

US ROCKIES WATTENBERG PLANNING

WELD-NAD83-UTMFT13N

Milk 4-21HZ Pad

MILK 36N-28HZ

Plan A

Plan: Rev A0 Permit

Sperry Drilling Services

Proposal Report

13 October, 2014

Well Coordinates: 14,601,551.57 N, 1,732,257.30 E (40° 12' 17.98" N, 104° 40' 15.86" W)

Ground Level: 4,837.00 usft

| | |
|--------------------------|---|
| Local Coordinate Origin: | Centered on Well MILK 36N-28HZ |
| Viewing Datum: | RKB = 17' @ 4854.00usft (D Rig) |
| TVDs to System: | N |
| North Reference: | True |
| Unit System: | Dec-Deg - API - US Survey Feet - Custom |

Version: 5000.1 Build: 70

HALLIBURTON

Project: WELD-NAD83-UTMFT13N
 Site: Milk 4-21HZ Pad
 Well: MILK 36N-28HZ
 Wellbore: Plan A
 Design: Rev A0 Permit

US ROCKIES WATTENBERG PLANNING

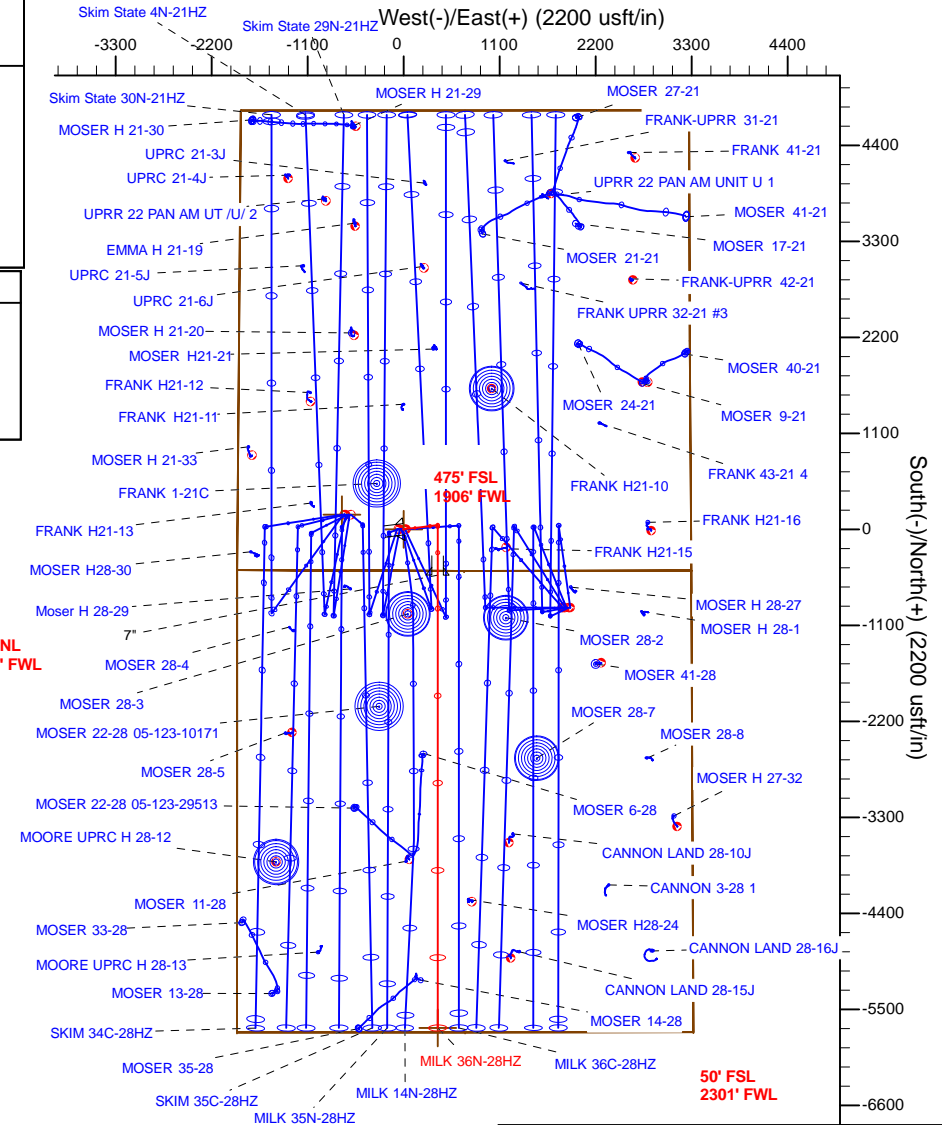
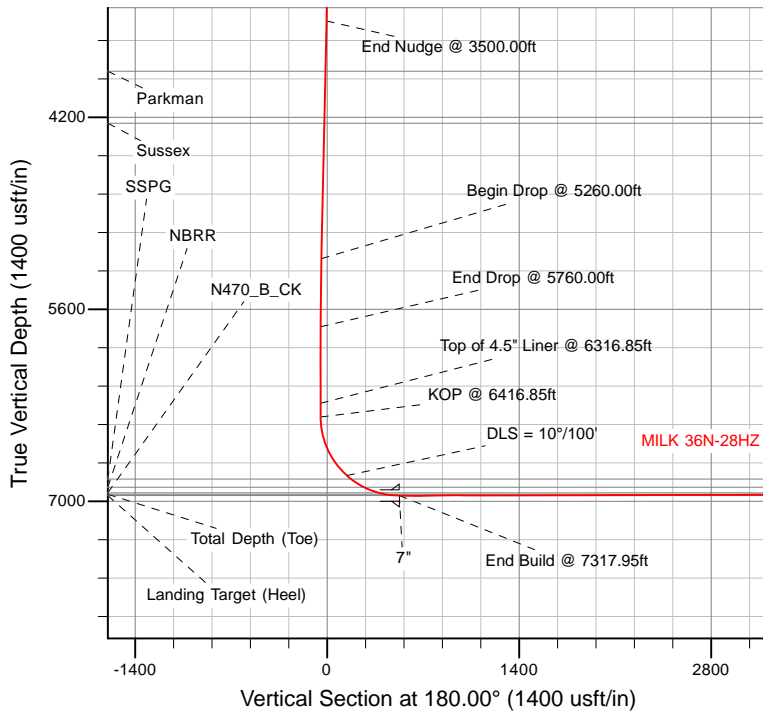


SECTION DETAILS

| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | VSec | Target |
|-----|----------|-------|--------|---------|----------|--------|-------|---------|---------|-------------------|
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2 | 3000.00 | 0.00 | 0.00 | 3000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 3 | 3500.00 | 10.00 | 83.00 | 3497.47 | 5.30 | 43.20 | 2.00 | 83.00 | -5.30 | |
| 4 | 5260.00 | 10.00 | 83.00 | 5230.73 | 42.55 | 346.54 | 0.00 | 0.00 | -42.55 | |
| 5 | 5760.00 | 0.00 | 0.00 | 5728.19 | 47.85 | 389.74 | 2.00 | -180.00 | -47.85 | |
| 6 | 6416.85 | 0.00 | 0.00 | 6385.04 | 47.85 | 389.74 | 0.00 | 0.00 | -47.85 | |
| 7 | 7317.95 | 90.11 | 180.00 | 6958.00 | -526.21 | 389.72 | 10.00 | 180.00 | 526.21 | |
| 8 | 12505.73 | 90.11 | 180.00 | 6948.00 | -5713.97 | 389.59 | 0.00 | 0.00 | 5713.97 | MILK 36N-28HZ_Bhl |

WELLBORE TARGET DETAILS (LAT/LONG)

| Name | TVD | +N/-S | +E/-W | Latitude | Longitude | Polygon |
|-------------------------|---------|----------|--------|-----------|-------------|-------------|
| Sec. 28 and 21-T3N-R65W | -- | -10.00 | 166.79 | -708.36 | 40.205452 | -104.673609 |
| MILK 36N-28HZ_SHL | | 0.00 | 0.00 | 0.00 | 40.204994 | -104.671072 |
| MILK 36N-28HZ_Bhl | 6948.00 | -5713.97 | 389.59 | 40.189303 | -104.669677 | |



| WELL DETAILS: MILK 36N-28HZ | |
|--|------------------|
| TVD | MD |
| 6285.04 | 6316.85 |
| 6385.04 | 6416.85 |
| Top of 4.5" Liner @ 6316.85ft | |
| KOP @ 6416.85ft | |
| Ground Level: 4837.00 | |
| RKB = 17' @ 4854.00usft (D Rig) | |
| Plan: Rev A0 Permit (MILK 36N-28HZ/Plan A) | |
| Created By: Clint Eshelman | Date: 10/13/2014 |
| Reviewed: _____ | Date: _____ |



Plan Report for MILK 36N-28HZ - Rev A0 Permit

| 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) | Toolface Azimuth (°) |
|--|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|----------------------|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MILK 36N-28HZ_SHL - Sec. 28 and 21-T3N-R65W | | | | | | | | | | |
| 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 |
| 300.00 | 0.00 | 0.00 | 300.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 400.00 | 0.00 | 0.00 | 400.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 500.00 | 0.00 | 0.00 | 500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 600.00 | 0.00 | 0.00 | 600.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 700.00 | 0.00 | 0.00 | 700.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 800.00 | 0.00 | 0.00 | 800.00 | 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 | 0.00 |
| 1,000.00 | 0.00 | 0.00 | 1,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,100.00 | 0.00 | 0.00 | 1,100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,126.00 | 0.00 | 0.00 | 1,126.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9 5/8" | | | | | | | | | | |
| 1,200.00 | 0.00 | 0.00 | 1,200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,300.00 | 0.00 | 0.00 | 1,300.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,400.00 | 0.00 | 0.00 | 1,400.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,500.00 | 0.00 | 0.00 | 1,500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,600.00 | 0.00 | 0.00 | 1,600.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,700.00 | 0.00 | 0.00 | 1,700.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,800.00 | 0.00 | 0.00 | 1,800.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,900.00 | 0.00 | 0.00 | 1,900.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,000.00 | 0.00 | 0.00 | 2,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,100.00 | 0.00 | 0.00 | 2,100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,200.00 | 0.00 | 0.00 | 2,200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,300.00 | 0.00 | 0.00 | 2,300.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,400.00 | 0.00 | 0.00 | 2,400.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 0.00 | 0.00 | 2,500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,600.00 | 0.00 | 0.00 | 2,600.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,700.00 | 0.00 | 0.00 | 2,700.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,800.00 | 0.00 | 0.00 | 2,800.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,900.00 | 0.00 | 0.00 | 2,900.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,000.00 | 0.00 | 0.00 | 3,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Begin Nudge @ 3000.00ft | | | | | | | | | | |
| 3,100.00 | 2.00 | 83.00 | 3,099.98 | 0.21 | 1.73 | -0.21 | 2.00 | 2.00 | 0.00 | 83.00 |
| 3,200.00 | 4.00 | 83.00 | 3,199.84 | 0.85 | 6.93 | -0.85 | 2.00 | 2.00 | 0.00 | 0.00 |
| 3,300.00 | 6.00 | 83.00 | 3,299.45 | 1.91 | 15.58 | -1.91 | 2.00 | 2.00 | 0.00 | 0.00 |
| 3,400.00 | 8.00 | 83.00 | 3,398.70 | 3.40 | 27.67 | -3.40 | 2.00 | 2.00 | 0.00 | 0.00 |
| 3,500.00 | 10.00 | 83.00 | 3,497.47 | 5.30 | 43.20 | -5.30 | 2.00 | 2.00 | 0.00 | 0.00 |
| End Nudge @ 3500.00ft | | | | | | | | | | |
| 3,600.00 | 10.00 | 83.00 | 3,595.95 | 7.42 | 60.43 | -7.42 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,700.00 | 10.00 | 83.00 | 3,694.43 | 9.54 | 77.67 | -9.54 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,800.00 | 10.00 | 83.00 | 3,792.91 | 11.65 | 94.90 | -11.65 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,872.19 | 10.00 | 83.00 | 3,864.00 | 13.18 | 107.35 | -13.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| Parkman | | | | | | | | | | |
| 3,900.00 | 10.00 | 83.00 | 3,891.39 | 13.77 | 112.14 | -13.77 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,000.00 | 10.00 | 83.00 | 3,989.87 | 15.89 | 129.38 | -15.89 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,100.00 | 10.00 | 83.00 | 4,088.35 | 18.00 | 146.61 | -18.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,200.00 | 10.00 | 83.00 | 4,186.83 | 20.12 | 163.85 | -20.12 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,258.05 | 10.00 | 83.00 | 4,244.00 | 21.35 | 173.85 | -21.35 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sussex | | | | | | | | | | |
| 4,300.00 | 10.00 | 83.00 | 4,285.31 | 22.23 | 181.08 | -22.23 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,400.00 | 10.00 | 83.00 | 4,383.79 | 24.35 | 198.32 | -24.35 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 10.00 | 83.00 | 4,482.27 | 26.47 | 215.55 | -26.47 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,600.00 | 10.00 | 83.00 | 4,580.75 | 28.58 | 232.79 | -28.58 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,700.00 | 10.00 | 83.00 | 4,679.23 | 30.70 | 250.02 | -30.70 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,800.00 | 10.00 | 83.00 | 4,777.72 | 32.82 | 267.26 | -32.82 | 0.00 | 0.00 | 0.00 | 0.00 |



Plan Report for MILK 36N-28HZ - Rev A0 Permit

| 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) | Toolface Azimuth (°) |
|---|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|----------------------|
| 4,900.00 | 10.00 | 83.00 | 4,876.20 | 34.93 | 284.49 | -34.93 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,000.00 | 10.00 | 83.00 | 4,974.68 | 37.05 | 301.73 | -37.05 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,100.00 | 10.00 | 83.00 | 5,073.16 | 39.16 | 318.96 | -39.16 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,200.00 | 10.00 | 83.00 | 5,171.64 | 41.28 | 336.20 | -41.28 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,260.00 | 10.00 | 83.00 | 5,230.73 | 42.55 | 346.54 | -42.55 | 0.00 | 0.00 | 0.00 | 0.00 |
| Begin Drop @ 5260.00ft | | | | | | | | | | |
| 5,300.00 | 9.20 | 83.00 | 5,270.17 | 43.36 | 353.16 | -43.36 | 2.00 | -2.00 | 0.00 | -180.00 |
| 5,400.00 | 7.20 | 83.00 | 5,369.14 | 45.10 | 367.32 | -45.10 | 2.00 | -2.00 | 0.00 | -180.00 |
| 5,500.00 | 5.20 | 83.00 | 5,468.55 | 46.42 | 378.04 | -46.42 | 2.00 | -2.00 | 0.00 | -180.00 |
| 5,600.00 | 3.20 | 83.00 | 5,568.28 | 47.31 | 385.31 | -47.31 | 2.00 | -2.00 | 0.00 | -180.00 |
| 5,700.00 | 1.20 | 83.00 | 5,668.20 | 47.78 | 389.12 | -47.78 | 2.00 | -2.00 | 0.00 | -180.00 |
| 5,760.00 | 0.00 | 0.00 | 5,728.19 | 47.85 | 389.74 | -47.85 | 2.00 | -2.00 | -138.33 | -180.00 |
| End Drop @ 5760.00ft | | | | | | | | | | |
| 5,800.00 | 0.00 | 0.00 | 5,768.19 | 47.85 | 389.74 | -47.85 | 0.00 | 0.00 | 0.00 | 180.00 |
| 5,900.00 | 0.00 | 0.00 | 5,868.19 | 47.85 | 389.74 | -47.85 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,000.00 | 0.00 | 0.00 | 5,968.19 | 47.85 | 389.74 | -47.85 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,100.00 | 0.00 | 0.00 | 6,068.19 | 47.85 | 389.74 | -47.85 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,200.00 | 0.00 | 0.00 | 6,168.19 | 47.85 | 389.74 | -47.85 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,300.00 | 0.00 | 0.00 | 6,268.19 | 47.85 | 389.74 | -47.85 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,316.85 | 0.00 | 0.00 | 6,285.04 | 47.85 | 389.74 | -47.85 | 0.00 | 0.00 | 0.00 | 0.00 |
| Top of 4.5" Liner @ 6316.85ft | | | | | | | | | | |
| 6,400.00 | 0.00 | 0.00 | 6,368.19 | 47.85 | 389.74 | -47.85 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,416.85 | 0.00 | 0.00 | 6,385.04 | 47.85 | 389.74 | -47.85 | 0.00 | 0.00 | 0.00 | 0.00 |
| KOP @ 6416.85ft | | | | | | | | | | |
| 6,500.00 | 8.31 | 180.00 | 6,467.90 | 41.83 | 389.74 | -41.83 | 10.00 | 10.00 | -216.47 | -180.00 |
| 6,600.00 | 18.31 | 180.00 | 6,565.09 | 18.83 | 389.74 | -18.83 | 10.00 | 10.00 | 0.00 | 0.00 |
| 6,700.00 | 28.31 | 180.00 | 6,656.81 | -20.70 | 389.74 | 20.70 | 10.00 | 10.00 | 0.00 | 0.00 |
| 6,800.00 | 38.31 | 180.00 | 6,740.27 | -75.55 | 389.74 | 75.55 | 10.00 | 10.00 | 0.00 | 0.00 |
| 6,900.00 | 48.31 | 180.00 | 6,812.93 | -144.07 | 389.73 | 144.07 | 10.00 | 10.00 | 0.00 | 0.00 |
| DLS = 10°/100' | | | | | | | | | | |
| 6,939.23 | 52.24 | 180.00 | 6,838.00 | -174.23 | 389.73 | 174.23 | 10.00 | 10.00 | 0.00 | 0.00 |
| SSPG | | | | | | | | | | |
| 7,000.00 | 58.31 | 180.00 | 6,872.60 | -224.16 | 389.73 | 224.16 | 10.00 | 10.00 | 0.00 | 0.00 |
| 7,052.29 | 63.54 | 180.00 | 6,898.00 | -269.85 | 389.73 | 269.85 | 10.00 | 10.00 | 0.00 | 0.00 |
| NBRR | | | | | | | | | | |
| 7,100.00 | 68.31 | 180.00 | 6,917.45 | -313.39 | 389.73 | 313.39 | 10.00 | 10.00 | 0.00 | 0.00 |
| 7,165.02 | 74.82 | 180.00 | 6,938.00 | -375.04 | 389.73 | 375.04 | 10.00 | 10.00 | 0.00 | 0.00 |
| N470_B_CK | | | | | | | | | | |
| 7,200.00 | 78.31 | 180.00 | 6,946.13 | -409.06 | 389.73 | 409.06 | 10.00 | 10.00 | 0.00 | 0.00 |
| 7,300.00 | 88.31 | 180.00 | 6,957.75 | -508.26 | 389.72 | 508.26 | 10.00 | 10.00 | 0.00 | 0.00 |
| 7,317.95 | 90.11 | 180.00 | 6,958.00 | -526.20 | 389.72 | 526.20 | 10.00 | 10.00 | 0.00 | 0.00 |
| End Build @ 7317.95ft - Landing Target (Heel) - 7" | | | | | | | | | | |
| 7,400.00 | 90.11 | 180.00 | 6,957.84 | -608.25 | 389.72 | 608.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7,500.00 | 90.11 | 180.00 | 6,957.65 | -708.25 | 389.72 | 708.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7,600.00 | 90.11 | 180.00 | 6,957.46 | -808.25 | 389.72 | 808.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7,700.00 | 90.11 | 180.00 | 6,957.26 | -908.25 | 389.71 | 908.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7,800.00 | 90.11 | 180.00 | 6,957.07 | -1,008.25 | 389.71 | 1,008.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7,900.00 | 90.11 | 180.00 | 6,956.88 | -1,108.25 | 389.71 | 1,108.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,000.00 | 90.11 | 180.00 | 6,956.68 | -1,208.25 | 389.71 | 1,208.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,100.00 | 90.11 | 180.00 | 6,956.49 | -1,308.25 | 389.70 | 1,308.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,200.00 | 90.11 | 180.00 | 6,956.30 | -1,408.25 | 389.70 | 1,408.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,300.00 | 90.11 | 180.00 | 6,956.11 | -1,508.25 | 389.70 | 1,508.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,400.00 | 90.11 | 180.00 | 6,955.91 | -1,608.25 | 389.70 | 1,608.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,500.00 | 90.11 | 180.00 | 6,955.72 | -1,708.25 | 389.69 | 1,708.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,600.00 | 90.11 | 180.00 | 6,955.53 | -1,808.25 | 389.69 | 1,808.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,700.00 | 90.11 | 180.00 | 6,955.34 | -1,908.25 | 389.69 | 1,908.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,800.00 | 90.11 | 180.00 | 6,955.14 | -2,008.25 | 389.69 | 2,008.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,900.00 | 90.11 | 180.00 | 6,954.95 | -2,108.25 | 389.68 | 2,108.25 | 0.00 | 0.00 | 0.00 | 0.00 |



Plan Report for MILK 36N-28HZ - Rev A0 Permit

| 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) | Toolface Azimuth (°) |
|---|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|----------------------|
| 9,000.00 | 90.11 | 180.00 | 6,954.76 | -2,208.25 | 389.68 | 2,208.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,100.00 | 90.11 | 180.00 | 6,954.56 | -2,308.25 | 389.68 | 2,308.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,200.00 | 90.11 | 180.00 | 6,954.37 | -2,408.25 | 389.68 | 2,408.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,300.00 | 90.11 | 180.00 | 6,954.18 | -2,508.25 | 389.67 | 2,508.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,400.00 | 90.11 | 180.00 | 6,953.99 | -2,608.25 | 389.67 | 2,608.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,500.00 | 90.11 | 180.00 | 6,953.79 | -2,708.25 | 389.67 | 2,708.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,600.00 | 90.11 | 180.00 | 6,953.60 | -2,808.25 | 389.67 | 2,808.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,700.00 | 90.11 | 180.00 | 6,953.41 | -2,908.25 | 389.66 | 2,908.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,800.00 | 90.11 | 180.00 | 6,953.22 | -3,008.25 | 389.66 | 3,008.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,900.00 | 90.11 | 180.00 | 6,953.02 | -3,108.25 | 389.66 | 3,108.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,000.00 | 90.11 | 180.00 | 6,952.83 | -3,208.25 | 389.65 | 3,208.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,100.00 | 90.11 | 180.00 | 6,952.64 | -3,308.25 | 389.65 | 3,308.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,200.00 | 90.11 | 180.00 | 6,952.44 | -3,408.25 | 389.65 | 3,408.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,300.00 | 90.11 | 180.00 | 6,952.25 | -3,508.25 | 389.65 | 3,508.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,400.00 | 90.11 | 180.00 | 6,952.06 | -3,608.25 | 389.64 | 3,608.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,500.00 | 90.11 | 180.00 | 6,951.87 | -3,708.25 | 389.64 | 3,708.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,600.00 | 90.11 | 180.00 | 6,951.67 | -3,808.25 | 389.64 | 3,808.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,700.00 | 90.11 | 180.00 | 6,951.48 | -3,908.25 | 389.64 | 3,908.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,800.00 | 90.11 | 180.00 | 6,951.29 | -4,008.25 | 389.63 | 4,008.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,900.00 | 90.11 | 180.00 | 6,951.09 | -4,108.25 | 389.63 | 4,108.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,000.00 | 90.11 | 180.00 | 6,950.90 | -4,208.25 | 389.63 | 4,208.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,100.00 | 90.11 | 180.00 | 6,950.71 | -4,308.25 | 389.63 | 4,308.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,200.00 | 90.11 | 180.00 | 6,950.52 | -4,408.25 | 389.62 | 4,408.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,300.00 | 90.11 | 180.00 | 6,950.32 | -4,508.25 | 389.62 | 4,508.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,400.00 | 90.11 | 180.00 | 6,950.13 | -4,608.25 | 389.62 | 4,608.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,500.00 | 90.11 | 180.00 | 6,949.94 | -4,708.25 | 389.62 | 4,708.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,600.00 | 90.11 | 180.00 | 6,949.75 | -4,808.25 | 389.61 | 4,808.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,700.00 | 90.11 | 180.00 | 6,949.55 | -4,908.25 | 389.61 | 4,908.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,800.00 | 90.11 | 180.00 | 6,949.36 | -5,008.25 | 389.61 | 5,008.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,900.00 | 90.11 | 180.00 | 6,949.17 | -5,108.25 | 389.61 | 5,108.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12,000.00 | 90.11 | 180.00 | 6,948.97 | -5,208.25 | 389.60 | 5,208.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12,100.00 | 90.11 | 180.00 | 6,948.78 | -5,308.24 | 389.60 | 5,308.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12,200.00 | 90.11 | 180.00 | 6,948.59 | -5,408.24 | 389.60 | 5,408.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12,300.00 | 90.11 | 180.00 | 6,948.40 | -5,508.24 | 389.60 | 5,508.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12,400.00 | 90.11 | 180.00 | 6,948.20 | -5,608.24 | 389.59 | 5,608.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12,500.00 | 90.11 | 180.00 | 6,948.01 | -5,708.24 | 389.59 | 5,708.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12,505.66 | 90.11 | 180.00 | 6,948.00 | -5,713.91 | 389.59 | 5,713.91 | 0.00 | 0.00 | 0.00 | 0.00 |
| MILK 36N-28HZ_BHL | | | | | | | | | | |
| 12,505.72 | 90.11 | 180.00 | 6,948.00 | -5,713.96 | 389.59 | 5,713.96 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total Depth (Toe) | | | | | | | | | | |
| 12,505.73 | 90.11 | 180.00 | 6,948.00 | -5,713.97 | 389.59 | 5,713.97 | 0.00 | 0.00 | 0.00 | 0.00 |
| TD Well @ 12505.73ft - MILK 36N-28HZ_Bhl | | | | | | | | | | |

Plan Annotations

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment |
|-----------------------|-----------------------|-------------------|--------------|-------------------------------|
| | | +N/-S (usft) | +E/-W (usft) | |
| 3,000.00 | 3,000.00 | 0.00 | 0.00 | Begin Nudge @ 3000.00ft |
| 3,500.00 | 3,497.47 | 5.30 | 43.20 | End Nudge @ 3500.00ft |
| 5,260.00 | 5,230.73 | 42.55 | 346.54 | Begin Drop @ 5260.00ft |
| 5,760.00 | 5,728.19 | 47.85 | 389.74 | End Drop @ 5760.00ft |
| 6,316.85 | 6,285.04 | 47.85 | 389.74 | Top of 4.5" Liner @ 6316.85ft |
| 6,416.85 | 6,385.04 | 47.85 | 389.74 | KOP @ 6416.85ft |
| 6,900.00 | 6,812.93 | -144.07 | 389.73 | DLS = 10°/100' |
| 7,317.95 | 6,958.00 | -526.20 | 389.72 | End Build @ 7317.95ft |
| 12,505.73 | 6,948.00 | -5,713.97 | 389.59 | TD Well @ 12505.73ft |



Plan Report for MILK 36N-28HZ - Rev A0 Permit

Vertical Section Information

| Angle Type | Target | Azimuth (°) | Origin Type | Origin +N/_S (usft) | Origin +E/-W (usft) | Start TVD (usft) |
|------------|----------------------|-------------|-------------|---------------------|---------------------|------------------|
| User | No Target (Freehand) | 180.00 | Slot | 0.00 | 0.00 | 0.00 |

Survey tool program

| From (usft) | To (usft) | Survey/Plan | Survey Tool |
|-------------|-----------|---------------|-------------|
| 0.00 | 7,317.95 | Rev A0 Permit | MWD+IFR1 |
| 7,317.95 | 12,505.73 | Rev A0 Permit | MWD+IFR1 |

Casing Details

| Measured Depth (usft) | Vertical Depth (usft) | Name | Casing Diameter (") | Hole Diameter (") |
|-----------------------|-----------------------|--------|---------------------|-------------------|
| 1,126.00 | 1,126.00 | 9 5/8" | 9-5/8 | 13-1/2 |
| 7,317.95 | 6,958.00 | 7" | 7 | 8-3/4 |

Formation Details

| Measured Depth (usft) | Vertical Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|-----------------------|-----------------------|-----------------------|-----------|---------|-------------------|
| 3,872.19 | 3,864.00 | Parkman | | 0.00 | |
| 4,258.05 | 4,244.00 | Sussex | | 0.00 | |
| 6,939.23 | 6,838.00 | SSPG | | 0.00 | |
| 7,052.29 | 6,898.00 | NBRR | | 0.00 | |
| 7,165.02 | 6,938.00 | N470_B_CK | | 0.00 | |
| 7,317.95 | 6,958.00 | Landing Target (Heel) | | 0.00 | |
| 12,505.72 | 6,948.00 | Total Depth (Toe) | | 0.00 | |

Targets associated with this wellbore

| Target Name | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Shape |
|-------------------------|------------|--------------|--------------|---------|
| MILK 36N-28HZ_SHL | 0.00 | 0.00 | 0.00 | Point |
| MILK 36N-28HZ_BHL | 6,984.00 | -5,713.97 | 389.59 | Point |
| Sec. 28 and 21-T3N-R65W | -10.00 | 166.79 | -708.36 | Polygon |
| MILK 36N-28HZ_Bhl | 6,948.00 | -5,713.97 | 389.59 | Point |

North Reference Sheet for Milk 4-21HZ Pad - MILK 36N-28HZ - Plan A

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference .
 Vertical Depths are relative to RKB = 17' @ 4854.00usft (D Rig). Northing and Easting are relative to MILK 36N-28HZ
 Coordinate System is Universal Transverse Mercator (US Survey Feet), Zone 13N (108 W to 102 W) using datum North American Datum 1983, ellipsoid
 Projection method is Transverse Mercator (Gauss-Kruger)
 Central Meridian is -105.00°, Longitude Origin:0.000000°, Latitude Origin:0.000000°
 False Easting: 1,640,416.67usft, False Northing: 0.00usft, Scale Reduction: 0.99960965

Grid Coordinates of Well: 14,601,551.57 usft N, 1,732,257.30 usft E
 Geographical Coordinates of Well: 40° 12' 17.98" N, 104° 40' 15.86" W
 Grid Convergence at Surface is: 0.21°

Based upon Minimum Curvature type calculations, at a Measured Depth of 12,505.73usft
 the Bottom Hole Displacement is 5,727.24usft in the Direction of 176.10° (True).

Magnetic Convergence at surface is: -8.14° (11 October 2014, , IGRF2010)

