Rocky Mountain Operations

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_MOSER 11-4 PAD

P_MOSER 34-4

P_MOSER 34-4

Plan: PLAN #1 9-1-10 RHS

Standard Planning Report

01 September, 2010



| | | | |
|------------------|-----------------------------|-------------------------------------|---|
| Database: | EDM5000-RobertS-Local | Local Co-ordinate Reference: | Well P_MOSER 34-4 |
| Company: | US ROCKIES REGION PLANNING | TVD Reference: | GL 4859' & RKB 15' @ 4874.00ft (ASSUMED) |
| Project: | COLORADO NORTHERN ZONE - 83 | MD Reference: | GL 4859' & RKB 15' @ 4874.00ft (ASSUMED) |
| Site: | WELD_MOSER 11-4 PAD | North Reference: | True |
| Well: | P_MOSER 34-4 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | P_MOSER 34-4 | | |
| Design: | PLAN #1 9-1-10 RHS | | |

| | | | |
|--------------------|--|----------------------|----------------|
| Project | COLORADO NORTHERN ZONE - 83, KERR MCGEE OIL & GAS ONSHORE LP | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | |

| | | | | | |
|------------------------------|-------------------------------------|---------------------|-------------------|--------------------------|-------------------|
| Site | WELD_MOSER 11-4 PAD, SEC 4 T3N R65W | | | | |
| Site Position: | Northing: | 1,304,665.78 usft | Latitude: | 40° 10' 0.188 N | |
| From: | Lat/Long | Easting: | 3,232,109.06 usft | Longitude: | 104° 40' 10.024 W |
| Position Uncertainty: | 0.00 ft | Slot Radius: | 13.200 in | Grid Convergence: | 0.54 ° |

| | | | | | | |
|-----------------------------|-----------------------------------|----------------------------|------------------|----------------------|-------------------|------------------|
| Well | P_MOSER 34-4, 2250' FSL 2450' FWL | | | | | |
| Well Position | +N/-S | -9.12 ft | Northing: | 1,304,656.78 usft | Latitude: | 40° 10' 0.098 N |
| | +E/-W | 12.86 ft | Easting: | 3,232,122.00 usft | Longitude: | 104° 40' 9.858 W |
| Position Uncertainty | 0.00 ft | Wellhead Elevation: | | Ground Level: | 4,859.00 ft | |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | P_MOSER 34-4 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 09/01/2010 | 8.90 | 66.90 | 53,102 |

| | | | | |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|
| Design | PLAN #1 9-1-10 RHS | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) |
| | 0.00 | 0.00 | 0.00 | 225.79 |

| Plan Sections | | | | | | | | | | |
|----------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|----------------------|---------------------|---------|--------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | 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 | |
| 250.00 | 0.00 | 0.00 | 250.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,650.00 | 28.00 | 225.79 | 1,594.94 | -233.82 | -240.36 | 2.00 | 2.00 | 0.00 | 225.79 | |
| 6,922.38 | 28.00 | 225.79 | 6,250.18 | -1,959.77 | -2,014.60 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 8,322.38 | 0.00 | 0.00 | 7,595.11 | -2,193.59 | -2,254.96 | 2.00 | -2.00 | 0.00 | 180.00 | |
| 8,526.27 | 0.00 | 0.00 | 7,799.00 | -2,193.59 | -2,254.96 | 0.00 | 0.00 | 0.00 | 0.00 | PBHL MOSER 34-4 (I |

| | | | |
|------------------|-----------------------------|-------------------------------------|---|
| Database: | EDM5000-RobertS-Local | Local Co-ordinate Reference: | Well P_MOSER 34-4 |
| Company: | US ROCKIES REGION PLANNING | TVD Reference: | GL 4859' & RKB 15' @ 4874.00ft (ASSUMED) |
| Project: | COLORADO NORTHERN ZONE - 83 | MD Reference: | GL 4859' & RKB 15' @ 4874.00ft (ASSUMED) |
| Site: | WELD_MOSER 11-4 PAD | North Reference: | True |
| Well: | P_MOSER 34-4 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | P_MOSER 34-4 | | |
| Design: | PLAN #1 9-1-10 RHS | | |

| Planned Survey | | | | | | | | | | |
|---|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|-----------------------------|----------------------------|---------------------------|------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | 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 | 0.00 |
| 100.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 200.00 | 0.00 | 0.00 | 200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 250.00 | 0.00 | 0.00 | 250.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Start Build 2.00 | | | | | | | | | | |
| 300.00 | 1.00 | 225.79 | 300.00 | -0.30 | -0.31 | 0.44 | 2.00 | 2.00 | 0.00 | 0.00 |
| 400.00 | 3.00 | 225.79 | 399.93 | -2.74 | -2.81 | 3.93 | 2.00 | 2.00 | 0.00 | 0.00 |
| 500.00 | 5.00 | 225.79 | 499.68 | -7.60 | -7.81 | 10.90 | 2.00 | 2.00 | 0.00 | 0.00 |
| 600.00 | 7.00 | 225.79 | 599.13 | -14.89 | -15.31 | 21.35 | 2.00 | 2.00 | 0.00 | 0.00 |
| 700.00 | 9.00 | 225.79 | 698.15 | -24.59 | -25.28 | 35.27 | 2.00 | 2.00 | 0.00 | 0.00 |
| 701.87 | 9.04 | 225.79 | 700.00 | -24.80 | -25.49 | 35.56 | 2.00 | 2.00 | 0.00 | 0.00 |
| 8 5/8" | | | | | | | | | | |
| 800.00 | 11.00 | 225.79 | 796.63 | -36.70 | -37.73 | 52.63 | 2.00 | 2.00 | 0.00 | 0.00 |
| 900.00 | 13.00 | 225.79 | 894.44 | -51.20 | -52.63 | 73.42 | 2.00 | 2.00 | 0.00 | 0.00 |
| 1,000.00 | 15.00 | 225.79 | 991.46 | -68.07 | -69.97 | 97.62 | 2.00 | 2.00 | 0.00 | 0.00 |
| 1,100.00 | 17.00 | 225.79 | 1,087.58 | -87.28 | -89.73 | 125.18 | 2.00 | 2.00 | 0.00 | 0.00 |
| 1,200.00 | 19.00 | 225.79 | 1,182.68 | -108.83 | -111.88 | 156.08 | 2.00 | 2.00 | 0.00 | 0.00 |
| 1,300.00 | 21.00 | 225.79 | 1,276.65 | -132.68 | -136.39 | 190.28 | 2.00 | 2.00 | 0.00 | 0.00 |
| 1,400.00 | 23.00 | 225.79 | 1,369.36 | -158.80 | -163.24 | 227.74 | 2.00 | 2.00 | 0.00 | 0.00 |
| 1,500.00 | 25.00 | 225.79 | 1,460.71 | -187.16 | -192.39 | 268.41 | 2.00 | 2.00 | 0.00 | 0.00 |
| 1,600.00 | 27.00 | 225.79 | 1,550.59 | -217.72 | -223.81 | 312.24 | 2.00 | 2.00 | 0.00 | 0.00 |
| 1,650.00 | 28.00 | 225.79 | 1,594.94 | -233.82 | -240.36 | 335.33 | 2.00 | 2.00 | 0.00 | 0.00 |
| Start 5272.38 hold at 1650.00 MD | | | | | | | | | | |
| 1,700.00 | 28.00 | 225.79 | 1,639.08 | -250.19 | -257.19 | 358.80 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,800.00 | 28.00 | 225.79 | 1,727.38 | -282.92 | -290.84 | 405.75 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,900.00 | 28.00 | 225.79 | 1,815.67 | -315.66 | -324.49 | 452.70 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,000.00 | 28.00 | 225.79 | 1,903.97 | -348.40 | -358.14 | 499.65 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,100.00 | 28.00 | 225.79 | 1,992.26 | -381.13 | -391.79 | 546.59 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,200.00 | 28.00 | 225.79 | 2,080.56 | -413.87 | -425.45 | 593.54 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,300.00 | 28.00 | 225.79 | 2,168.85 | -446.60 | -459.10 | 640.49 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,400.00 | 28.00 | 225.79 | 2,257.15 | -479.34 | -492.75 | 687.43 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 28.00 | 225.79 | 2,345.44 | -512.07 | -526.40 | 734.38 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,600.00 | 28.00 | 225.79 | 2,433.74 | -544.81 | -560.05 | 781.33 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,700.00 | 28.00 | 225.79 | 2,522.03 | -577.54 | -593.70 | 828.28 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,800.00 | 28.00 | 225.79 | 2,610.33 | -610.28 | -627.35 | 875.22 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,900.00 | 28.00 | 225.79 | 2,698.62 | -643.02 | -661.01 | 922.17 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,000.00 | 28.00 | 225.79 | 2,786.92 | -675.75 | -694.66 | 969.12 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,100.00 | 28.00 | 225.79 | 2,875.21 | -708.49 | -728.31 | 1,016.06 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,200.00 | 28.00 | 225.79 | 2,963.51 | -741.22 | -761.96 | 1,063.01 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,300.00 | 28.00 | 225.79 | 3,051.80 | -773.96 | -795.61 | 1,109.96 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,400.00 | 28.00 | 225.79 | 3,140.10 | -806.69 | -829.26 | 1,156.91 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,500.00 | 28.00 | 225.79 | 3,228.39 | -839.43 | -862.91 | 1,203.85 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,600.00 | 28.00 | 225.79 | 3,316.68 | -872.16 | -896.57 | 1,250.80 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,700.00 | 28.00 | 225.79 | 3,404.98 | -904.90 | -930.22 | 1,297.75 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,800.00 | 28.00 | 225.79 | 3,493.27 | -937.64 | -963.87 | 1,344.69 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 28.00 | 225.79 | 3,581.57 | -970.37 | -997.52 | 1,391.64 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,000.00 | 28.00 | 225.79 | 3,669.86 | -1,003.11 | -1,031.17 | 1,438.59 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,100.00 | 28.00 | 225.79 | 3,758.16 | -1,035.84 | -1,064.82 | 1,485.54 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,200.00 | 28.00 | 225.79 | 3,846.45 | -1,068.58 | -1,098.47 | 1,532.48 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 28.00 | 225.79 | 3,934.75 | -1,101.31 | -1,132.13 | 1,579.43 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,400.00 | 28.00 | 225.79 | 4,023.04 | -1,134.05 | -1,165.78 | 1,626.38 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 28.00 | 225.79 | 4,111.34 | -1,166.78 | -1,199.43 | 1,673.32 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | |
|------------------|-----------------------------|-------------------------------------|---|
| Database: | EDM5000-RobertS-Local | Local Co-ordinate Reference: | Well P_MOSER 34-4 |
| Company: | US ROCKIES REGION PLANNING | TVD Reference: | GL 4859' & RKB 15' @ 4874.00ft (ASSUMED) |
| Project: | COLORADO NORTHERN ZONE - 83 | MD Reference: | GL 4859' & RKB 15' @ 4874.00ft (ASSUMED) |
| Site: | WELD_MOSER 11-4 PAD | North Reference: | True |
| Well: | P_MOSER 34-4 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | P_MOSER 34-4 | | |
| Design: | PLAN #1 9-1-10 RHS | | |

| Planned Survey | | | | | | | | | | |
|-------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|--|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
| 4,553.98 | 28.00 | 225.79 | 4,159.00 | -1,184.46 | -1,217.59 | 1,698.67 | 0.00 | 0.00 | 0.00 | |
| PARKMAN | | | | | | | | | | |
| 4,600.00 | 28.00 | 225.79 | 4,199.63 | -1,199.52 | -1,233.08 | 1,720.27 | 0.00 | 0.00 | 0.00 | |
| 4,700.00 | 28.00 | 225.79 | 4,287.93 | -1,232.26 | -1,266.73 | 1,767.22 | 0.00 | 0.00 | 0.00 | |
| 4,800.00 | 28.00 | 225.79 | 4,376.22 | -1,264.99 | -1,300.38 | 1,814.17 | 0.00 | 0.00 | 0.00 | |
| 4,900.00 | 28.00 | 225.79 | 4,464.52 | -1,297.73 | -1,334.03 | 1,861.11 | 0.00 | 0.00 | 0.00 | |
| 4,952.65 | 28.00 | 225.79 | 4,511.00 | -1,314.96 | -1,351.75 | 1,885.83 | 0.00 | 0.00 | 0.00 | |
| SUSSEX | | | | | | | | | | |
| 5,000.00 | 28.00 | 225.79 | 4,552.81 | -1,330.46 | -1,367.69 | 1,908.06 | 0.00 | 0.00 | 0.00 | |
| 5,100.00 | 28.00 | 225.79 | 4,641.11 | -1,363.20 | -1,401.34 | 1,955.01 | 0.00 | 0.00 | 0.00 | |
| 5,200.00 | 28.00 | 225.79 | 4,729.40 | -1,395.93 | -1,434.99 | 2,001.95 | 0.00 | 0.00 | 0.00 | |
| 5,300.00 | 28.00 | 225.79 | 4,817.70 | -1,428.67 | -1,468.64 | 2,048.90 | 0.00 | 0.00 | 0.00 | |
| 5,400.00 | 28.00 | 225.79 | 4,905.99 | -1,461.40 | -1,502.29 | 2,095.85 | 0.00 | 0.00 | 0.00 | |
| 5,500.00 | 28.00 | 225.79 | 4,994.29 | -1,494.14 | -1,535.94 | 2,142.80 | 0.00 | 0.00 | 0.00 | |
| 5,600.00 | 28.00 | 225.79 | 5,082.58 | -1,526.88 | -1,569.59 | 2,189.74 | 0.00 | 0.00 | 0.00 | |
| 5,700.00 | 28.00 | 225.79 | 5,170.87 | -1,559.61 | -1,603.25 | 2,236.69 | 0.00 | 0.00 | 0.00 | |
| 5,800.00 | 28.00 | 225.79 | 5,259.17 | -1,592.35 | -1,636.90 | 2,283.64 | 0.00 | 0.00 | 0.00 | |
| 5,900.00 | 28.00 | 225.79 | 5,347.46 | -1,625.08 | -1,670.55 | 2,330.58 | 0.00 | 0.00 | 0.00 | |
| 6,000.00 | 28.00 | 225.79 | 5,435.76 | -1,657.82 | -1,704.20 | 2,377.53 | 0.00 | 0.00 | 0.00 | |
| 6,100.00 | 28.00 | 225.79 | 5,524.05 | -1,690.55 | -1,737.85 | 2,424.48 | 0.00 | 0.00 | 0.00 | |
| 6,200.00 | 28.00 | 225.79 | 5,612.35 | -1,723.29 | -1,771.50 | 2,471.43 | 0.00 | 0.00 | 0.00 | |
| 6,300.00 | 28.00 | 225.79 | 5,700.64 | -1,756.02 | -1,805.15 | 2,518.37 | 0.00 | 0.00 | 0.00 | |
| 6,400.00 | 28.00 | 225.79 | 5,788.94 | -1,788.76 | -1,838.81 | 2,565.32 | 0.00 | 0.00 | 0.00 | |
| 6,500.00 | 28.00 | 225.79 | 5,877.23 | -1,821.50 | -1,872.46 | 2,612.27 | 0.00 | 0.00 | 0.00 | |
| 6,600.00 | 28.00 | 225.79 | 5,965.53 | -1,854.23 | -1,906.11 | 2,659.21 | 0.00 | 0.00 | 0.00 | |
| 6,700.00 | 28.00 | 225.79 | 6,053.82 | -1,886.97 | -1,939.76 | 2,706.16 | 0.00 | 0.00 | 0.00 | |
| 6,800.00 | 28.00 | 225.79 | 6,142.12 | -1,919.70 | -1,973.41 | 2,753.11 | 0.00 | 0.00 | 0.00 | |
| 6,900.00 | 28.00 | 225.79 | 6,230.41 | -1,952.44 | -2,007.06 | 2,800.06 | 0.00 | 0.00 | 0.00 | |
| 6,922.38 | 28.00 | 225.79 | 6,250.18 | -1,959.77 | -2,014.60 | 2,810.57 | 0.00 | 0.00 | 0.00 | |
| Start Drop -2.00 | | | | | | | | | | |
| 7,000.00 | 26.45 | 225.79 | 6,319.19 | -1,984.52 | -2,040.05 | 2,846.07 | 2.00 | -2.00 | 0.00 | |
| 7,100.00 | 24.45 | 225.79 | 6,409.49 | -2,014.48 | -2,070.84 | 2,889.04 | 2.00 | -2.00 | 0.00 | |
| 7,200.00 | 22.45 | 225.79 | 6,501.22 | -2,042.23 | -2,099.36 | 2,928.83 | 2.00 | -2.00 | 0.00 | |
| 7,300.00 | 20.45 | 225.79 | 6,594.29 | -2,067.72 | -2,125.57 | 2,965.39 | 2.00 | -2.00 | 0.00 | |
| 7,400.00 | 18.45 | 225.79 | 6,688.58 | -2,090.94 | -2,149.44 | 2,998.68 | 2.00 | -2.00 | 0.00 | |
| 7,500.00 | 16.45 | 225.79 | 6,783.98 | -2,111.84 | -2,170.93 | 3,028.66 | 2.00 | -2.00 | 0.00 | |
| 7,600.00 | 14.45 | 225.79 | 6,880.36 | -2,130.41 | -2,190.02 | 3,055.30 | 2.00 | -2.00 | 0.00 | |
| 7,625.42 | 13.94 | 225.79 | 6,905.00 | -2,134.76 | -2,194.49 | 3,061.53 | 2.00 | -2.00 | 0.00 | |
| NIO | | | | | | | | | | |
| 7,700.00 | 12.45 | 225.79 | 6,977.61 | -2,146.63 | -2,206.69 | 3,078.55 | 2.00 | -2.00 | 0.00 | |
| 7,800.00 | 10.45 | 225.79 | 7,075.62 | -2,160.47 | -2,220.91 | 3,098.40 | 2.00 | -2.00 | 0.00 | |
| 7,900.00 | 8.45 | 225.79 | 7,174.26 | -2,171.91 | -2,232.68 | 3,114.81 | 2.00 | -2.00 | 0.00 | |
| 7,915.91 | 8.13 | 225.79 | 7,190.00 | -2,173.51 | -2,234.32 | 3,117.11 | 2.00 | -2.00 | 0.00 | |
| CODELL | | | | | | | | | | |
| 8,000.00 | 6.45 | 225.79 | 7,273.41 | -2,180.95 | -2,241.97 | 3,127.78 | 2.00 | -2.00 | 0.00 | |
| 8,003.61 | 6.38 | 225.79 | 7,277.00 | -2,181.23 | -2,242.26 | 3,128.18 | 2.00 | -2.00 | 0.00 | |
| GREENHORN | | | | | | | | | | |
| 8,100.00 | 4.45 | 225.79 | 7,372.95 | -2,187.57 | -2,248.77 | 3,137.27 | 2.00 | -2.00 | 0.00 | |
| 8,200.00 | 2.45 | 225.79 | 7,472.77 | -2,191.76 | -2,253.08 | 3,143.28 | 2.00 | -2.00 | 0.00 | |
| 8,300.00 | 0.45 | 225.79 | 7,572.73 | -2,193.53 | -2,254.90 | 3,145.81 | 2.00 | -2.00 | 0.00 | |
| 8,322.38 | 0.00 | 0.00 | 7,595.11 | -2,193.59 | -2,254.96 | 3,145.90 | 2.00 | -2.00 | 0.00 | |

| | | | |
|------------------|-----------------------------|-------------------------------------|---|
| Database: | EDM5000-RobertS-Local | Local Co-ordinate Reference: | Well P_MOSER 34-4 |
| Company: | US ROCKIES REGION PLANNING | TVD Reference: | GL 4859' & RKB 15' @ 4874.00ft (ASSUMED) |
| Project: | COLORADO NORTHERN ZONE - 83 | MD Reference: | GL 4859' & RKB 15' @ 4874.00ft (ASSUMED) |
| Site: | WELD_MOSER 11-4 PAD | North Reference: | True |
| Well: | P_MOSER 34-4 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | P_MOSER 34-4 | | |
| Design: | PLAN #1 9-1-10 RHS | | |

| Planned Survey | | | | | | | | | | |
|---|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|--|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
| Start 203.89 hold at 8322.38 MD | | | | | | | | | | |
| 8,376.27 | 0.00 | 0.00 | 7,649.00 | -2,193.59 | -2,254.96 | 3,145.90 | 0.00 | 0.00 | 0.00 | |
| JSAND | | | | | | | | | | |
| 8,400.00 | 0.00 | 0.00 | 7,672.73 | -2,193.59 | -2,254.96 | 3,145.90 | 0.00 | 0.00 | 0.00 | |
| 8,500.00 | 0.00 | 0.00 | 7,772.73 | -2,193.59 | -2,254.96 | 3,145.90 | 0.00 | 0.00 | 0.00 | |
| 8,526.27 | 0.00 | 0.00 | 7,799.00 | -2,193.59 | -2,254.96 | 3,145.90 | 0.00 | 0.00 | 0.00 | |
| TD at 8526.27 - PBHL MOSER 34-4 (50' FSL 218' FWL) | | | | | | | | | | |

| Design Targets | | | | | | | | | | |
|--|---------------|--------------|----------|------------|------------|-----------------|----------------|-----------------|-------------------|--|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude | Longitude | |
| PBHL MOSER 34-4 (50' - plan hits target center - Circle (radius 50.00) | 0.00 | 0.00 | 7,799.00 | -2,193.59 | -2,254.96 | 1,302,442.17 | 3,229,887.70 | 40° 9' 38.419 N | 104° 40' 38.903 W | |

| Casing Points | | | | | | |
|---------------------|---------------------|--------|----------------------|--------------------|--|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Casing Diameter (in) | Hole Diameter (in) | | |
| 701.87 | 700.00 | 8 5/8" | 8.625 | 11.000 | | |

| Formations | | | | | | |
|---------------------|---------------------|-----------|-----------|---------|-------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 4,553.98 | 4,159.00 | PARKMAN | | | | |
| 4,952.65 | 4,511.00 | SUSSEX | | | | |
| 7,625.42 | 6,905.00 | NIO | | | | |
| 7,915.91 | 7,190.00 | CODELL | | | | |
| 8,003.61 | 7,277.00 | GREENHORN | | | | |
| 8,376.27 | 7,649.00 | JSAND | | | | |

| Plan Annotations | | | | | |
|---------------------|---------------------|-------------------|------------|----------------------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment | |
| | | +N/-S (ft) | +E/-W (ft) | | |
| 250.00 | 250.00 | 0.00 | 0.00 | Start Build 2.00 | |
| 1,650.00 | 1,594.94 | -233.82 | -240.36 | Start 5272.38 hold at 1650.00 MD | |
| 6,922.38 | 6,250.18 | -1,959.77 | -2,014.60 | Start Drop -2.00 | |
| 8,322.38 | 7,595.11 | -2,193.59 | -2,254.96 | Start 203.89 hold at 8322.38 MD | |
| 8,526.27 | 7,799.00 | -2,193.59 | -2,254.96 | TD at 8526.27 | |