

US ROCKIES WATTENBERG PLANNING

WELD-NAD83-UTMFT13N

3N-66W-23 FARLEY 34-23HZ PAD

FARLEY 23-2HZ

Plan A

Plan: Permit Rev-1

SHL Lat/Long: 40.205260/-104.752142

Survey Program: MWD+IFR

Standard Planning Report

02 October, 2018

Project: WELD-NAD83-UTMFT13N
Site: 3N-66W-23 FARLEY 34-23HZ PAD
Well: FARLEY 23-2HZ
Wellbore: Plan A
Design: Permit Rev-1

US ROCKIES WATTENBERG PLANNING

CASING DETAILS

| TVD | MD | Size |
|---------|---------|-------|
| 1500.00 | 1508.79 | 9-5/8 |
| 7179.00 | 7613.02 | 5-1/2 |

WELL DETAILS: FARLEY 23-2HZ

GL = 4939.00

RKB = 17' @ 4956.00usft (Drilling Rig)

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 | 250.00 | 0.00 | 0.00 | 250.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 3 | 783.33 | 8.00 | 337.95 | 781.60 | 34.45 | -13.96 | 1.50 | 337.95 | -34.61 | |
| 4 | 3103.33 | 8.00 | 337.95 | 3079.02 | 333.72 | -135.17 | 0.00 | 0.00 | -335.18 | |
| 5 | 3503.33 | 0.00 | 0.00 | 3477.72 | 359.56 | -145.64 | 2.00 | 180.00 | -361.14 | |
| 6 | 6488.41 | 0.00 | 0.00 | 6462.80 | 359.56 | -145.64 | 0.00 | 0.00 | -361.14 | |
| 7 | 7613.02 | 89.97 | 179.37 | 7179.00 | -356.21 | -137.74 | 8.00 | 179.37 | 354.67 | |
| 8 | 13142.91 | 89.97 | 179.37 | 7182.00 | -5885.76 | -76.72 | 0.00 | 0.00 | 5884.56 | FARLEY 23-2HZ_BHL |

WELLBORE TARGET DETAILS (LAT/LONG)

| Name | TVD | +N/-S | +E/-W | Latitude | Longitude |
|-------------------|---------|----------|--------|-----------|-------------|
| FARLEY 23-2HZ_SHL | 0.00 | 0.00 | 0.00 | 40.205260 | -104.752142 |
| FARLEY 23-2HZ_BHL | 7182.00 | -5885.76 | -76.72 | 40.189097 | -104.752417 |

FORMATION TOP DETAILS

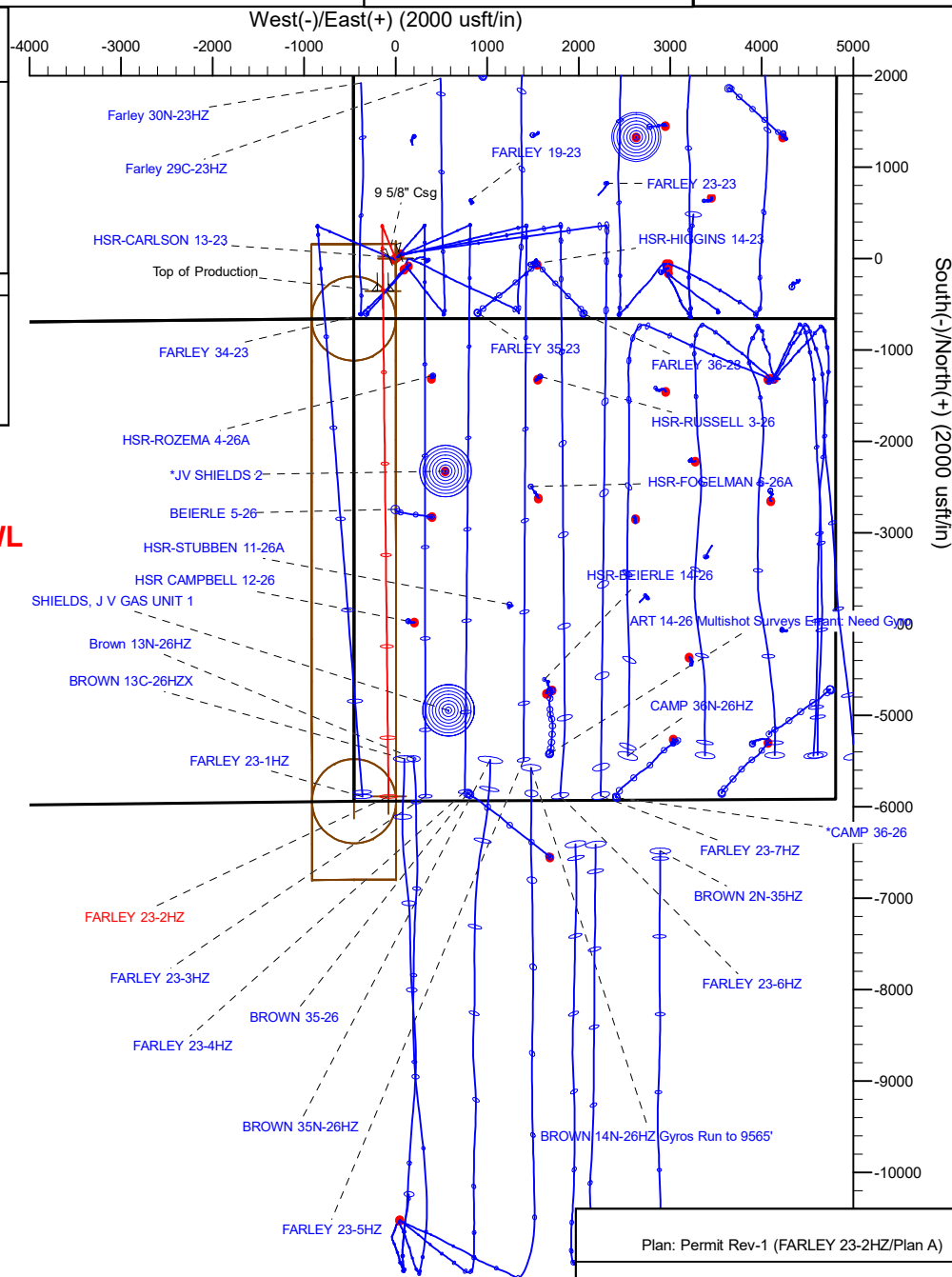
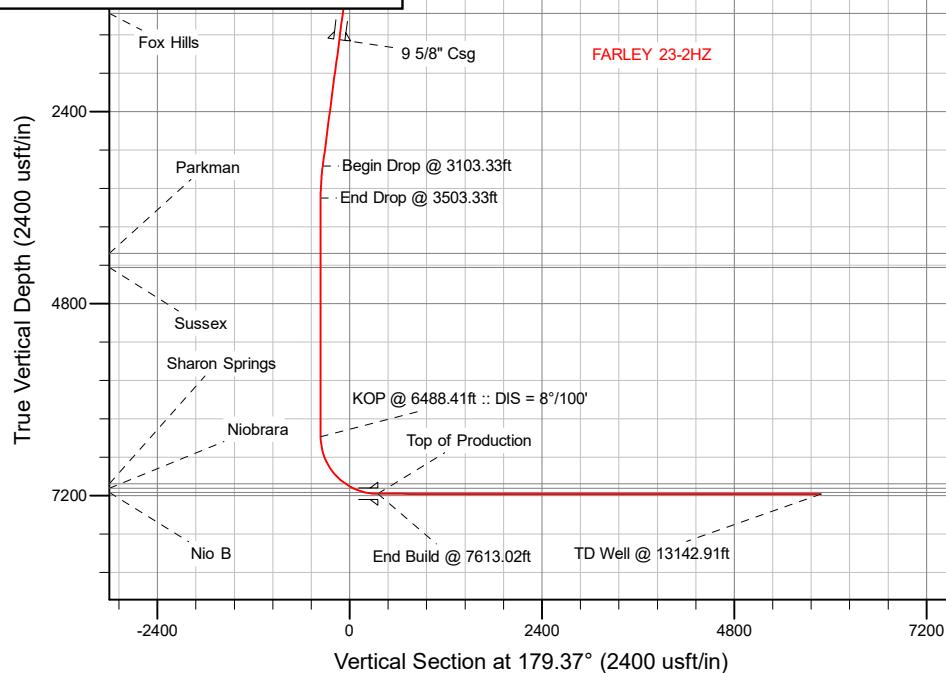
| TVDPath | MDPath | Formation |
|---------|---------|----------------|
| 1171.00 | 1176.56 | Fox Hills |
| 4171.00 | 4196.61 | Parkman |
| 4349.00 | 4374.61 | Sussex |
| 7054.00 | 7183.86 | Sharon Springs |
| 7111.00 | 7298.79 | Niobrara |
| 7161.00 | 7452.50 | Nio B |

SHL
656' FSL
459' FWL

HEEL
300' FSL
322' FWL

TOE
50' FSL
377' FWL

-- End Nudge @ 783.33ft



Plan: Permit Rev-1 (FARLEY 23-2HZ/Plan A)

Date: 10/02/2018

Corporate Planning Report

| | | | |
|------------------|--------------------------------|-------------------------------------|--|
| Database: | PLANNING | Local Co-ordinate Reference: | Well FARLEY 23-2HZ |
| Company: | US ROCKIES WATTENBERG PLANNING | TVD Reference: | RKB = 17' @ 4956.00usft (Drilling Rig) |
| Project: | WELD-NAD83-UTMFT13N | MD Reference: | RKB = 17' @ 4956.00usft (Drilling Rig) |
| Site: | 3N-66W-23 FARLEY 34-23HZ PAD | North Reference: | True |
| Well: | FARLEY 23-2HZ | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Plan A | | |
| Design: | Permit Rev-1 | | |

| | | | |
|--------------------|--|----------------------|----------------|
| Project | WELD-NAD83-UTMFT13N | | |
| Map System: | Universal Transverse Mercator (US Survey Feet) | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Zone 13N (108 W to 102 W) | | |

| | | | | | |
|-----------------------|-----------|------------------------------|--------------------|-------------------|-------------|
| Site | | 3N-66W-23 FARLEY 34-23HZ PAD | | | |
| Site Position: | | Northing: | 14,601,565.02 usft | Latitude: | 40.205233 |
| From: | Lat/Long | Easting: | 1,709,610.42 usft | Longitude: | -104.752181 |
| Position Uncertainty: | 0.00 usft | Slot Radius: | 13-3/16 " | Grid Convergence: | 0.16 ° |

| Well | FARLEY 23-2HZ | | | | | |
|----------------------|---------------|------------|---------------------|--------------------|---------------|---------------|
| Well Position | +N/-S | 9.83 usft | Northing: | 14,601,574.89 usft | Latitude: | 40.205260 |
| | +E/-W | 10.89 usft | Easting: | 1,709,621.29 usft | Longitude: | -104.752142 |
| Position Uncertainty | | 3.28 usft | Wellhead Elevation: | | Ground Level: | 4,939.00 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Plan A | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2015 | 9/25/2018 | 8.05 | 66.67 | 52,146.31023153 |

| | | | | | |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|------|
| Design | Permit Rev-1 | | | | |
| Audit Notes: | | | | | |
| Version: | | Phase: | PLAN | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) | |
| | 0.00 | 0.00 | 0.00 | 179.37 | |

| | | | | | |
|---------------------------------|------------------------|--------------------------|-----------------------|--|--|
| Plan Survey Tool Program | Date | 10/2/2018 | | | |
| Depth From (usft) | Depth To (usft) | Survey (Wellbore) | Tool Name | Remarks | |
| 1 | 0.00 | 1,500.00 | Permit Rev-1 (Plan A) | APC_ISCWSA REV 2 MWD+II Fixed:v2:crustal field declinatio | |
| 2 | 1,500.00 | 13,142.91 | Permit Rev-1 (Plan A) | APC_ISCWSA REV 2 MWD+II Fixed:v2:crustal field declinatio | |

Corporate
Planning Report

| | | | |
|-----------|--------------------------------|------------------------------|--|
| Database: | PLANNING | Local Co-ordinate Reference: | Well FARLEY 23-2HZ |
| Company: | US ROCKIES WATTENBERG PLANNING | TVD Reference: | RKB = 17' @ 4956.00usft (Drilling Rig) |
| Project: | WELD-NAD83-UTMFT13N | MD Reference: | RKB = 17' @ 4956.00usft (Drilling Rig) |
| Site: | 3N-66W-23 FARLEY 34-23HZ PAD | North Reference: | True |
| Well: | FARLEY 23-2HZ | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Plan A | | |
| Design: | Permit Rev-1 | | |

| Plan Sections | | | | | | | | | | |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|------------------------------|-----------------------------|------------|-------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 250.00 | 0.00 | 0.00 | 250.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 783.33 | 8.00 | 337.95 | 781.60 | 34.45 | -13.96 | 1.50 | 1.50 | 0.00 | 337.95 | |
| 3,103.33 | 8.00 | 337.95 | 3,079.02 | 333.72 | -135.17 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 3,503.33 | 0.00 | 0.00 | 3,477.72 | 359.56 | -145.64 | 2.00 | -2.00 | 0.00 | 180.00 | |
| 6,488.41 | 0.00 | 0.00 | 6,462.80 | 359.56 | -145.64 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7,613.02 | 89.97 | 179.37 | 7,179.00 | -356.21 | -137.74 | 8.00 | 8.00 | 15.95 | 179.37 | |
| 13,142.91 | 89.97 | 179.37 | 7,182.00 | -5,885.76 | -76.72 | 0.00 | 0.00 | 0.00 | 0.00 | FARLEY 23-2HZ_BHI |

Corporate Planning Report

| | | | |
|------------------|--------------------------------|-------------------------------------|--|
| Database: | PLANNING | Local Co-ordinate Reference: | Well FARLEY 23-2HZ |
| Company: | US ROCKIES WATTENBERG PLANNING | TVD Reference: | RKB = 17' @ 4956.00usft (Drilling Rig) |
| Project: | WELD-NAD83-UTMFT13N | MD Reference: | RKB = 17' @ 4956.00usft (Drilling Rig) |
| Site: | 3N-66W-23 FARLEY 34-23HZ PAD | North Reference: | True |
| Well: | FARLEY 23-2HZ | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Plan A | | |
| Design: | Permit Rev-1 | | |

| Planned Survey | | | | | | | | | |
|------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 100.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 200.00 | 0.00 | 0.00 | 200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 250.00 | 0.00 | 0.00 | 250.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Begin Nudge @ 250.00ft | | | | | | | | | |
| 300.00 | 0.75 | 337.95 | 300.00 | 0.30 | -0.12 | -0.30 | 1.50 | 1.50 | 0.00 |
| 400.00 | 2.25 | 337.95 | 399.96 | 2.73 | -1.11 | -2.74 | 1.50 | 1.50 | 0.00 |
| 500.00 | 3.75 | 337.95 | 499.82 | 7.58 | -3.07 | -7.61 | 1.50 | 1.50 | 0.00 |
| 600.00 | 5.25 | 337.95 | 599.51 | 14.85 | -6.02 | -14.92 | 1.50 | 1.50 | 0.00 |
| 700.00 | 6.75 | 337.95 | 698.96 | 24.54 | -9.94 | -24.65 | 1.50 | 1.50 | 0.00 |
| 783.33 | 8.00 | 337.95 | 781.60 | 34.45 | -13.96 | -34.61 | 1.50 | 1.50 | 0.00 |
| End Nudge @ 783.33ft | | | | | | | | | |
| 800.00 | 8.00 | 337.95 | 798.11 | 36.60 | -14.83 | -36.76 | 0.00 | 0.00 | 0.00 |
| 900.00 | 8.00 | 337.95 | 897.13 | 49.50 | -20.05 | -49.72 | 0.00 | 0.00 | 0.00 |
| 1,000.00 | 8.00 | 337.95 | 996.16 | 62.40 | -25.28 | -62.68 | 0.00 | 0.00 | 0.00 |
| 1,100.00 | 8.00 | 337.95 | 1,095.19 | 75.30 | -30.50 | -75.63 | 0.00 | 0.00 | 0.00 |
| 1,176.56 | 8.00 | 337.95 | 1,171.00 | 85.18 | -34.50 | -85.55 | 0.00 | 0.00 | 0.00 |
| Fox Hills | | | | | | | | | |
| 1,200.00 | 8.00 | 337.95 | 1,194.21 | 88.20 | -35.73 | -88.59 | 0.00 | 0.00 | 0.00 |
| 1,300.00 | 8.00 | 337.95 | 1,293.24 | 101.10 | -40.95 | -101.55 | 0.00 | 0.00 | 0.00 |
| 1,400.00 | 8.00 | 337.95 | 1,392.27 | 114.00 | -46.17 | -114.50 | 0.00 | 0.00 | 0.00 |
| 1,500.00 | 8.00 | 337.95 | 1,491.29 | 126.90 | -51.40 | -127.46 | 0.00 | 0.00 | 0.00 |
| 1,508.79 | 8.00 | 337.95 | 1,500.00 | 128.03 | -51.86 | -128.60 | 0.00 | 0.00 | 0.00 |
| 9 5/8" Csg | | | | | | | | | |
| 1,600.00 | 8.00 | 337.95 | 1,590.32 | 139.80 | -56.62 | -140.41 | 0.00 | 0.00 | 0.00 |
| 1,700.00 | 8.00 | 337.95 | 1,689.35 | 152.70 | -61.85 | -153.37 | 0.00 | 0.00 | 0.00 |
| 1,800.00 | 8.00 | 337.95 | 1,788.37 | 165.60 | -67.07 | -166.33 | 0.00 | 0.00 | 0.00 |
| 1,900.00 | 8.00 | 337.95 | 1,887.40 | 178.50 | -72.30 | -179.28 | 0.00 | 0.00 | 0.00 |
| 2,000.00 | 8.00 | 337.95 | 1,986.43 | 191.40 | -77.52 | -192.24 | 0.00 | 0.00 | 0.00 |
| 2,100.00 | 8.00 | 337.95 | 2,085.46 | 204.30 | -82.75 | -205.19 | 0.00 | 0.00 | 0.00 |
| 2,200.00 | 8.00 | 337.95 | 2,184.48 | 217.20 | -87.97 | -218.15 | 0.00 | 0.00 | 0.00 |
| 2,300.00 | 8.00 | 337.95 | 2,283.51 | 230.09 | -93.20 | -231.11 | 0.00 | 0.00 | 0.00 |
| 2,400.00 | 8.00 | 337.95 | 2,382.54 | 242.99 | -98.42 | -244.06 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 8.00 | 337.95 | 2,481.56 | 255.89 | -103.65 | -257.02 | 0.00 | 0.00 | 0.00 |
| 2,600.00 | 8.00 | 337.95 | 2,580.59 | 268.79 | -108.87 | -269.97 | 0.00 | 0.00 | 0.00 |
| 2,700.00 | 8.00 | 337.95 | 2,679.62 | 281.69 | -114.10 | -282.93 | 0.00 | 0.00 | 0.00 |
| 2,800.00 | 8.00 | 337.95 | 2,778.64 | 294.59 | -119.32 | -295.89 | 0.00 | 0.00 | 0.00 |
| 2,900.00 | 8.00 | 337.95 | 2,877.67 | 307.49 | -124.55 | -308.84 | 0.00 | 0.00 | 0.00 |
| 3,000.00 | 8.00 | 337.95 | 2,976.70 | 320.39 | -129.77 | -321.80 | 0.00 | 0.00 | 0.00 |
| 3,100.00 | 8.00 | 337.95 | 3,075.72 | 333.29 | -135.00 | -334.75 | 0.00 | 0.00 | 0.00 |
| 3,103.33 | 8.00 | 337.95 | 3,079.02 | 333.72 | -135.17 | -335.18 | 0.00 | 0.00 | 0.00 |
| Begin Drop @ 3103.33ft | | | | | | | | | |
| 3,200.00 | 6.07 | 337.95 | 3,174.96 | 344.69 | -139.61 | -346.20 | 2.00 | -2.00 | 0.00 |
| 3,300.00 | 4.07 | 337.95 | 3,274.56 | 352.87 | -142.93 | -354.42 | 2.00 | -2.00 | 0.00 |
| 3,400.00 | 2.07 | 337.95 | 3,374.41 | 357.83 | -144.94 | -359.40 | 2.00 | -2.00 | 0.00 |
| 3,500.00 | 0.07 | 337.95 | 3,474.39 | 359.56 | -145.64 | -361.14 | 2.00 | -2.00 | 0.00 |
| 3,503.33 | 0.00 | 0.00 | 3,477.72 | 359.56 | -145.64 | -361.14 | 2.00 | -2.00 | 0.00 |
| End Drop @ 3503.33ft | | | | | | | | | |
| 3,600.00 | 0.00 | 0.00 | 3,574.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 3,700.00 | 0.00 | 0.00 | 3,674.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 3,800.00 | 0.00 | 0.00 | 3,774.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 0.00 | 0.00 | 3,874.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 4,000.00 | 0.00 | 0.00 | 3,974.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |

Corporate Planning Report

| | | | |
|------------------|--------------------------------|-------------------------------------|--|
| Database: | PLANNING | Local Co-ordinate Reference: | Well FARLEY 23-2HZ |
| Company: | US ROCKIES WATTENBERG PLANNING | TVD Reference: | RKB = 17' @ 4956.00usft (Drilling Rig) |
| Project: | WELD-NAD83-UTMFT13N | MD Reference: | RKB = 17' @ 4956.00usft (Drilling Rig) |
| Site: | 3N-66W-23 FARLEY 34-23HZ PAD | North Reference: | True |
| Well: | FARLEY 23-2HZ | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Plan A | | |
| Design: | Permit Rev-1 | | |

| Planned Survey | | | | | | | | | |
|--|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 4,100.00 | 0.00 | 0.00 | 4,074.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 4,196.61 | 0.00 | 0.00 | 4,171.00 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| Parkman | | | | | | | | | |
| 4,200.00 | 0.00 | 0.00 | 4,174.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 0.00 | 0.00 | 4,274.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 4,374.61 | 0.00 | 0.00 | 4,349.00 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| Sussex | | | | | | | | | |
| 4,400.00 | 0.00 | 0.00 | 4,374.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 0.00 | 0.00 | 4,474.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 4,600.00 | 0.00 | 0.00 | 4,574.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 4,700.00 | 0.00 | 0.00 | 4,674.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 4,800.00 | 0.00 | 0.00 | 4,774.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 4,900.00 | 0.00 | 0.00 | 4,874.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 5,000.00 | 0.00 | 0.00 | 4,974.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 5,100.00 | 0.00 | 0.00 | 5,074.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 5,200.00 | 0.00 | 0.00 | 5,174.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 5,300.00 | 0.00 | 0.00 | 5,274.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 5,400.00 | 0.00 | 0.00 | 5,374.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 5,500.00 | 0.00 | 0.00 | 5,474.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 5,600.00 | 0.00 | 0.00 | 5,574.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 5,700.00 | 0.00 | 0.00 | 5,674.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 5,800.00 | 0.00 | 0.00 | 5,774.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 5,900.00 | 0.00 | 0.00 | 5,874.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 6,000.00 | 0.00 | 0.00 | 5,974.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 6,100.00 | 0.00 | 0.00 | 6,074.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 6,200.00 | 0.00 | 0.00 | 6,174.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 6,300.00 | 0.00 | 0.00 | 6,274.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 6,400.00 | 0.00 | 0.00 | 6,374.39 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| 6,488.41 | 0.00 | 0.00 | 6,462.80 | 359.56 | -145.64 | -361.14 | 0.00 | 0.00 | 0.00 |
| KOP @ 6488.41ft :: DIS = 8°/100' | | | | | | | | | |
| 6,500.00 | 0.93 | 179.37 | 6,474.39 | 359.47 | -145.64 | -361.05 | 8.00 | 8.00 | 0.00 |
| 6,600.00 | 8.93 | 179.37 | 6,573.94 | 350.88 | -145.54 | -352.46 | 8.00 | 8.00 | 0.00 |
| 6,700.00 | 16.93 | 179.37 | 6,671.33 | 328.53 | -145.29 | -330.11 | 8.00 | 8.00 | 0.00 |
| 6,800.00 | 24.93 | 179.37 | 6,764.66 | 292.85 | -144.90 | -294.42 | 8.00 | 8.00 | 0.00 |
| 6,900.00 | 32.93 | 179.37 | 6,852.11 | 244.52 | -144.37 | -246.09 | 8.00 | 8.00 | 0.00 |
| 7,000.00 | 40.93 | 179.37 | 6,931.98 | 184.49 | -143.70 | -186.06 | 8.00 | 8.00 | 0.00 |
| 7,100.00 | 48.93 | 179.37 | 7,002.73 | 113.93 | -142.93 | -115.50 | 8.00 | 8.00 | 0.00 |
| 7,183.86 | 55.64 | 179.37 | 7,054.00 | 47.64 | -142.19 | -49.20 | 8.00 | 8.00 | 0.00 |
| Sharon Springs | | | | | | | | | |
| 7,200.00 | 56.93 | 179.37 | 7,062.96 | 34.21 | -142.05 | -35.77 | 8.00 | 8.00 | 0.00 |
| 7,298.79 | 64.83 | 179.37 | 7,111.00 | -52.02 | -141.09 | 50.46 | 8.00 | 8.00 | 0.00 |
| Niobrara | | | | | | | | | |
| 7,300.00 | 64.93 | 179.37 | 7,111.51 | -53.11 | -141.08 | 51.56 | 8.00 | 8.00 | 0.00 |
| 7,400.00 | 72.93 | 179.37 | 7,147.44 | -146.34 | -140.05 | 144.79 | 8.00 | 8.00 | 0.00 |
| 7,452.50 | 77.13 | 179.37 | 7,161.00 | -197.05 | -139.49 | 195.50 | 8.00 | 8.00 | 0.00 |
| Nio B | | | | | | | | | |
| 7,500.00 | 80.93 | 179.37 | 7,170.04 | -243.66 | -138.98 | 242.12 | 8.00 | 8.00 | 0.00 |
| 7,600.00 | 88.93 | 179.37 | 7,178.87 | -343.19 | -137.88 | 341.65 | 8.00 | 8.00 | 0.00 |
| 7,613.02 | 89.97 | 179.37 | 7,179.00 | -356.20 | -137.74 | 354.67 | 8.00 | 8.00 | 0.00 |
| End Build @ 7613.02ft - Top of Production | | | | | | | | | |
| 7,700.00 | 89.97 | 179.37 | 7,179.05 | -443.18 | -136.78 | 441.65 | 0.00 | 0.00 | 0.00 |
| 7,800.00 | 89.97 | 179.37 | 7,179.10 | -543.17 | -135.67 | 541.65 | 0.00 | 0.00 | 0.00 |
| 7,900.00 | 89.97 | 179.37 | 7,179.16 | -643.17 | -134.57 | 641.65 | 0.00 | 0.00 | 0.00 |

Corporate Planning Report

| | | | |
|------------------|--------------------------------|-------------------------------------|--|
| Database: | PLANNING | Local Co-ordinate Reference: | Well FARLEY 23-2HZ |
| Company: | US ROCKIES WATTENBERG PLANNING | TVD Reference: | RKB = 17' @ 4956.00usft (Drilling Rig) |
| Project: | WELD-NAD83-UTMFT13N | MD Reference: | RKB = 17' @ 4956.00usft (Drilling Rig) |
| Site: | 3N-66W-23 FARLEY 34-23HZ PAD | North Reference: | True |
| Well: | FARLEY 23-2HZ | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Plan A | | |
| Design: | Permit Rev-1 | | |

| Planned Survey | | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | |
| 8,000.00 | 89.97 | 179.37 | 7,179.21 | -743.16 | -133.47 | 741.65 | 0.00 | 0.00 | 0.00 | |
| 8,100.00 | 89.97 | 179.37 | 7,179.26 | -843.15 | -132.36 | 841.65 | 0.00 | 0.00 | 0.00 | |
| 8,200.00 | 89.97 | 179.37 | 7,179.32 | -943.15 | -131.26 | 941.65 | 0.00 | 0.00 | 0.00 | |
| 8,300.00 | 89.97 | 179.37 | 7,179.37 | -1,043.14 | -130.16 | 1,041.65 | 0.00 | 0.00 | 0.00 | |
| 8,400.00 | 89.97 | 179.37 | 7,179.43 | -1,143.14 | -129.05 | 1,141.65 | 0.00 | 0.00 | 0.00 | |
| 8,500.00 | 89.97 | 179.37 | 7,179.48 | -1,243.13 | -127.95 | 1,241.65 | 0.00 | 0.00 | 0.00 | |
| 8,600.00 | 89.97 | 179.37 | 7,179.54 | -1,343.12 | -126.85 | 1,341.65 | 0.00 | 0.00 | 0.00 | |
| 8,700.00 | 89.97 | 179.37 | 7,179.59 | -1,443.12 | -125.74 | 1,441.65 | 0.00 | 0.00 | 0.00 | |
| 8,800.00 | 89.97 | 179.37 | 7,179.64 | -1,543.11 | -124.64 | 1,541.65 | 0.00 | 0.00 | 0.00 | |
| 8,900.00 | 89.97 | 179.37 | 7,179.70 | -1,643.11 | -123.54 | 1,641.65 | 0.00 | 0.00 | 0.00 | |
| 9,000.00 | 89.97 | 179.37 | 7,179.75 | -1,743.10 | -122.43 | 1,741.65 | 0.00 | 0.00 | 0.00 | |
| 9,100.00 | 89.97 | 179.37 | 7,179.81 | -1,843.09 | -121.33 | 1,841.65 | 0.00 | 0.00 | 0.00 | |
| 9,200.00 | 89.97 | 179.37 | 7,179.86 | -1,943.09 | -120.23 | 1,941.65 | 0.00 | 0.00 | 0.00 | |
| 9,300.00 | 89.97 | 179.37 | 7,179.91 | -2,043.08 | -119.12 | 2,041.65 | 0.00 | 0.00 | 0.00 | |
| 9,400.00 | 89.97 | 179.37 | 7,179.97 | -2,143.08 | -118.02 | 2,141.65 | 0.00 | 0.00 | 0.00 | |
| 9,500.00 | 89.97 | 179.37 | 7,180.02 | -2,243.07 | -116.92 | 2,241.65 | 0.00 | 0.00 | 0.00 | |
| 9,600.00 | 89.97 | 179.37 | 7,180.08 | -2,343.06 | -115.81 | 2,341.65 | 0.00 | 0.00 | 0.00 | |
| 9,700.00 | 89.97 | 179.37 | 7,180.13 | -2,443.06 | -114.71 | 2,441.65 | 0.00 | 0.00 | 0.00 | |
| 9,800.00 | 89.97 | 179.37 | 7,180.19 | -2,543.05 | -113.61 | 2,541.65 | 0.00 | 0.00 | 0.00 | |
| 9,900.00 | 89.97 | 179.37 | 7,180.24 | -2,643.04 | -112.50 | 2,641.65 | 0.00 | 0.00 | 0.00 | |
| 10,000.00 | 89.97 | 179.37 | 7,180.29 | -2,743.04 | -111.40 | 2,741.65 | 0.00 | 0.00 | 0.00 | |
| 10,100.00 | 89.97 | 179.37 | 7,180.35 | -2,843.03 | -110.30 | 2,841.65 | 0.00 | 0.00 | 0.00 | |
| 10,200.00 | 89.97 | 179.37 | 7,180.40 | -2,943.03 | -109.19 | 2,941.65 | 0.00 | 0.00 | 0.00 | |
| 10,300.00 | 89.97 | 179.37 | 7,180.46 | -3,043.02 | -108.09 | 3,041.65 | 0.00 | 0.00 | 0.00 | |
| 10,400.00 | 89.97 | 179.37 | 7,180.51 | -3,143.01 | -106.99 | 3,141.65 | 0.00 | 0.00 | 0.00 | |
| 10,500.00 | 89.97 | 179.37 | 7,180.57 | -3,243.01 | -105.88 | 3,241.65 | 0.00 | 0.00 | 0.00 | |
| 10,600.00 | 89.97 | 179.37 | 7,180.62 | -3,343.00 | -104.78 | 3,341.65 | 0.00 | 0.00 | 0.00 | |
| 10,700.00 | 89.97 | 179.37 | 7,180.67 | -3,443.00 | -103.68 | 3,441.65 | 0.00 | 0.00 | 0.00 | |
| 10,800.00 | 89.97 | 179.37 | 7,180.73 | -3,542.99 | -102.57 | 3,541.65 | 0.00 | 0.00 | 0.00 | |
| 10,900.00 | 89.97 | 179.37 | 7,180.78 | -3,642.98 | -101.47 | 3,641.65 | 0.00 | 0.00 | 0.00 | |
| 11,000.00 | 89.97 | 179.37 | 7,180.84 | -3,742.98 | -100.37 | 3,741.65 | 0.00 | 0.00 | 0.00 | |
| 11,100.00 | 89.97 | 179.37 | 7,180.89 | -3,842.97 | -99.26 | 3,841.65 | 0.00 | 0.00 | 0.00 | |
| 11,200.00 | 89.97 | 179.37 | 7,180.95 | -3,942.97 | -98.16 | 3,941.65 | 0.00 | 0.00 | 0.00 | |
| 11,300.00 | 89.97 | 179.37 | 7,181.00 | -4,042.96 | -97.06 | 4,041.65 | 0.00 | 0.00 | 0.00 | |
| 11,400.00 | 89.97 | 179.37 | 7,181.05 | -4,142.95 | -95.95 | 4,141.65 | 0.00 | 0.00 | 0.00 | |
| 11,500.00 | 89.97 | 179.37 | 7,181.11 | -4,242.95 | -94.85 | 4,241.65 | 0.00 | 0.00 | 0.00 | |
| 11,600.00 | 89.97 | 179.37 | 7,181.16 | -4,342.94 | -93.74 | 4,341.65 | 0.00 | 0.00 | 0.00 | |
| 11,700.00 | 89.97 | 179.37 | 7,181.22 | -4,442.93 | -92.64 | 4,441.65 | 0.00 | 0.00 | 0.00 | |
| 11,800.00 | 89.97 | 179.37 | 7,181.27 | -4,542.93 | -91.54 | 4,541.65 | 0.00 | 0.00 | 0.00 | |
| 11,900.00 | 89.97 | 179.37 | 7,181.33 | -4,642.92 | -90.43 | 4,641.65 | 0.00 | 0.00 | 0.00 | |
| 12,000.00 | 89.97 | 179.37 | 7,181.38 | -4,742.92 | -89.33 | 4,741.65 | 0.00 | 0.00 | 0.00 | |
| 12,100.00 | 89.97 | 179.37 | 7,181.43 | -4,842.91 | -88.23 | 4,841.65 | 0.00 | 0.00 | 0.00 | |
| 12,200.00 | 89.97 | 179.37 | 7,181.49 | -4,942.90 | -87.12 | 4,941.65 | 0.00 | 0.00 | 0.00 | |
| 12,300.00 | 89.97 | 179.37 | 7,181.54 | -5,042.90 | -86.02 | 5,041.65 | 0.00 | 0.00 | 0.00 | |
| 12,400.00 | 89.97 | 179.37 | 7,181.60 | -5,142.89 | -84.92 | 5,141.65 | 0.00 | 0.00 | 0.00 | |
| 12,500.00 | 89.97 | 179.37 | 7,181.65 | -5,242.89 | -83.81 | 5,241.65 | 0.00 | 0.00 | 0.00 | |
| 12,600.00 | 89.97 | 179.37 | 7,181.71 | -5,342.88 | -82.71 | 5,341.65 | 0.00 | 0.00 | 0.00 | |
| 12,700.00 | 89.97 | 179.37 | 7,181.76 | -5,442.87 | -81.61 | 5,441.65 | 0.00 | 0.00 | 0.00 | |
| 12,800.00 | 89.97 | 179.37 | 7,181.81 | -5,542.87 | -80.50 | 5,541.65 | 0.00 | 0.00 | 0.00 | |
| 12,900.00 | 89.97 | 179.37 | 7,181.87 | -5,642.86 | -79.40 | 5,641.65 | 0.00 | 0.00 | 0.00 | |
| 13,000.00 | 89.97 | 179.37 | 7,181.92 | -5,742.86 | -78.30 | 5,741.65 | 0.00 | 0.00 | 0.00 | |
| 13,100.00 | 89.97 | 179.37 | 7,181.98 | -5,842.85 | -77.19 | 5,841.65 | 0.00 | 0.00 | 0.00 | |
| 13,142.91 | 89.97 | 179.37 | 7,182.00 | -5,885.76 | -76.72 | 5,884.56 | 0.00 | 0.00 | 0.00 | |

Corporate Planning Report

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|------------------|--------------------------------|-------------------------------------|--|
| Database: | PLANNING | Local Co-ordinate Reference: | Well FARLEY 23-2HZ |
| Company: | US ROCKIES WATTENBERG PLANNING | TVD Reference: | RKB = 17' @ 4956.00usft (Drilling Rig) |
| Project: | WELD-NAD83-UTMFT13N | MD Reference: | RKB = 17' @ 4956.00usft (Drilling Rig) |
| Site: | 3N-66W-23 FARLEY 34-23HZ PAD | North Reference: | True |
| Well: | FARLEY 23-2HZ | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Plan A | | |
| Design: | Permit Rev-1 | | |

| Planned Survey | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| TD Well @ 13142.91ft | | | | | | | | | |

| Casing Points | | | | | |
|-----------------------|-----------------------|-------------------|---------------------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name | Casing Diameter (") | Hole Diameter (") | |
| 1,508.79 | 1,500.00 | 9 5/8" Csg | 9-5/8 | 13-1/2 | |
| 7,613.02 | 7,179.00 | Top of Production | 5-1/2 | 7-7/8 | |

| Formations | | | | | | |
|-----------------------|-----------------------|----------------|-----------|---------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 1,176.56 | 1,171.00 | Fox Hills | | | | |
| 4,196.61 | 4,171.00 | Parkman | | | | |
| 4,374.61 | 4,349.00 | Sussex | | | | |
| 7,183.86 | 7,054.00 | Sharon Springs | | | | |
| 7,298.79 | 7,111.00 | Niobrara | | | | |
| 7,452.50 | 7,161.00 | Nio B | | | | |

| Plan Annotations | | | | | |
|-----------------------|-----------------------|-------------------|--------------|----------------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | | |
| | | +N/-S (usft) | +E/-W (usft) | Comment | |
| 250.00 | 250.00 | 0.00 | 0.00 | Begin Nudge @ 250.00ft | |
| 783.33 | 781.60 | 34.45 | -13.96 | End Nudge @ 783.33ft | |
| 3,103.33 | 3,079.02 | 333.72 | -135.17 | Begin Drop @ 3103.33ft | |
| 3,503.33 | 3,477.72 | 359.56 | -145.64 | End Drop @ 3503.33ft | |
| 6,488.41 | 6,462.80 | 359.56 | -145.64 | KOP @ 6488.41ft :: DIS = 8°/100' | |
| 7,613.02 | 7,179.00 | -356.21 | -137.74 | End Build @ 7613.02ft | |
| 13,142.91 | 7,182.00 | -5,885.76 | -76.72 | TD Well @ 13142.91ft | |