

Shell Exploration & Production Co. Inc.

Barber Co. KS (NAD-27)

Sec 04-T35S-R10W

Schupbach Ranch 3510 3-1H

API# 15007392901 / JOB# 9504798 / N180

Wellbore #1

Design: Wellbore #1

Sperry Drilling Services Combo Report

18 October, 2012

Surface UWI : API# 15007392901 / JOB# 9504798 / N180

Well Coordinates: 129,623.13 N, 2,030,843.42 E (37° 01' 21.39" N, 098° 23' 39.70" W)

Ground Level: 1,282.00 ft

Local Coordinate Origin:

Viewing Datum:

TVDs to System:

North Reference:

Unit System:

Centered on Well Schupbach Ranch 3510 3-1H

well @ 1305.80ft (Original Well Elev)

N

True

API US Survey Feet

Version: 2003.21 Build: 43

HALLIBURTON

Design Report for Schupbach Ranch 3510 3-1H - Wellbore #1

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | TVD below System (ft) | Vertical Depth (ft) | Local Coordinates | | Map Coordinates | | Dogleg Rate (°/100ft) | Vertical Section (ft) | Comments |
|---------------------|-----------------|-------------|-----------------------|---------------------|-------------------|--------------|-----------------|--------------|-----------------------|-----------------------|-------------------------|
| | | | | | Northing (ft) | Easting (ft) | Northing (ft) | Easting (ft) | | | |
| 0.00 | 0.00 | 0.00 | -1,305.80 | 0.00 | 0.00 N | 0.00 E | 129,623.13 | 2,030,843.42 | 0.00 | 0.00 | |
| 100.00 | 0.13 | 87.39 | -1,205.80 | 100.00 | 0.01 N | 0.11 E | 129,623.14 | 2,030,843.53 | 0.13 | 0.01 | First Gyro Survey |
| 200.00 | 0.16 | 72.65 | -1,105.80 | 200.00 | 0.05 N | 0.36 E | 129,623.18 | 2,030,843.78 | 0.05 | 0.06 | |
| 300.00 | 0.12 | 92.47 | -1,005.80 | 300.00 | 0.09 N | 0.60 E | 129,623.22 | 2,030,844.02 | 0.06 | 0.10 | |
| 400.00 | 0.09 | 78.30 | -905.80 | 400.00 | 0.10 N | 0.78 E | 129,623.23 | 2,030,844.20 | 0.04 | 0.11 | |
| 500.00 | 0.08 | 97.35 | -805.80 | 500.00 | 0.11 N | 0.93 E | 129,623.24 | 2,030,844.35 | 0.03 | 0.12 | |
| 600.00 | 0.10 | 38.38 | -705.80 | 600.00 | 0.17 N | 1.05 E | 129,623.30 | 2,030,844.47 | 0.09 | 0.18 | |
| 700.00 | 0.13 | 91.13 | -605.80 | 700.00 | 0.23 N | 1.22 E | 129,623.36 | 2,030,844.64 | 0.11 | 0.25 | |
| 745.00 | 0.42 | 65.42 | -560.80 | 745.00 | 0.30 N | 1.42 E | 129,623.43 | 2,030,844.84 | 0.68 | 0.31 | Final Gyro Survey |
| 900.00 | 0.09 | 297.99 | -405.80 | 900.00 | 0.59 N | 1.83 E | 129,623.73 | 2,030,845.25 | 0.31 | 0.61 | First Sperry MWD Survey |
| 1,090.00 | 0.15 | 19.31 | -215.80 | 1,090.00 | 0.90 N | 1.78 E | 129,624.03 | 2,030,845.20 | 0.09 | 0.92 | |
| 1,278.00 | 0.22 | 9.91 | -27.80 | 1,278.00 | 1.49 N | 1.92 E | 129,624.62 | 2,030,845.34 | 0.04 | 1.51 | |
| 1,465.00 | 0.15 | 15.74 | 159.19 | 1,464.99 | 2.08 N | 2.05 E | 129,625.21 | 2,030,845.47 | 0.04 | 2.10 | |
| 1,653.00 | 0.39 | 4.80 | 347.19 | 1,652.99 | 2.95 N | 2.17 E | 129,626.08 | 2,030,845.59 | 0.13 | 2.97 | |
| 1,840.00 | 0.31 | 66.97 | 534.19 | 1,839.99 | 3.78 N | 2.69 E | 129,626.92 | 2,030,846.10 | 0.20 | 3.81 | |
| 2,026.00 | 0.39 | 35.96 | 720.19 | 2,025.99 | 4.49 N | 3.52 E | 129,627.63 | 2,030,846.94 | 0.11 | 4.53 | |
| 2,214.00 | 0.54 | 15.56 | 908.18 | 2,213.98 | 5.86 N | 4.14 E | 129,629.00 | 2,030,847.55 | 0.12 | 5.90 | |
| 2,404.00 | 0.62 | 25.71 | 1,098.17 | 2,403.97 | 7.65 N | 4.82 E | 129,630.79 | 2,030,848.23 | 0.07 | 7.70 | |
| 2,594.00 | 0.72 | 31.85 | 1,288.16 | 2,593.96 | 9.59 N | 5.90 E | 129,632.73 | 2,030,849.31 | 0.06 | 9.65 | |
| 2,784.00 | 0.99 | 45.81 | 1,478.14 | 2,783.94 | 11.75 N | 7.71 E | 129,634.89 | 2,030,851.11 | 0.18 | 11.83 | |
| 2,973.00 | 1.16 | 52.83 | 1,667.10 | 2,972.90 | 14.04 N | 10.40 E | 129,637.19 | 2,030,853.80 | 0.11 | 14.15 | |
| 3,163.00 | 1.41 | 49.94 | 1,857.06 | 3,162.86 | 16.71 N | 13.72 E | 129,639.86 | 2,030,857.12 | 0.14 | 16.85 | |
| 3,353.00 | 1.38 | 41.86 | 2,047.00 | 3,352.80 | 19.92 N | 17.04 E | 129,643.07 | 2,030,860.44 | 0.10 | 20.09 | |
| 3,543.00 | 1.38 | 49.91 | 2,236.94 | 3,542.74 | 23.10 N | 20.31 E | 129,646.25 | 2,030,863.71 | 0.10 | 23.30 | |
| 3,733.00 | 1.23 | 53.14 | 2,426.89 | 3,732.69 | 25.79 N | 23.70 E | 129,648.95 | 2,030,867.09 | 0.09 | 26.03 | |
| 3,923.00 | 0.74 | 55.82 | 2,616.87 | 3,922.67 | 27.71 N | 26.34 E | 129,650.87 | 2,030,869.73 | 0.26 | 27.97 | |
| 4,113.00 | 0.65 | 46.28 | 2,806.85 | 4,112.65 | 29.14 N | 28.14 E | 129,652.30 | 2,030,871.52 | 0.08 | 29.42 | |
| 4,176.00 | 3.64 | 351.84 | 2,869.80 | 4,175.60 | 31.37 N | 28.11 E | 129,654.53 | 2,030,871.50 | 5.25 | 31.65 | |
| 4,208.00 | 5.71 | 355.53 | 2,901.70 | 4,207.50 | 33.96 N | 27.84 E | 129,657.12 | 2,030,871.22 | 6.53 | 34.24 | |
| 4,271.00 | 8.58 | 3.28 | 2,964.20 | 4,270.00 | 41.78 N | 27.87 E | 129,664.94 | 2,030,871.24 | 4.80 | 42.05 | |
| 4,303.00 | 10.15 | 5.17 | 2,995.77 | 4,301.57 | 46.97 N | 28.26 E | 129,670.13 | 2,030,871.63 | 5.00 | 47.25 | |
| 4,336.00 | 12.34 | 5.12 | 3,028.14 | 4,333.94 | 53.38 N | 28.84 E | 129,676.54 | 2,030,872.20 | 6.64 | 53.66 | |
| 4,366.00 | 14.89 | 5.54 | 3,057.29 | 4,363.09 | 60.41 N | 29.49 E | 129,683.57 | 2,030,872.85 | 8.51 | 60.70 | |
| 4,398.00 | 17.13 | 6.41 | 3,088.05 | 4,393.85 | 69.19 N | 30.42 E | 129,692.35 | 2,030,873.76 | 7.04 | 69.48 | |
| 4,428.00 | 20.20 | 6.97 | 3,116.47 | 4,422.27 | 78.72 N | 31.54 E | 129,701.89 | 2,030,874.87 | 10.25 | 79.03 | |
| 4,460.00 | 23.56 | 6.46 | 3,146.16 | 4,451.96 | 90.56 N | 32.93 E | 129,713.73 | 2,030,876.25 | 10.52 | 90.88 | |
| 4,491.00 | 26.26 | 4.63 | 3,174.27 | 4,480.07 | 103.56 N | 34.18 E | 129,726.72 | 2,030,877.48 | 9.06 | 103.89 | |
| 4,523.00 | 29.52 | 0.65 | 3,202.56 | 4,508.36 | 118.50 N | 34.84 E | 129,741.67 | 2,030,878.13 | 11.73 | 118.84 | |
| 4,554.00 | 32.63 | 358.04 | 3,229.10 | 4,534.90 | 134.49 N | 34.64 E | 129,757.66 | 2,030,877.91 | 10.93 | 134.83 | |

Design Report for Schupbach Ranch 3510 3-1H - Wellbore #1

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | TVD below System (ft) | Vertical Depth (ft) | Local Coordinates | | Map Coordinates | | Dogleg Rate (°/100ft) | Vertical Section (ft) | Comments |
|---------------------|-----------------|-------------|-----------------------|---------------------|-------------------|--------------|-----------------|--------------|-----------------------|-----------------------|----------|
| | | | | | Northing (ft) | Easting (ft) | Northing (ft) | Easting (ft) | | | |
| 4,586.00 | 36.15 | 356.19 | 3,255.51 | 4,561.31 | 152.54 N | 33.72 E | 129,775.71 | 2,030,876.97 | 11.47 | 152.87 | |
| 4,618.00 | 39.70 | 355.41 | 3,280.75 | 4,586.55 | 172.15 N | 32.27 E | 129,795.32 | 2,030,875.50 | 11.19 | 172.46 | |
| 4,649.00 | 43.28 | 354.80 | 3,303.96 | 4,609.76 | 192.61 N | 30.52 E | 129,815.77 | 2,030,873.72 | 11.62 | 192.90 | |
| 4,681.00 | 46.80 | 355.11 | 3,326.57 | 4,632.37 | 215.16 N | 28.53 E | 129,838.32 | 2,030,871.71 | 11.02 | 215.44 | |
| 4,713.00 | 50.23 | 355.18 | 3,347.77 | 4,653.57 | 239.05 N | 26.50 E | 129,862.20 | 2,030,869.65 | 10.72 | 239.30 | |
| 4,744.00 | 53.59 | 356.06 | 3,366.89 | 4,672.69 | 263.37 N | 24.64 E | 129,886.53 | 2,030,867.76 | 11.07 | 263.60 | |
| 4,776.00 | 56.98 | 356.37 | 3,385.11 | 4,690.91 | 289.61 N | 22.91 E | 129,912.77 | 2,030,866.00 | 10.62 | 289.83 | |
| 4,807.00 | 61.25 | 356.11 | 3,401.02 | 4,706.82 | 316.15 N | 21.16 E | 129,939.31 | 2,030,864.22 | 13.79 | 316.35 | |
| 4,839.00 | 65.42 | 355.37 | 3,415.38 | 4,721.18 | 344.66 N | 19.03 E | 129,967.81 | 2,030,862.06 | 13.19 | 344.84 | |
| 4,871.00 | 70.16 | 354.93 | 3,427.47 | 4,733.27 | 374.17 N | 16.53 E | 129,997.32 | 2,030,859.52 | 14.87 | 374.32 | |
| 4,902.00 | 75.24 | 354.89 | 3,436.68 | 4,742.48 | 403.65 N | 13.90 E | 130,026.79 | 2,030,856.87 | 16.39 | 403.76 | |
| 5,063.00 | 84.98 | 359.20 | 3,464.32 | 4,770.12 | 561.82 N | 5.83 E | 130,184.95 | 2,030,848.61 | 6.60 | 561.85 | |
| 5,158.00 | 90.43 | 359.42 | 3,468.12 | 4,773.92 | 656.70 N | 4.69 E | 130,279.83 | 2,030,847.36 | 5.74 | 656.71 | |
| 5,253.00 | 90.92 | 0.40 | 3,467.00 | 4,772.80 | 751.69 N | 4.54 E | 130,374.82 | 2,030,847.10 | 1.15 | 751.70 | |
| 5,348.00 | 89.66 | 359.24 | 3,466.52 | 4,772.32 | 846.68 N | 4.24 E | 130,469.82 | 2,030,846.70 | 1.80 | 846.68 | |
| 5,443.00 | 91.08 | 1.34 | 3,465.91 | 4,771.71 | 941.67 N | 4.72 E | 130,564.81 | 2,030,847.07 | 2.67 | 941.67 | |
| 5,537.00 | 91.60 | 1.25 | 3,463.71 | 4,769.51 | 1,035.62 N | 6.84 E | 130,658.76 | 2,030,849.09 | 0.56 | 1,035.64 | |
| 5,632.00 | 90.65 | 0.06 | 3,461.84 | 4,767.64 | 1,130.60 N | 7.93 E | 130,753.73 | 2,030,850.07 | 1.60 | 1,130.62 | |
| 5,727.00 | 91.54 | 1.42 | 3,460.03 | 4,765.83 | 1,225.57 N | 9.15 E | 130,848.70 | 2,030,851.19 | 1.71 | 1,225.60 | |
| 5,822.00 | 91.23 | 1.65 | 3,457.73 | 4,763.53 | 1,320.51 N | 11.70 E | 130,943.64 | 2,030,853.62 | 0.41 | 1,320.56 | |
| 5,917.00 | 91.57 | 3.30 | 3,455.41 | 4,761.21 | 1,415.38 N | 15.80 E | 131,038.53 | 2,030,857.62 | 1.77 | 1,415.47 | |
| 6,012.00 | 90.62 | 3.41 | 3,453.59 | 4,759.39 | 1,510.20 N | 21.36 E | 131,133.35 | 2,030,863.07 | 1.01 | 1,510.34 | |
| 6,106.00 | 90.00 | 1.23 | 3,453.08 | 4,758.88 | 1,604.12 N | 25.16 E | 131,227.27 | 2,030,866.76 | 2.41 | 1,604.29 | |
| 6,201.00 | 90.31 | 0.86 | 3,452.83 | 4,758.63 | 1,699.10 N | 26.90 E | 131,322.26 | 2,030,868.39 | 0.51 | 1,699.29 | |
| 6,296.00 | 89.26 | 359.07 | 3,453.18 | 4,758.98 | 1,794.10 N | 26.84 E | 131,417.25 | 2,030,868.22 | 2.18 | 1,794.27 | |
| 6,391.00 | 90.22 | 359.61 | 3,453.62 | 4,759.42 | 1,889.09 N | 25.74 E | 131,512.24 | 2,030,867.02 | 1.16 | 1,889.25 | |
| 6,486.00 | 89.78 | 358.92 | 3,453.62 | 4,759.42 | 1,984.08 N | 24.52 E | 131,607.23 | 2,030,865.70 | 0.86 | 1,984.23 | |
| 6,580.00 | 90.37 | 0.49 | 3,453.49 | 4,759.29 | 2,078.07 N | 24.04 E | 131,701.23 | 2,030,865.11 | 1.78 | 2,078.21 | |
| 6,675.00 | 88.92 | 359.72 | 3,454.08 | 4,759.88 | 2,173.07 N | 24.21 E | 131,796.22 | 2,030,865.17 | 1.73 | 2,173.20 | |
| 6,770.00 | 88.74 | 357.16 | 3,456.02 | 4,761.82 | 2,268.01 N | 21.63 E | 131,891.15 | 2,030,862.48 | 2.70 | 2,268.11 | |
| 6,865.00 | 88.24 | 356.88 | 3,458.52 | 4,764.32 | 2,362.84 N | 16.69 E | 131,985.99 | 2,030,857.43 | 0.60 | 2,362.89 | |
| 6,959.00 | 89.35 | 356.01 | 3,460.50 | 4,766.30 | 2,456.64 N | 10.86 E | 132,079.78 | 2,030,851.50 | 1.50 | 2,456.63 | |
| 7,054.00 | 90.68 | 356.69 | 3,460.48 | 4,766.28 | 2,551.45 N | 4.82 E | 132,174.57 | 2,030,845.35 | 1.57 | 2,551.37 | |
| 7,149.00 | 91.14 | 359.60 | 3,458.97 | 4,764.77 | 2,646.37 N | 1.74 E | 132,269.50 | 2,030,842.16 | 3.10 | 2,646.26 | |
| 7,244.00 | 91.51 | 0.17 | 3,456.77 | 4,762.57 | 2,741.35 N | 1.55 E | 132,364.47 | 2,030,841.87 | 0.72 | 2,741.23 | |
| 7,339.00 | 90.83 | 1.86 | 3,454.83 | 4,760.63 | 2,836.31 N | 3.23 E | 132,459.43 | 2,030,843.44 | 1.92 | 2,836.20 | |
| 7,434.00 | 90.46 | 0.33 | 3,453.76 | 4,759.56 | 2,931.28 N | 5.05 E | 132,554.41 | 2,030,845.15 | 1.66 | 2,931.19 | |
| 7,529.00 | 89.41 | 3.00 | 3,453.87 | 4,759.67 | 3,026.23 N | 7.81 E | 132,649.36 | 2,030,847.80 | 3.02 | 3,026.16 | |
| 7,624.00 | 89.57 | 2.51 | 3,454.71 | 4,760.51 | 3,121.12 N | 12.38 E | 132,744.25 | 2,030,852.26 | 0.54 | 3,121.09 | |



Design Report for Schupbach Ranch 3510 3-1H - Wellbore #1

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | TVD below System (ft) | Vertical Depth (ft) | Local Coordinates (ft) | | Map Coordinates (ft) | | Dogleg Rate (°/100ft) | Vertical Section (ft) | Comments |
|---------------------|-----------------|-------------|-----------------------|---------------------|------------------------|---------|----------------------|--------------|-----------------------|-----------------------|-------------------------|
| | | | | | Northing | Easting | Northing | Easting | | | |
| 7,719.00 | 89.66 | 1.62 | 3,455.35 | 4,761.15 | 3,216.05 N | 15.80 E | 132,839.19 | 2,030,855.57 | 0.94 | 3,216.05 | |
| 7,814.00 | 89.23 | 1.00 | 3,456.27 | 4,762.07 | 3,311.02 N | 17.97 E | 132,934.16 | 2,030,857.64 | 0.79 | 3,311.04 | |
| 7,909.00 | 88.31 | 358.92 | 3,458.31 | 4,764.11 | 3,405.99 N | 17.90 E | 133,029.14 | 2,030,857.47 | 2.39 | 3,406.00 | |
| 8,003.00 | 88.95 | 0.45 | 3,460.56 | 4,766.36 | 3,499.96 N | 17.39 E | 133,123.10 | 2,030,856.84 | 1.76 | 3,499.96 | |
| 8,098.00 | 90.18 | 359.11 | 3,461.28 | 4,767.08 | 3,594.96 N | 17.02 E | 133,218.10 | 2,030,856.37 | 1.91 | 3,594.95 | |
| 8,193.00 | 91.07 | 359.93 | 3,460.25 | 4,766.05 | 3,689.95 N | 16.23 E | 133,313.08 | 2,030,855.47 | 1.27 | 3,689.92 | |
| 8,288.00 | 91.69 | 2.54 | 3,457.96 | 4,763.76 | 3,784.89 N | 18.27 E | 133,408.03 | 2,030,857.41 | 2.82 | 3,784.88 | |
| 8,383.00 | 91.33 | 0.88 | 3,455.45 | 4,761.25 | 3,879.81 N | 21.11 E | 133,502.95 | 2,030,860.13 | 1.79 | 3,879.83 | |
| 8,478.00 | 91.79 | 1.23 | 3,452.87 | 4,758.67 | 3,974.76 N | 22.86 E | 133,597.90 | 2,030,861.77 | 0.61 | 3,974.79 | |
| 8,573.00 | 90.15 | 3.69 | 3,451.26 | 4,757.06 | 4,069.64 N | 26.93 E | 133,692.79 | 2,030,865.74 | 3.11 | 4,069.71 | |
| 8,667.00 | 89.51 | 3.83 | 3,451.54 | 4,757.34 | 4,163.44 N | 33.10 E | 133,786.60 | 2,030,871.80 | 0.70 | 4,163.56 | |
| 8,762.00 | 91.91 | 4.44 | 3,450.36 | 4,756.16 | 4,258.18 N | 39.95 E | 133,881.34 | 2,030,878.54 | 2.61 | 4,258.37 | |
| 8,857.00 | 91.72 | 1.39 | 3,447.35 | 4,753.15 | 4,353.00 N | 44.77 E | 133,976.17 | 2,030,883.26 | 3.22 | 4,353.23 | |
| 8,952.00 | 89.01 | 1.21 | 3,446.75 | 4,752.55 | 4,447.96 N | 46.93 E | 134,071.13 | 2,030,885.31 | 2.86 | 4,448.21 | |
| 8,997.00 | 88.31 | 2.03 | 3,447.80 | 4,753.60 | 4,492.93 N | 48.20 E | 134,116.10 | 2,030,886.53 | 2.40 | 4,493.19 | Final Sperry MWD Survey |
| 9,052.00 | 88.31 | 2.03 | 3,449.42 | 4,755.22 | 4,547.87 N | 50.15 E | 134,171.05 | 2,030,888.42 | 0.00 | 4,548.15 | Projection to TD |

Design Annotations

| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates (ft) | | Comment |
|---------------------|---------------------|------------------------|-------|-------------------------|
| | | +N/-S | +E/-W | |
| 100.00 | 100.00 | 0.01 | 0.11 | First Gyro Survey |
| 745.00 | 745.00 | 0.30 | 1.42 | Final Gyro Survey |
| 900.00 | 900.00 | 0.59 | 1.83 | First Sperry MWD Survey |
| 8,997.00 | 4,753.60 | 4,492.93 | 48.20 | Final Sperry MWD Survey |
| 9,052.00 | 4,755.22 | 4,547.87 | 50.15 | Projection to TD |

Vertical Section Information

| Angle Type | Target | Azimuth (°) | Origin Type | Origin (ft) | | Start TVD (ft) |
|------------|----------------------|-------------|-------------|-------------|-------|----------------|
| | | | | +N/_S | +E/-W | |
| User | No Target (Freehand) | 0.57 | Slot | 0.00 | 0.00 | 0.00 |

Survey tool program

| From (ft) | To (ft) | Survey/Plan | Survey Tool |
|-----------|---------|------------------|-------------|
| 100.00 | 745.00 | VES Gyro Surveys | NS-Gyro-MS |

Design Report for Schupbach Ranch 3510 3-1H - Wellbore #1

Survey tool program

| From (ft) | To (ft) | Survey/Plan | Survey Tool |
|-----------|----------|--------------------|-------------|
| 900.00 | 9,052.00 | Sperry MWD Surveys | MWD+SC |

Design Targets

| Target Name | Dip Angle | Dip Dir. | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
|-------------------|-----------|----------|-----|-------|-------|----------|---------|----------|-----------|
| - hit/miss target | () | () | () | () | () | () | () | | |
| - Shape | | | | | | | | | |

Directional Difficulty Index

| | | | |
|-------------------------------------|--------------|-------------------------------|------------------------------|
| Average Dogleg over Survey: | 1.79 °/100ft | Maximum Dogleg over Survey: | 16.39 °/100ft at 4,902.00 ft |
| Net Tortousity applicable to Plans: | 0.62 °/100ft | Directional Difficulty Index: | 6.148 |

Audit Info

North Reference Sheet for Sec 04-T35S-R10W - Schupbach Ranch 3510 3-1H - Wellbore #1

All data is in Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.
 Vertical Depths are relative to well @ 1305.80ft (Original Well Elev). Northing and Easting are relative to Schupbach Ranch 3510 3-1H
 Coordinate System is US State Plane 1927 (Exact solution), Kansas South 1502 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866
 Projection method is Lambert Conformal Conic (2 parallel)
 Central Meridian is 98° 30' 0.000 W°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:37° 16' 0.000 N°
 False Easting: 2,000,000.00ft, False Northing: 0.00ft, Scale Reduction: 1.00005693

Grid Coordinates of Well: 129,623.13 ft N, 2,030,843.42 ft E
 Geographical Coordinates of Well: 37° 01' 21.39" N, 098° 23' 39.70" W
 Grid Convergence at Surface is: 0.06°

Based upon Minimum Curvature type calculations, at a Measured Depth of 9,052.00ft
 the Bottom Hole Displacement is 4,548.15ft in the Direction of 0.63° (True).

Magnetic Convergence at surface is: -4.79° (17 September 2012, , BGGM2012)

