



Devon Energy

Chaves Co, New Mexico (Nad-83)

Open Range 34 Fee #1H

Open Range 34 Fee #1H

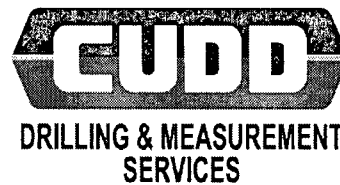
well #14537

Lateral #1

Plan: Design #2

Standard Survey Report

21 July, 2010





CUDD Drilling & Measurement Services
Survey Report



| | | | |
|------------------|--------------------------------|-------------------------------------|---------------------------------------|
| Company: | Devon Energy | Local Co-ordinate Reference: | Site Open Range 34 Fee #1H |
| Project: | Chaves Co, New Mexico (Nad-83) | TVD Reference: | WELL @ 3809.00ft (Original Well Elev) |
| Site: | Open Range 34 Fee #1H | MD Reference: | WELL @ 3809.00ft (Original Well Elev) |
| Well: | Open Range 34 Fee #1H | North Reference: | Grid |
| Wellbore: | Lateral #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Design #2 | Database: | EDM 2003.21 Single User Db |

| | | | |
|--------------------|--------------------------------|----------------------|----------------|
| Project | Chaves Co, New Mexico (Nad-83) | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | New Mexico Eastern Zone | | |

| | | | | | |
|------------------------------|---|---------------------|---------------|--------------------------|------------------|
| Site | Open Range 34 Fee #1H, Sec 34, T-11S, R-29E | | | | |
| Site Position: | | Northing: | 846,530.09 ft | Latitude: | 33° 19' 36.012 N |
| From: | Map | Easting: | 635,611.99 ft | Longitude: | 104° 1' 28.864 W |
| Position Uncertainty: | 0.00 ft | Slot Radius: | " | Grid Convergence: | 0.17 ° |

| | | | | | | |
|-----------------------------|-----------------------|---------|----------------------------|---------------|----------------------|------------------|
| Well | Open Range 34 Fee #1H | | | | | |
| Well Position | +N/-S | 0.00 ft | Northing: | 846,530.09 ft | Latitude: | 33° 19' 36.012 N |
| | +E/-W | 0.00 ft | Easting: | 635,611.99 ft | Longitude: | 104° 1' 28.864 W |
| Position Uncertainty | | 0.00 ft | Wellhead Elevation: | 3,809.00 ft | Ground Level: | 3,790.00 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Lateral #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF200510 | 06/15/10 | 7.99 | 61.17 | 49,358 |

| | | | | | |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|--|
| Design | Design #2 | | | | |
| Audit Notes: | | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.00 | |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) | |
| | 8,555.00 | 0.00 | 0.00 | 89.82 | |

| | | | | | |
|----------------------------|----------------|--------------------------|------------------|----------------------------------|--|
| Survey Tool Program | Date | 07/21/10 | | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 0.00 | 7,700.00 | Design #2 (Lateral #1) | NS-GYRO-MS | North sensing gyrocompassing m/s | |
| 7,700.00 | 12,118.72 | Design #2 (Lateral #1) | CUDD MWD | MWD - Standard CUDD MWD | |

| | | | | | | | | | | |
|----------------------------|------------------------|--------------------|----------------------------|-------------------|-------------------|------------------------------|------------------------------|-----------------------------|----------------------------|--|
| 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 | |
| 5,730.00 | 0.00 | 0.00 | 5,730.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Abo | | | | | | | | | | |
| 6,135.00 | 0.00 | 0.00 | 6,135.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Abo Dol. | | | | | | | | | | |
| 6,560.00 | 0.00 | 0.00 | 6,560.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Wolfcamp | | | | | | | | | | |
| 6,700.00 | 0.00 | 0.00 | 6,700.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Wolfcamp Mkr | | | | | | | | | | |
| 7,275.00 | 0.00 | 0.00 | 7,275.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Pennsylvanian | | | | | | | | | | |



CUDD Drilling & Measurement Services
Survey Report



| | | | |
|------------------|--------------------------------|-------------------------------------|---------------------------------------|
| Company: | Devon Energy | Local Co-ordinate Reference: | Site Open Range 34 Fee #1H |
| Project: | Chaves Co, New Mexico (Nad-83) | TVD Reference: | WELL @ 3809.00ft (Original Well Elev) |
| Site: | Open Range 34 Fee #1H | MD Reference: | WELL @ 3809.00ft (Original Well Elev) |
| Well: | Open Range 34 Fee #1H | North Reference: | Grid |
| Wellbore: | Lateral #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Design #2 | Database: | EDM 2003.21 Single User Db |

| 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) |
|---------------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 7,847.47 | 0.00 | 0.00 | 7,847.47 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7,847.53 | 0.00 | 89.82 | 7,847.53 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| KOP - Build 10°/100' | | | | | | | | | |
| 8,233.55 | 38.61 | 89.82 | 8,204.99 | 0.38 | 125.23 | 125.23 | 10.00 | 10.00 | 0.00 |
| Mississippian | | | | | | | | | |
| 8,274.50 | 42.70 | 89.82 | 8,236.05 | 0.46 | 151.90 | 151.90 | 10.00 | 10.00 | 0.00 |
| Mississippian Meramec | | | | | | | | | |
| 8,402.90 | 55.54 | 89.82 | 8,319.91 | 0.76 | 248.79 | 248.79 | 10.00 | 10.00 | 0.00 |
| Mississippian Osage | | | | | | | | | |
| 8,724.67 | 87.72 | 89.82 | 8,419.97 | 1.68 | 550.16 | 550.16 | 10.00 | 10.00 | 0.00 |
| 8,724.73 | 87.72 | 89.82 | 8,419.98 | 1.68 | 550.22 | 550.22 | 0.00 | 0.00 | 0.00 |
| EOC - Hold I:87.72* @ A:89.82* | | | | | | | | | |
| 12,118.72 | 87.72 | 89.82 | 8,555.00 | 12.04 | 3,941.51 | 3,941.53 | 0.00 | 0.00 | 0.00 |
| PBHL - TD (OR34F#1H) | | | | | | | | | |

| Target Name | Dip Angle (°) | Dip Dir (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
|----------------------|---------------|-------------|----------|------------|------------|---------------|--------------|------------------|------------------|
| PBHL - TD (OR34F#1H) | 0.00 | 359.85 | 8,555.00 | 12.04 | 3,941.51 | 846,542.13 | 639,553.49 | 33° 19' 36.013 N | 104° 0' 42.409 W |
| - hit/miss target | | | | | | | | | |
| - Shape | | | | | | | | | |
| - Point | | | | | | | | | |

| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|---------------------|---------------------|---------------------------|-----------|---------|-------------------|
| 5,730.00 | 5,730.00 | Abo | | 2.28 | 89.85 |
| 6,135.00 | 6,135.00 | Abo Dol. | | 2.28 | 89.85 |
| 6,560.00 | 6,560.00 | Wolfcamp | | 2.28 | 89.85 |
| 6,700.00 | 6,700.00 | Wolfcamp Mkr | | 2.28 | 89.85 |
| 7,275.00 | 7,275.00 | Pennsylvanian | | 2.28 | 89.85 |
| 8,233.55 | 8,200.00 | Mississippian | | 2.28 | 89.85 |
| 8,274.50 | 8,230.00 | Mississippian Meramec | | 2.28 | 89.85 |
| 8,402.90 | 8,310.00 | Mississippian Osage | | 2.28 | 89.85 |
| | 8,500.00 | Mississippian Lower Osage | | 2.28 | 89.85 |
| | 8,775.00 | Siluro-Devonian | | 2.28 | 89.85 |

| Measured Depth (ft) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Comment |
|---------------------|---------------------|------------|------------|--------------------------------|
| 7,847.53 | 7,847.53 | 0.00 | 0.00 | KOP - Build 10°/100' |
| 8,724.73 | 8,419.98 | 1.68 | 550.22 | EOC - Hold I:87.72* @ A:89.82* |

Checked By: _____ Approved By: _____ Date: _____

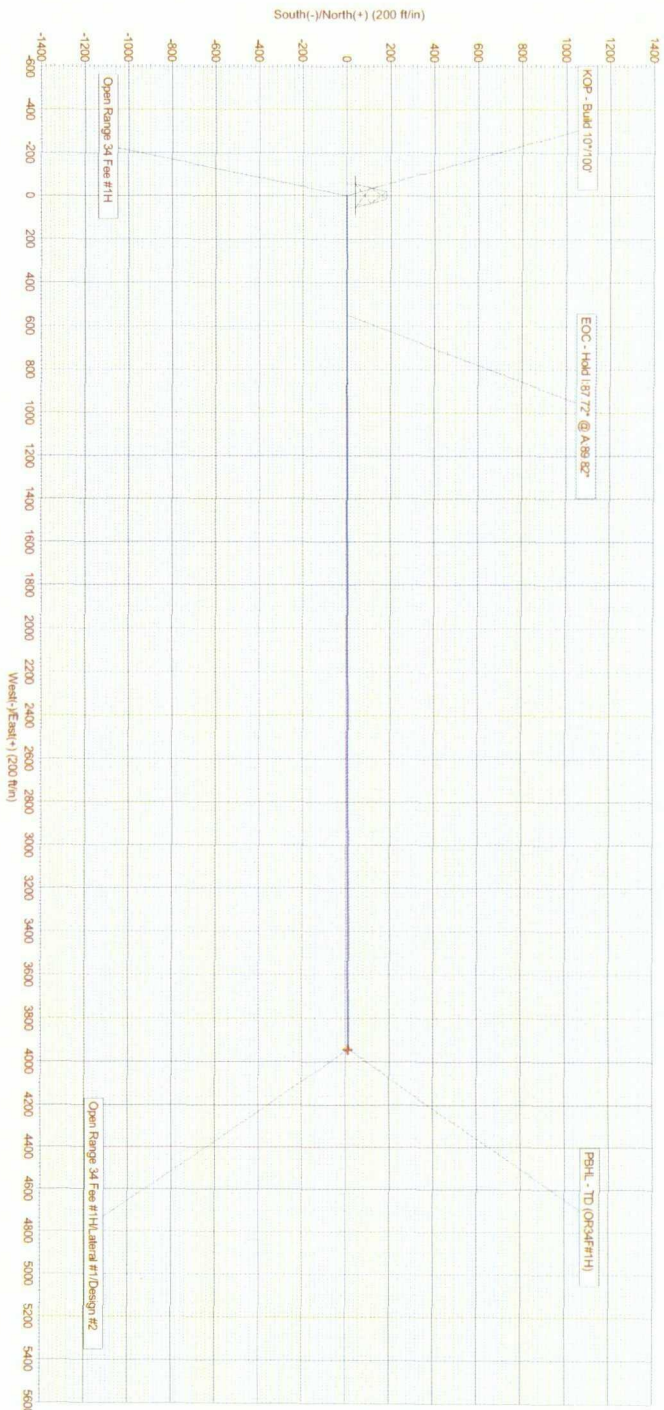


Project: Chavez Co. New Mexico (Nhd-33)
 Site: Open Range 34 Fee #1H
 Well: Open Range 34 Fee #1H
 Wellbore: Lateral #1
 Design: Design #2



Plan: Design #2 (Open Range 34 Fee #1H Lateral #1)

Created By: Mike Stacey Date: 10/31/2010
 Checked: _____ Date: _____
 Reviewed: _____ Date: _____
 Approved: _____ Date: _____



SECTION DETAILS

| Sec | MD | Inc | Asi | TVD | +N-S | +E-W | D.Leg | TFace | VSec | Target |
|-----|---------|-------|-------|--------|-------|--------|-------|-------|--------|---------------------|
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2 | 794.47 | 0.00 | 0.00 | 794.47 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 3 | 874.53 | 0.00 | 0.00 | 874.53 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 4 | 1218.72 | 87.72 | 88.82 | 855.00 | 12.04 | 394.51 | 0.00 | 0.00 | 394.51 | PBH - TD (ORCAF#1H) |

WELLSHOE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

| Name | TVD | +N-S | +E-W | Northing | Easting | Latitude | Longitude | Shape |
|---------------------|--------|-------|--------|-----------|-----------|-----------------|-----------------|-------|
| PBH - TD (ORCAF#1H) | 855.00 | 12.04 | 394.51 | 846542.13 | 639553.49 | 33°19'36.013" N | 104°0'42.209" W | Point |

ANNOTATIONS

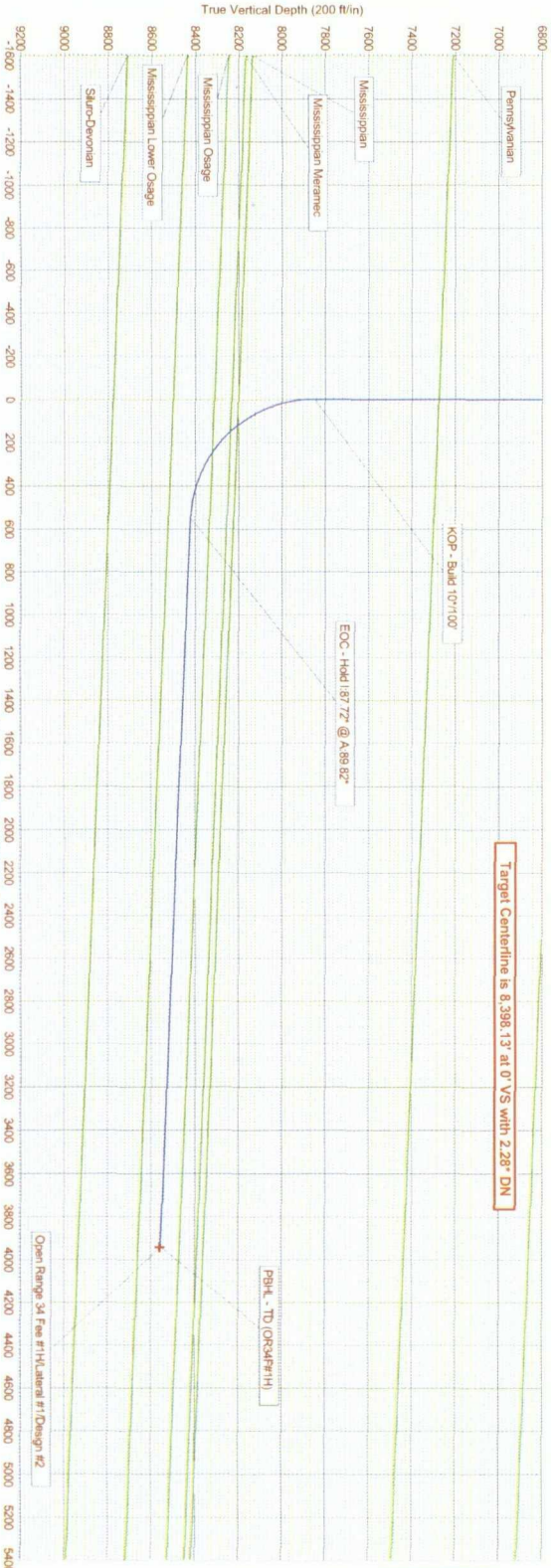
| TVD | MD | Annotation |
|---------|--------|-----------------------------|
| 794.47 | 794.47 | KOP - Buid 10'100' |
| 874.53 | 874.53 | ECC - Hdd 187.72' @ A88.82' |
| 8419.98 | | |

WELL DETAILS Open Range 34 Fee #1H

Ground Level: 3790.00

WELL @ 3899.00ft (Original VMI Elev)

| +N-S | +E-W | Northing | Latitude | Longitude | Slat |
|------|------|-----------|-----------------|-----------------|------|
| 0.00 | 0.00 | 846533.09 | 33°19'36.012" N | 104°0'23.964" W | |
| | | 633511.99 | | | |



Target Centerline is 8,398.13' at 0° VS with 2.28" DN

PROJECT DETAILS Chavez Co. New Mexico (Nhd-33)

Geoid System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980 Everest Zone
 System Datum: Mean Sea Level



Reviewed: 06/15/2010 at 09:00 AM

Open Range 34 Fee #1H_Plan #2_Report_07-21-10.txt

Devon Energy
Open Range 34 Fee #1H - Design #2

Chaves Co, New Mexico (Nad-83)
Open Range 34 Fee #1H

| Measured Depth (ft) | Incl. | Azim. | Vertical Depth (ft) | Northings (ft) | Eastings (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) |
|---------------------|-------|-------|---------------------|----------------|---------------|-----------------------|-----------------------|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 N | 0.00 E | 0.00 | 0.00 |
| 7847.47 | 0.00 | 0.00 | 7847.47 | 0.00 N | 0.00 E | 0.00 | 0.00 |
| 7900.00 | 5.25 | 89.82 | 7899.93 | 0.01 N | 2.41 E | 2.41 | 10.00 |
| 8000.00 | 15.25 | 89.82 | 7998.20 | 0.06 N | 20.18 E | 20.18 | 10.00 |
| 8100.00 | 25.25 | 89.82 | 8091.90 | 0.17 N | 54.76 E | 54.76 | 10.00 |
| 8200.00 | 35.25 | 89.82 | 8178.17 | 0.32 N | 105.07 E | 105.07 | 10.00 |
| 8300.00 | 45.25 | 89.82 | 8254.40 | 0.52 N | 169.61 E | 169.61 | 10.00 |
| 8400.00 | 55.25 | 89.82 | 8318.26 | 0.75 N | 246.40 E | 246.40 | 10.00 |
| 8500.00 | 65.25 | 89.82 | 8367.81 | 1.02 N | 333.11 E | 333.11 | 10.00 |
| 8600.00 | 75.25 | 89.82 | 8401.55 | 1.30 N | 427.11 E | 427.11 | 10.00 |
| 8700.00 | 85.25 | 89.82 | 8418.46 | 1.61 N | 525.54 E | 525.54 | 10.00 |
| 8724.67 | 87.72 | 89.82 | 8419.97 | 1.68 N | 550.16 E | 550.16 | 10.00 |
| 8800.00 | 87.72 | 89.82 | 8422.97 | 1.91 N | 625.43 E | 625.43 | 0.00 |
| 8900.00 | 87.72 | 89.82 | 8426.95 | 2.22 N | 725.35 E | 725.36 | 0.00 |
| 9000.00 | 87.72 | 89.82 | 8430.93 | 2.52 N | 825.27 E | 825.28 | 0.00 |
| 9100.00 | 87.72 | 89.82 | 8434.91 | 2.83 N | 925.19 E | 925.20 | 0.00 |
| 9200.00 | 87.72 | 89.82 | 8438.88 | 3.13 N | 1025.11 E | 1025.12 | 0.00 |
| 9300.00 | 87.72 | 89.82 | 8442.86 | 3.44 N | 1125.03 E | 1125.04 | 0.00 |
| 9400.00 | 87.72 | 89.82 | 8446.84 | 3.74 N | 1224.95 E | 1224.96 | 0.00 |
| 9500.00 | 87.72 | 89.82 | 8450.82 | 4.05 N | 1324.87 E | 1324.88 | 0.00 |
| 9600.00 | 87.72 | 89.82 | 8454.80 | 4.35 N | 1424.79 E | 1424.80 | 0.00 |
| 9700.00 | 87.72 | 89.82 | 8458.78 | 4.66 N | 1524.71 E | 1524.72 | 0.00 |
| 9800.00 | 87.72 | 89.82 | 8462.75 | 4.96 N | 1624.64 E | 1624.64 | 0.00 |
| 9900.00 | 87.72 | 89.82 | 8466.73 | 5.27 N | 1724.56 E | 1724.56 | 0.00 |
| 10000.00 | 87.72 | 89.82 | 8470.71 | 5.57 N | 1824.48 E | 1824.48 | 0.00 |
| 10100.00 | 87.72 | 89.82 | 8474.69 | 5.88 N | 1924.40 E | 1924.41 | 0.00 |
| 10200.00 | 87.72 | 89.82 | 8478.67 | 6.18 N | 2024.32 E | 2024.33 | 0.00 |
| 10300.00 | 87.72 | 89.82 | 8482.65 | 6.49 N | 2124.24 E | 2124.25 | 0.00 |
| 10400.00 | 87.72 | 89.82 | 8486.62 | 6.79 N | 2224.16 E | 2224.17 | 0.00 |
| 10500.00 | 87.72 | 89.82 | 8490.60 | 7.10 N | 2324.08 E | 2324.09 | 0.00 |
| 10600.00 | 87.72 | 89.82 | 8494.58 | 7.40 N | 2424.00 E | 2424.01 | 0.00 |
| 10700.00 | 87.72 | 89.82 | 8498.56 | 7.71 N | 2523.92 E | 2523.93 | 0.00 |
| 10800.00 | 87.72 | 89.82 | 8502.54 | 8.01 N | 2623.84 E | 2623.85 | 0.00 |
| 10900.00 | 87.72 | 89.82 | 8506.52 | 8.32 N | 2723.76 E | 2723.77 | 0.00 |
| 11000.00 | 87.72 | 89.82 | 8510.49 | 8.63 N | 2823.68 E | 2823.69 | 0.00 |
| 11100.00 | 87.72 | 89.82 | 8514.47 | 8.93 N | 2923.60 E | 2923.61 | 0.00 |
| 11200.00 | 87.72 | 89.82 | 8518.45 | 9.24 N | 3023.52 E | 3023.53 | 0.00 |
| 11300.00 | 87.72 | 89.82 | 8522.43 | 9.54 N | 3123.44 E | 3123.46 | 0.00 |
| 11400.00 | 87.72 | 89.82 | 8526.41 | 9.85 N | 3223.36 E | 3223.38 | 0.00 |
| 11500.00 | 87.72 | 89.82 | 8530.39 | 10.15 N | 3323.28 E | 3323.30 | 0.00 |
| 11600.00 | 87.72 | 89.82 | 8534.36 | 10.46 N | 3423.20 E | 3423.22 | 0.00 |
| 11700.00 | 87.72 | 89.82 | 8538.34 | 10.76 N | 3523.12 E | 3523.14 | 0.00 |
| 11800.00 | 87.72 | 89.82 | 8542.32 | 11.07 N | 3623.04 E | 3623.06 | 0.00 |
| 11900.00 | 87.72 | 89.82 | 8546.30 | 11.37 N | 3722.96 E | 3722.98 | 0.00 |
| 12000.00 | 87.72 | 89.82 | 8550.28 | 11.68 N | 3822.88 E | 3822.90 | 0.00 |
| 12100.00 | 87.72 | 89.82 | 8554.26 | 11.98 N | 3922.80 E | 3922.82 | 0.00 |
| 12118.72 | 87.72 | 89.82 | 8555.00 | 12.04 N | 3941.51 E | 3941.53 | 0.00 |

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to WELL. Northings and Eastings are relative to Site.

Open Range 34 Fee #1H_Plan #2_Report_07-21-10.txt

The Dogleg Severity is in Degrees per 100 feet.

Vertical Section is from Slot and calculated along an Azimuth of 89.820° (Grid).

Coordinate System is North American Datum 1983 US State Plane 1983, New Mexico Eastern Zone.

Central meridian is -104.333°.

Grid Convergence at Surface is 0.170°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 12118.72ft., the Bottom Hole Displacement is 3941.53ft., in the Direction of 89.820° (Grid).