

Burlington Resources

Arapahoe County, Colorado

Sec. 30-T4S-R64W

Watkins 30-5-8H

Plan A (Lateral)

Plan: Rev A1

Sperry Drilling Services

Proposal Report

02 November, 2013

Well Coordinates: 1,672,168.14 N, 3,252,694.56 E (39° 40' 31.70" N, 104° 36' 08.11" W)

Ground Level: 5,765.00 usft

Local Coordinate Origin:

Viewing Datum:

TVDs to System:

North Reference:

Unit System:

Centered on Well Watkins 30-5-8H

KB 24 ft @ 5789.00usft (H&P 280)

N

True

API - US Survey Feet - Custom

Version: 5000.1 Build: 70

HALLIBURTON

Project: Arapahoe County, Colorado
Site: Sec. 30-T4S-R64W
Well: Watkins 30-5-8H
Wellbore: Plan A (Lateral)
Plan: Rev A1

Burlington Resources

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 | 2100.00 | 0.00 | 0.00 | 2100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 3 | 2233.33 | 2.00 | 180.00 | 2233.31 | -2.33 | 0.00 | 1.50 | 180.00 | 0.01 | |
| 4 | 2930.00 | 2.00 | 180.00 | 2929.55 | -26.64 | 0.00 | 0.00 | 0.00 | 0.17 | |
| 5 | 3063.33 | 0.00 | 0.00 | 3062.86 | -28.97 | 0.00 | 1.50 | 180.00 | 0.18 | |
| 6 | 7202.55 | 0.00 | 0.00 | 7202.07 | -28.97 | 0.00 | 0.00 | 0.00 | 0.18 | |
| 7 | 8108.21 | 90.57 | 90.00 | 7775.00 | -28.96 | 578.62 | 10.00 | 90.00 | 578.79 | |
| 8 | 12157.81 | 90.57 | 90.00 | 7735.00 | -28.92 | 4628.02 | 0.00 | 0.00 | 4628.11 | Watkins 30-5-8H_Rev A1_BHL Tgt (Lateral) |

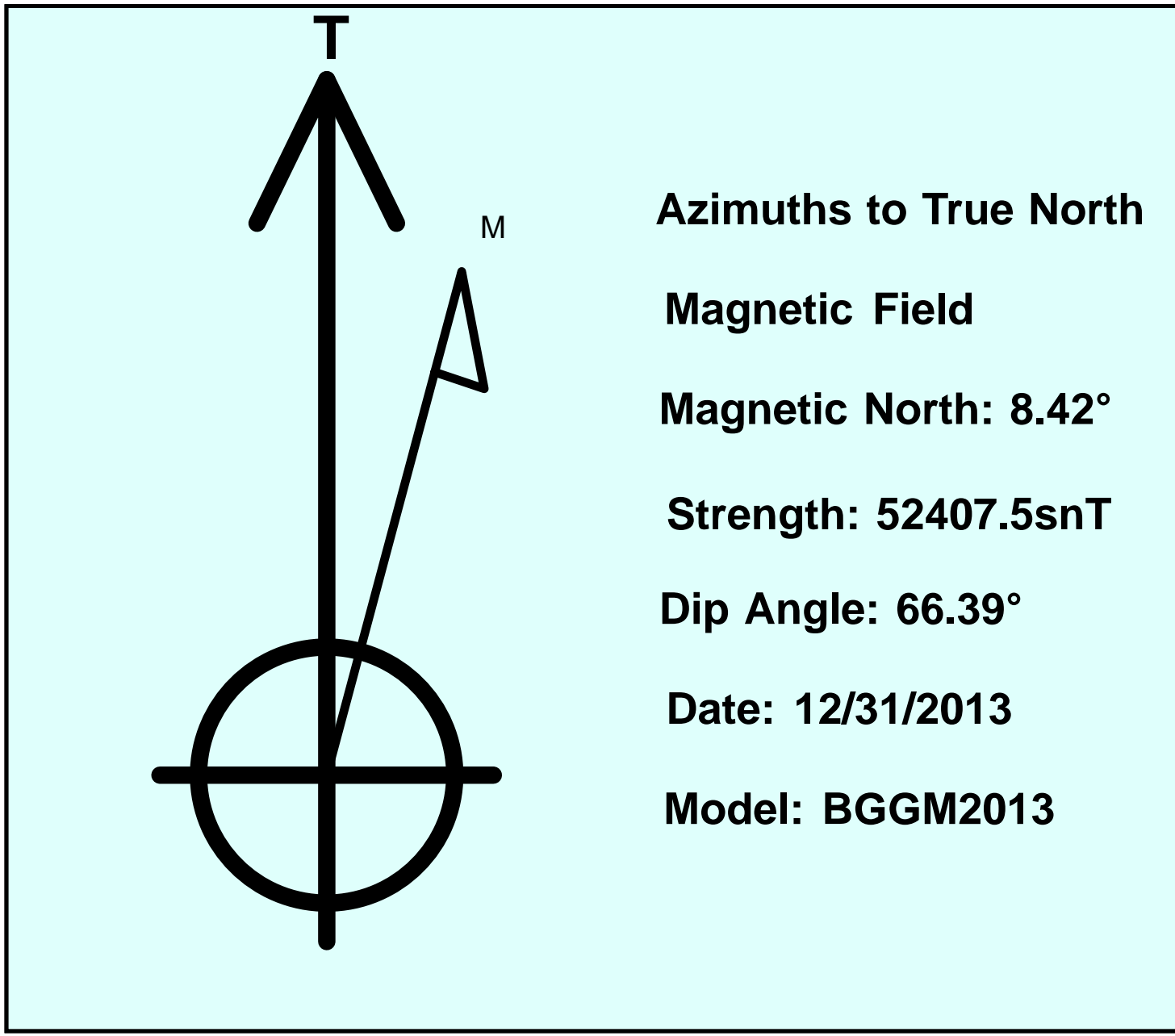
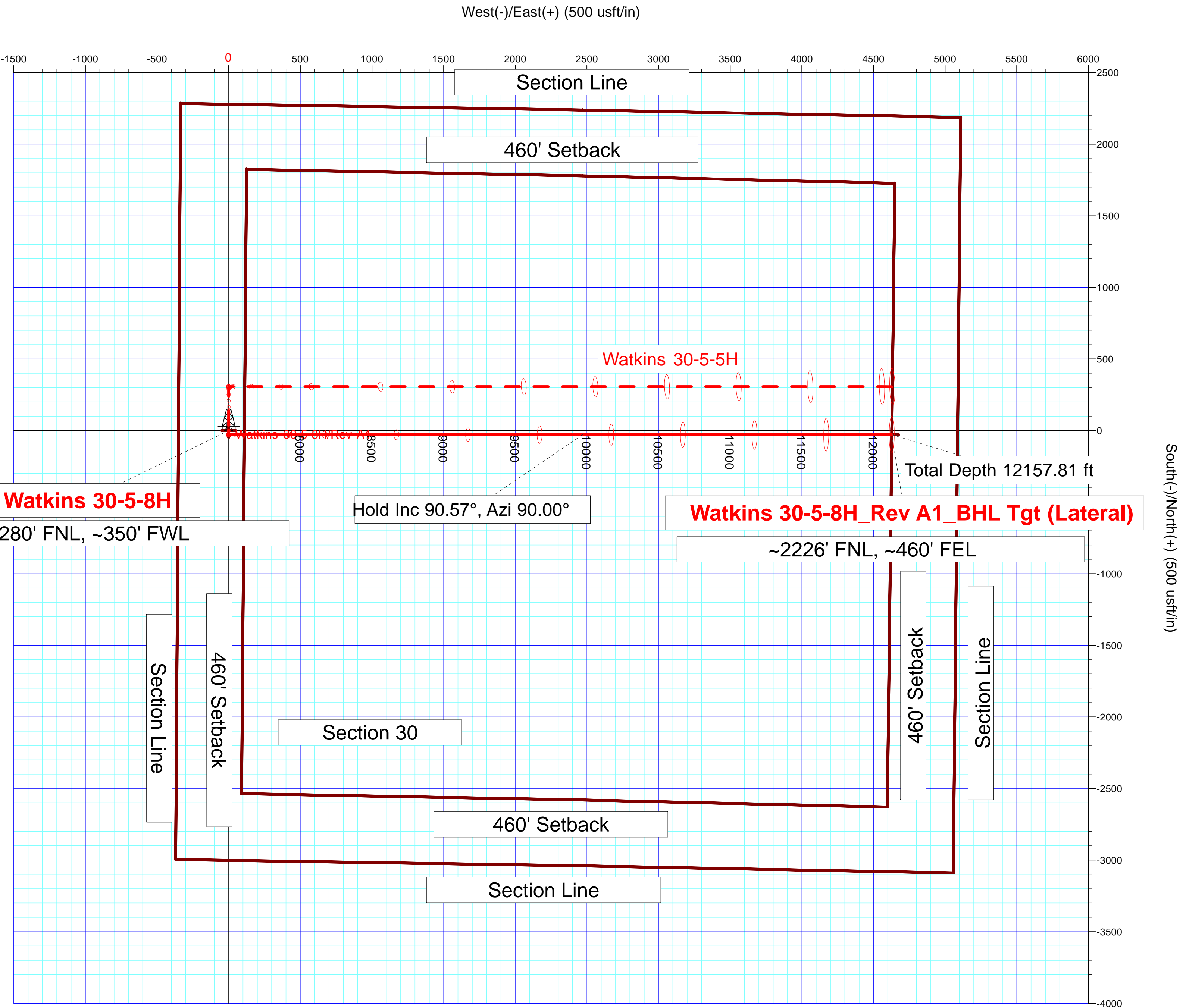
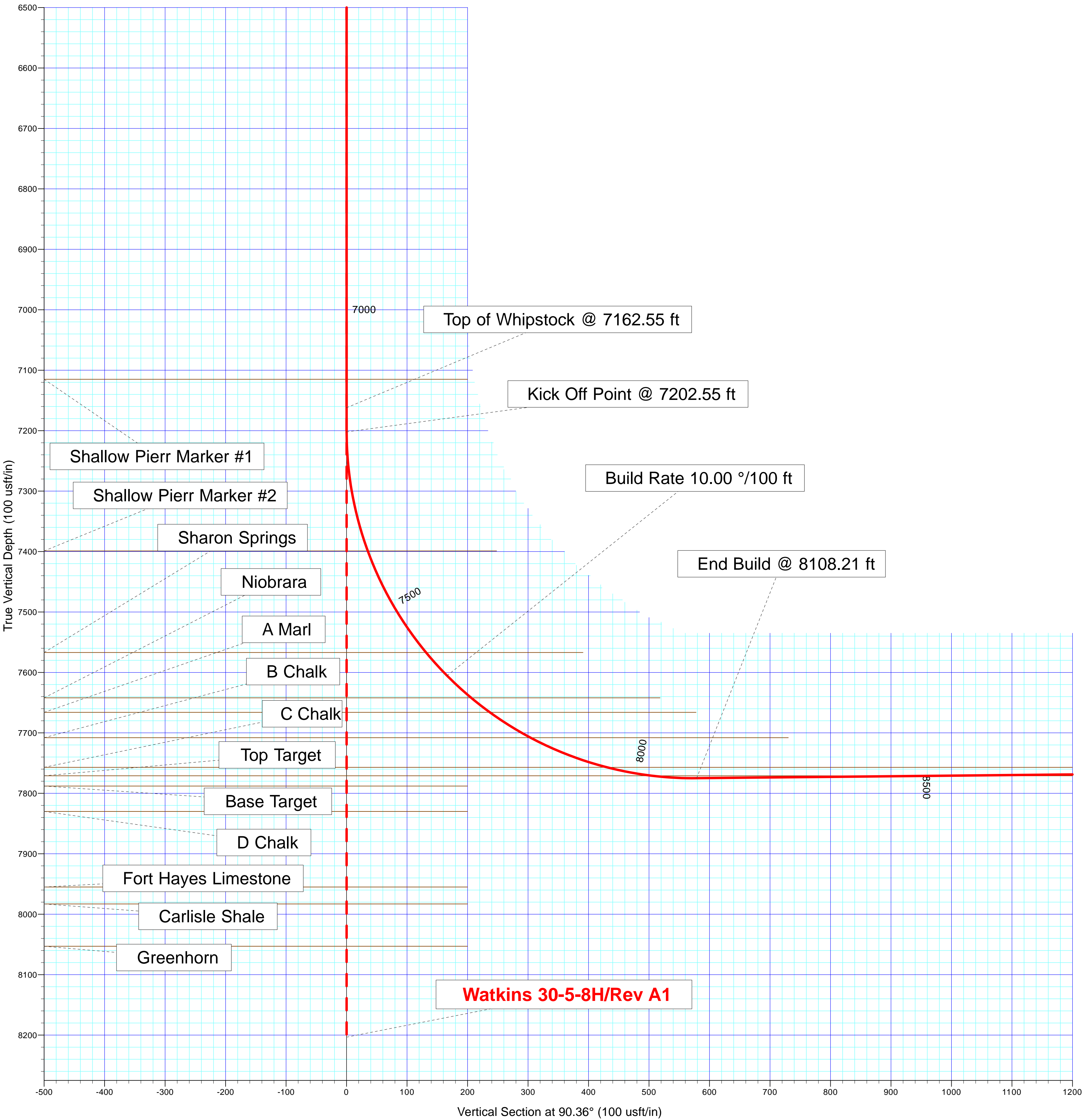
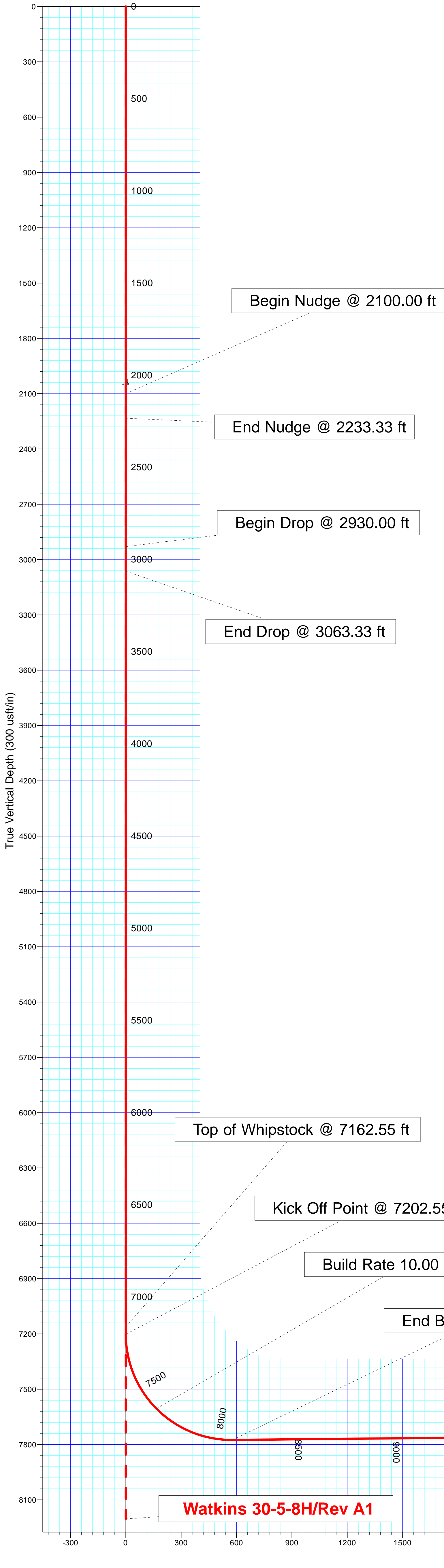
Plan: Rev A1 (Watkins 30-5-8H/Plan A (Lateral))

Created By: Kansa B. Becker Date: 13:06, November 02 2013

Checked: _____ Date: _____

Reviewed: _____ Date: _____

Approved: _____ Date: _____



Plan Report for Watkins 30-5-8H - Rev A1

| 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 |
| 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 |
| 1,200.00 | 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 |
| 2,050.00 | 0.00 | 0.00 | 2,050.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9 5/8" Casing Pt. | | | | | | | | | | |
| 2,100.00 | 0.00 | 0.00 | 2,100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Begin Nudge @ 2100.00 ft | | | | | | | | | | |
| 2,200.00 | 1.50 | 180.00 | 2,199.99 | -1.31 | 0.00 | 0.01 | 1.50 | 1.50 | 0.00 | 180.00 |
| 2,233.33 | 2.00 | 180.00 | 2,233.31 | -2.33 | 0.00 | 0.01 | 1.50 | 1.50 | 0.00 | 0.00 |
| End Nudge @ 2233.33 ft | | | | | | | | | | |
| 2,300.00 | 2.00 | 180.00 | 2,299.93 | -4.65 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,400.00 | 2.00 | 180.00 | 2,399.87 | -8.14 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 2.00 | 180.00 | 2,499.81 | -11.63 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,600.00 | 2.00 | 180.00 | 2,599.75 | -15.12 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,700.00 | 2.00 | 180.00 | 2,699.69 | -18.61 | 0.00 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,800.00 | 2.00 | 180.00 | 2,799.63 | -22.10 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,900.00 | 2.00 | 180.00 | 2,899.57 | -25.59 | 0.00 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,930.00 | 2.00 | 180.00 | 2,929.55 | -26.64 | 0.00 | 0.17 | 0.00 | 0.00 | 0.00 | 0.00 |
| Begin Drop @ 2930.00 ft | | | | | | | | | | |
| 3,000.00 | 0.95 | 180.00 | 2,999.52 | -28.44 | 0.00 | 0.18 | 1.50 | -1.50 | 0.00 | 180.00 |
| 3,063.33 | 0.00 | 0.00 | 3,062.86 | -28.97 | 0.00 | 0.18 | 1.50 | -1.50 | 0.00 | -180.00 |
| End Drop @ 3063.33 ft | | | | | | | | | | |
| 3,100.00 | 0.00 | 0.00 | 3,099.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,200.00 | 0.00 | 0.00 | 3,199.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,300.00 | 0.00 | 0.00 | 3,299.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,400.00 | 0.00 | 0.00 | 3,399.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,500.00 | 0.00 | 0.00 | 3,499.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,600.00 | 0.00 | 0.00 | 3,599.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,700.00 | 0.00 | 0.00 | 3,699.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,800.00 | 0.00 | 0.00 | 3,799.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 0.00 | 0.00 | 3,899.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,000.00 | 0.00 | 0.00 | 3,999.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,100.00 | 0.00 | 0.00 | 4,099.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,200.00 | 0.00 | 0.00 | 4,199.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 0.00 | 0.00 | 4,299.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,400.00 | 0.00 | 0.00 | 4,399.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 0.00 | 0.00 | 4,499.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,600.00 | 0.00 | 0.00 | 4,599.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,700.00 | 0.00 | 0.00 | 4,699.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,800.00 | 0.00 | 0.00 | 4,799.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |

Plan Report for Watkins 30-5-8H - Rev A1

| 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 | 0.00 | 0.00 | 4,899.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,000.00 | 0.00 | 0.00 | 4,999.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,100.00 | 0.00 | 0.00 | 5,099.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,200.00 | 0.00 | 0.00 | 5,199.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,300.00 | 0.00 | 0.00 | 5,299.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,400.00 | 0.00 | 0.00 | 5,399.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,500.00 | 0.00 | 0.00 | 5,499.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,600.00 | 0.00 | 0.00 | 5,599.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,700.00 | 0.00 | 0.00 | 5,699.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,800.00 | 0.00 | 0.00 | 5,799.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,900.00 | 0.00 | 0.00 | 5,899.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,000.00 | 0.00 | 0.00 | 5,999.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,100.00 | 0.00 | 0.00 | 6,099.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,200.00 | 0.00 | 0.00 | 6,199.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,300.00 | 0.00 | 0.00 | 6,299.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,400.00 | 0.00 | 0.00 | 6,399.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,500.00 | 0.00 | 0.00 | 6,499.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,600.00 | 0.00 | 0.00 | 6,599.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,700.00 | 0.00 | 0.00 | 6,699.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,800.00 | 0.00 | 0.00 | 6,799.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6,900.00 | 0.00 | 0.00 | 6,899.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7,000.00 | 0.00 | 0.00 | 6,999.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7,100.00 | 0.00 | 0.00 | 7,099.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7,115.48 | 0.00 | 0.00 | 7,115.00 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| Shallow Pierr Marker #1 | | | | | | | | | | |
| 7,162.55 | 0.00 | 0.00 | 7,162.07 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| Top of Whipstock @ 7162.55 ft | | | | | | | | | | |
| 7,200.00 | 0.00 | 0.00 | 7,199.52 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7,202.55 | 0.00 | 0.00 | 7,202.07 | -28.97 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| Kick Off Point @ 7202.55 ft | | | | | | | | | | |
| 7,300.00 | 9.75 | 90.00 | 7,299.05 | -28.97 | 8.27 | 8.45 | 10.00 | 10.00 | 0.00 | 90.00 |
| 7,400.00 | 19.75 | 90.00 | 7,395.64 | -28.97 | 33.69 | 33.87 | 10.00 | 10.00 | 0.00 | 0.00 |
| 7,403.58 | 20.10 | 90.00 | 7,399.00 | -28.97 | 34.91 | 35.09 | 10.00 | 10.00 | 0.00 | 0.00 |
| Shallow Pierr Marker #2 | | | | | | | | | | |
| 7,500.00 | 29.75 | 90.00 | 7,486.34 | -28.97 | 75.49 | 75.67 | 10.00 | 10.00 | 0.00 | 0.00 |
| 7,598.18 | 39.56 | 90.00 | 7,567.00 | -28.97 | 131.25 | 131.43 | 10.00 | 10.00 | 0.00 | 0.00 |
| Sharon Springs | | | | | | | | | | |
| 7,600.00 | 39.75 | 90.00 | 7,568.40 | -28.97 | 132.41 | 132.59 | 10.00 | 10.00 | 0.00 | 0.00 |
| 7,650.00 | 44.75 | 90.00 | 7,605.41 | -28.97 | 166.02 | 166.20 | 10.00 | 10.00 | 0.00 | 0.00 |
| Build Rate 10.00 °/100 ft | | | | | | | | | | |
| 7,700.00 | 49.75 | 90.00 | 7,639.34 | -28.97 | 202.72 | 202.90 | 10.00 | 10.00 | 0.00 | 0.00 |
| 7,704.14 | 50.16 | 90.00 | 7,642.00 | -28.97 | 205.89 | 206.06 | 10.00 | 10.00 | 0.00 | 0.00 |
| Niobrara | | | | | | | | | | |
| 7,743.23 | 54.07 | 90.00 | 7,666.00 | -28.96 | 236.73 | 236.91 | 10.00 | 10.00 | 0.00 | 0.00 |
| A Marl | | | | | | | | | | |
| 7,800.00 | 59.75 | 90.00 | 7,696.99 | -28.96 | 284.27 | 284.45 | 10.00 | 10.00 | 0.00 | 0.00 |
| 7,822.63 | 62.01 | 90.00 | 7,708.00 | -28.96 | 304.04 | 304.22 | 10.00 | 10.00 | 0.00 | 0.00 |
| B Chalk | | | | | | | | | | |
| 7,900.00 | 69.75 | 90.00 | 7,739.60 | -28.96 | 374.60 | 374.78 | 10.00 | 10.00 | 0.00 | 0.00 |
| 7,958.44 | 75.59 | 90.00 | 7,757.00 | -28.96 | 430.36 | 430.54 | 10.00 | 10.00 | 0.00 | 0.00 |
| C Chalk | | | | | | | | | | |
| 8,000.00 | 79.75 | 90.00 | 7,765.88 | -28.96 | 470.96 | 471.13 | 10.00 | 10.00 | 0.00 | 0.00 |
| 8,034.57 | 83.20 | 90.00 | 7,771.00 | -28.96 | 505.14 | 505.31 | 10.00 | 10.00 | 0.00 | 0.00 |
| Top Target | | | | | | | | | | |
| 8,100.00 | 89.75 | 90.00 | 7,775.02 | -28.96 | 570.41 | 570.58 | 10.00 | 10.00 | 0.00 | 0.00 |
| 8,108.21 | 90.57 | 90.00 | 7,775.00 | -28.96 | 578.62 | 578.79 | 10.00 | 10.00 | 0.00 | 0.00 |
| End Build @ 8108.21 ft | | | | | | | | | | |
| 8,200.00 | 90.57 | 90.00 | 7,774.09 | -28.96 | 670.40 | 670.57 | 0.00 | 0.00 | 0.00 | 0.00 |

Plan Report for Watkins 30-5-8H - Rev A1

| 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 (°) |
|-----------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|----------------------|
| 8,300.00 | 90.57 | 90.00 | 7,773.11 | -28.96 | 770.40 | 770.57 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,400.00 | 90.57 | 90.00 | 7,772.12 | -28.96 | 870.39 | 870.56 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,500.00 | 90.57 | 90.00 | 7,771.13 | -28.96 | 970.39 | 970.55 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,600.00 | 90.57 | 90.00 | 7,770.14 | -28.96 | 1,070.39 | 1,070.55 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,700.00 | 90.57 | 90.00 | 7,769.15 | -28.96 | 1,170.38 | 1,170.54 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,800.00 | 90.57 | 90.00 | 7,768.17 | -28.95 | 1,270.38 | 1,270.53 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8,900.00 | 90.57 | 90.00 | 7,767.18 | -28.95 | 1,370.37 | 1,370.52 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,000.00 | 90.57 | 90.00 | 7,766.19 | -28.95 | 1,470.37 | 1,470.52 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,100.00 | 90.57 | 90.00 | 7,765.20 | -28.95 | 1,570.36 | 1,570.51 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,200.00 | 90.57 | 90.00 | 7,764.22 | -28.95 | 1,670.36 | 1,670.50 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,300.00 | 90.57 | 90.00 | 7,763.23 | -28.95 | 1,770.35 | 1,770.50 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,400.00 | 90.57 | 90.00 | 7,762.24 | -28.95 | 1,870.35 | 1,870.49 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,500.00 | 90.57 | 90.00 | 7,761.25 | -28.95 | 1,970.34 | 1,970.48 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,600.00 | 90.57 | 90.00 | 7,760.26 | -28.95 | 2,070.34 | 2,070.48 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,700.00 | 90.57 | 90.00 | 7,759.28 | -28.95 | 2,170.33 | 2,170.47 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,800.00 | 90.57 | 90.00 | 7,758.29 | -28.94 | 2,270.33 | 2,270.46 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9,900.00 | 90.57 | 90.00 | 7,757.30 | -28.94 | 2,370.32 | 2,370.46 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,000.00 | 90.57 | 90.00 | 7,756.31 | -28.94 | 2,470.32 | 2,470.45 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hold Inc 90.57°, Azi 90.00° | | | | | | | | | | |
| 10,100.00 | 90.57 | 90.00 | 7,755.33 | -28.94 | 2,570.31 | 2,570.44 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,200.00 | 90.57 | 90.00 | 7,754.34 | -28.94 | 2,670.31 | 2,670.44 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,300.00 | 90.57 | 90.00 | 7,753.35 | -28.94 | 2,770.30 | 2,770.43 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,400.00 | 90.57 | 90.00 | 7,752.36 | -28.94 | 2,870.30 | 2,870.42 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,500.00 | 90.57 | 90.00 | 7,751.37 | -28.94 | 2,970.29 | 2,970.42 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,600.00 | 90.57 | 90.00 | 7,750.39 | -28.94 | 3,070.29 | 3,070.41 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,700.00 | 90.57 | 90.00 | 7,749.40 | -28.93 | 3,170.28 | 3,170.40 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,800.00 | 90.57 | 90.00 | 7,748.41 | -28.93 | 3,270.28 | 3,270.39 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10,900.00 | 90.57 | 90.00 | 7,747.42 | -28.93 | 3,370.27 | 3,370.39 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,000.00 | 90.57 | 90.00 | 7,746.44 | -28.93 | 3,470.27 | 3,470.38 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,100.00 | 90.57 | 90.00 | 7,745.45 | -28.93 | 3,570.26 | 3,570.37 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,200.00 | 90.57 | 90.00 | 7,744.46 | -28.93 | 3,670.26 | 3,670.37 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,300.00 | 90.57 | 90.00 | 7,743.47 | -28.93 | 3,770.25 | 3,770.36 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,400.00 | 90.57 | 90.00 | 7,742.49 | -28.93 | 3,870.25 | 3,870.35 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,500.00 | 90.57 | 90.00 | 7,741.50 | -28.93 | 3,970.24 | 3,970.35 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,600.00 | 90.57 | 90.00 | 7,740.51 | -28.93 | 4,070.24 | 4,070.34 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,700.00 | 90.57 | 90.00 | 7,739.52 | -28.92 | 4,170.23 | 4,170.33 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,800.00 | 90.57 | 90.00 | 7,738.53 | -28.92 | 4,270.23 | 4,270.33 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11,900.00 | 90.57 | 90.00 | 7,737.55 | -28.92 | 4,370.22 | 4,370.32 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12,000.00 | 90.57 | 90.00 | 7,736.56 | -28.92 | 4,470.22 | 4,470.31 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12,100.00 | 90.57 | 90.00 | 7,735.57 | -28.92 | 4,570.21 | 4,570.31 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12,157.81 | 90.57 | 90.00 | 7,735.00 | -28.92 | 4,628.02 | 4,628.11 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total Depth 12157.81 ft | | | | | | | | | | |

Plan Annotations

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment |
|-----------------------|-----------------------|-------------------|--------------|-------------------------------|
| | | +N/-S (usft) | +E/-W (usft) | |
| 2,100.00 | 2,100.00 | 0.00 | 0.00 | Begin Nudge @ 2100.00 ft |
| 2,233.33 | 2,233.31 | -2.33 | 0.00 | End Nudge @ 2233.33 ft |
| 2,930.00 | 2,929.55 | -26.64 | 0.00 | Begin Drop @ 2930.00 ft |
| 3,063.33 | 3,062.86 | -28.97 | 0.00 | End Drop @ 3063.33 ft |
| 7,162.55 | 7,162.07 | -28.97 | 0.00 | Top of Whipstock @ 7162.55 ft |
| 7,202.55 | 7,202.07 | -28.97 | 0.00 | Kick Off Point @ 7202.55 ft |
| 7,650.00 | 7,605.41 | -28.97 | 166.02 | Build Rate 10.00 °/100 ft |
| 8,108.21 | 7,775.00 | -28.96 | 578.62 | End Build @ 8108.21 ft |
| 10,000.00 | 7,756.31 | -28.94 | 2,470.32 | Hold Inc 90.57°, Azi 90.00° |
| 12,157.81 | 7,735.00 | -28.92 | 4,628.02 | Total Depth 12157.81 ft |

Plan Report for Watkins 30-5-8H - Rev A1

Vertical Section Information

| Angle Type | Target | Azimuth (°) | Origin Type | Origin +N/-S (usft) | Origin +E/-W (usft) | Start TVD (usft) |
|------------|--|-------------|-------------|---------------------|---------------------|------------------|
| Target | Watkins 30-5-8H_Rev A1_BHL Tgt (Lateral) | 90.36 | Slot | 0.00 | 0.00 | 0.00 |

Survey tool program

| From (usft) | To (usft) | Survey/Plan | Survey Tool |
|-------------|-----------|-------------|-------------|
| 0.00 | 2,050.00 | Rev A1 | NSG-CT_D/P |
| 2,050.00 | 12,157.81 | Rev A1 | MWD |

Casing Details

| Measured Depth (usft) | Vertical Depth (usft) | Name | Casing Diameter (") | Hole Diameter (") |
|-----------------------|-----------------------|-------------------|---------------------|-------------------|
| 2,050.00 | 2,050.00 | 9 5/8" Casing Pt. | 9-5/8 | 13-1/2 |

Formation Details

| Measured Depth (usft) | Vertical Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|-----------------------|-----------------------|-------------------------|-----------|---------|-------------------|
| 7,115.48 | 7,115.00 | Shallow Pierr Marker #1 | | | |
| 7,403.58 | 7,399.00 | Shallow Pierr Marker #2 | | | |
| 7,598.18 | 7,567.00 | Sharon Springs | | | |
| 7,704.14 | 7,642.00 | Niobrara | | | |
| 7,743.23 | 7,666.00 | A Marl | | | |
| 7,822.63 | 7,708.00 | B Chalk | | | |
| 7,958.44 | 7,757.00 | C Chalk | | | |
| 8,034.57 | 7,771.00 | Top Target | | | |

Targets associated with this wellbore

| Target Name | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Shape |
|--|------------|--------------|--------------|---------|
| Watkins 30-5-8H_SB | 0.00 | 0.00 | 0.00 | Polygon |
| Watkins 30-5-8H_SL | 0.00 | 0.00 | 0.00 | Polygon |
| Watkins 30-5-8H_Rev A1_BHL Tgt (Lateral) | 7,735.00 | -28.92 | 4,628.02 | Point |

Directional Difficulty Index

| | | | |
|-------------------------------------|----------------|-------------------------------|----------------------------------|
| Average Dogleg over Survey: | 0.78 °/100usft | Maximum Dogleg over Survey: | 10.00 °/100usft at 8,108.21 usft |
| Net Tortousity applicable to Plans: | 0.78 °/100usft | Directional Difficulty Index: | 6.037 |

Plan Report for Watkins 30-5-8H - Rev A1

Audit Info

North Reference Sheet for Sec. 30-T4S-R64W - Watkins 30-5-8H - Plan A (Lateral)

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference .
 Vertical Depths are relative to KB 24 ft @ 5789.00usft (H&P 280). Northing and Easting are relative to Watkins 30-5-8H
 Coordinate System is US State Plane 1983, Colorado Central Zone using datum North American Datum 1983, ellipsoid GRS 1980
 Projection method is Lambert Conformal Conic (2 parallel)
 Central Meridian is -105.50°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:39° 45' 0.000 N°
 False Easting: 3,000,000.00usft, False Northing: 1,000,000.00usft, Scale Reduction: 0.99998611

Grid Coordinates of Well: 1,672,168.14 usft N, 3,252,694.56 usft E
 Geographical Coordinates of Well: 39° 40' 31.70" N, 104° 36' 08.11" W
 Grid Convergence at Surface is: 0.57°

Based upon Minimum Curvature type calculations, at a Measured Depth of 12,157.81usft
 the Bottom Hole Displacement is 4,628.11usft in the Direction of 90.36° (True).
 Magnetic Convergence at surface is: -7.85° (31 December 2013, , BGGM2013)

