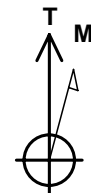
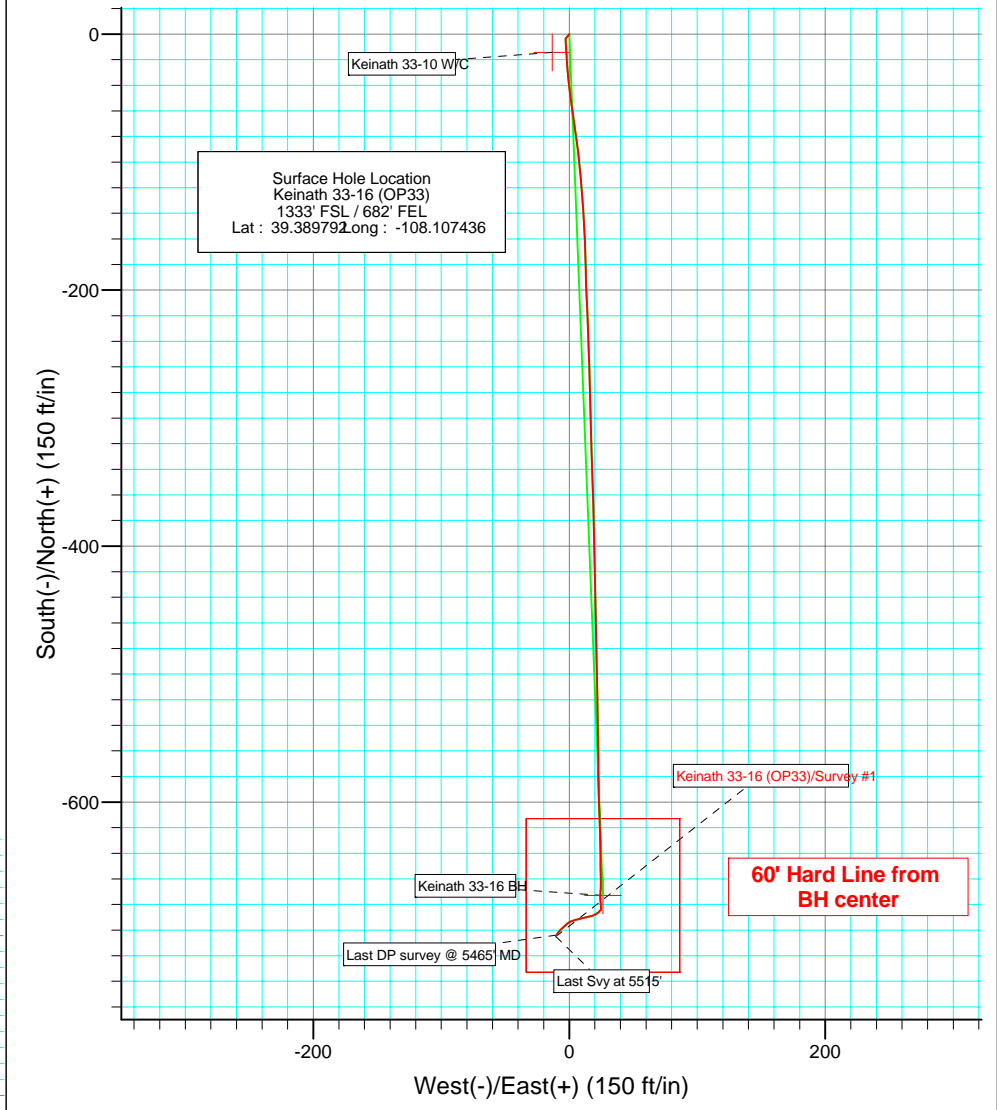
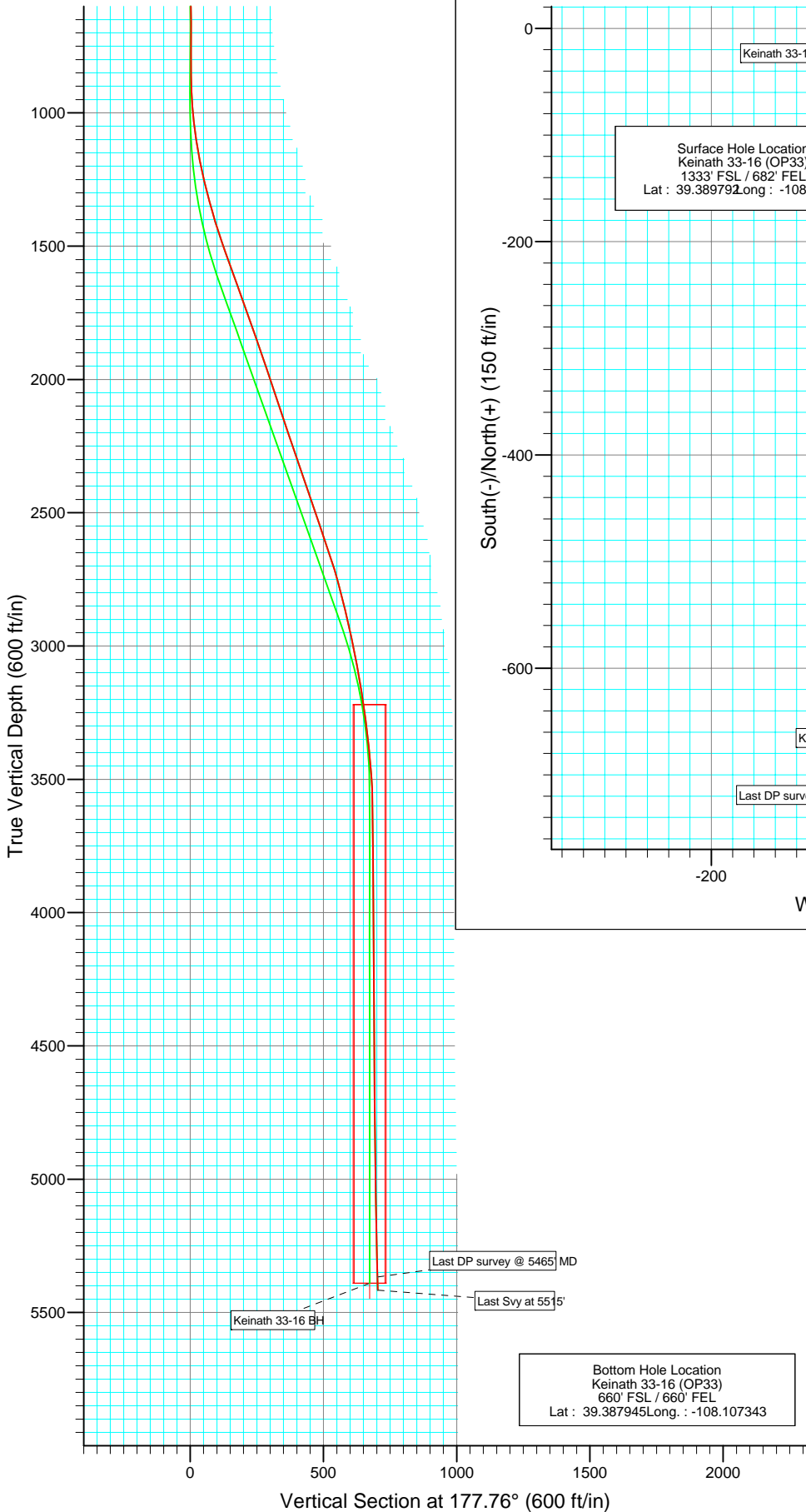




Project: S. Piceance
 Site: SESE Sec33-T7S-R96W (OP33)
 Well: Keinath 33-16 (OP33)
 Wellbore: DD
 Design: Survey



Azimuths to True North
 Magnetic North: 10.89°

Magnetic Field
 Strength: 52613.0snT
 Dip Angle: 65.75°
 Date: 5/25/2007
 Model: IGRF200510

DESIGN DETAILS: DD

Job#: 75231; DS
 KBE @ 5060.0ft (SST#1)

| Target | Azimuth | Origin | N/S | E/W | From TVD |
|------------------|---------|--------|-----|-----|----------|
| Keinath 33-16 BH | 177.76 | Slot | 0.0 | 0.0 | 0.0 |

Cathedral Energy Services

Survey Report

| | |
|--|---|
| Company: EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: Well Keinath 33-16 (OP33) |
| Project: S. Piceance | TVD Reference: KBE @ 5060.0ft (SST#1) |
| Site: SESE Sec33-T7S-R96W (OP33) | MD Reference: KBE @ 5060.0ft (SST#1) |
| Well: Keinath 33-16 (OP33) | North Reference: True |
| Wellbore: DD | Survey Calculation Method: Minimum Curvature |
| Design: DD | Database: EDM 2003.16 US Multi User Db |

| | | |
|---|----------------------|----------------|
| Project S. Piceance, Garfield County, CO | | |
| Map System: US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: North American Datum 1983 | | |
| Map Zone: Colorado Central Zone | | |

| | | | | |
|--|-----------------------|-----------------|--------------------------|-------------|
| Site SESE Sec33-T7S-R96W (OP33) | | | | |
| Site Position: | Northing: | 1,577,451.59 ft | Latitude: | 39.389833 |
| From: Lat/Long | Easting: | 2,263,185.75 ft | Longitude: | -108.107386 |
| Position Uncertainty: 0.0 ft | Slot Radius: " | | Grid Convergence: | -1.64 ° |

| | | | | |
|----------------------------------|--------------|--------|----------------------------|-----------------|
| Well Keinath 33-16 (OP33) | | | | |
| Well Position | +N/-S | 0.0 ft | Northing: | 1,577,437.06 ft |
| | +E/-W | 0.0 ft | Easting: | 2,263,171.20 ft |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft |
| | | | Ground Level: | 5,046.0 ft |

| | | | | | |
|--------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore DD | | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF200510 | 5/25/2007 | 10.89 | 65.75 | 52,613 |

| | | | | |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|
| Design DD | | | | |
| Audit Notes: | | | | |
| Version: 1.0 | Phase: | ACTUAL | Tie On Depth: | |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) |
| | 0.0 | 0.0 | 0.0 | 177.76 |

| | | |
|-----------------------|----------------|--------------------------|
| Survey Program | | Date 6/13/2007 |
| From (ft) | To (ft) | Survey (Wellbore) |
| 848.0 | 5,515.0 | Survey #1 (DD) |
| | | Tool Name |
| | | MWD |
| | | Description |
| | | Geolink MWD |

| Survey | | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|-----------------------|----------------------|-----------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Formations / Comments |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 848.0 | 0.60 | 218.30 | 848.0 | -3.5 | -2.8 | 3.4 | 0.07 | 0.07 | 0.07 | |
| 878.0 | 0.50 | 186.20 | 878.0 | -3.7 | -2.9 | 3.6 | 1.06 | 1.06 | -0.33 | |
| 909.0 | 1.80 | 177.00 | 909.0 | -4.4 | -2.9 | 4.2 | 4.22 | 4.22 | 4.19 | |
| 940.0 | 3.10 | 176.50 | 939.9 | -5.7 | -2.8 | 5.6 | 4.19 | 4.19 | 4.19 | |
| 970.0 | 4.70 | 177.70 | 969.9 | -7.7 | -2.7 | 7.6 | 5.34 | 5.34 | 5.33 | |
| 1,001.0 | 5.50 | 178.00 | 1,000.8 | -10.5 | -2.6 | 10.4 | 2.58 | 2.58 | 2.58 | |
| 1,032.0 | 6.20 | 175.90 | 1,031.6 | -13.6 | -2.4 | 13.5 | 2.36 | 2.36 | 2.26 | |
| 1,064.0 | 7.20 | 176.30 | 1,063.4 | -17.4 | -2.1 | 17.3 | 3.13 | 3.13 | 3.13 | |
| 1,096.0 | 8.60 | 175.40 | 1,095.1 | -21.7 | -1.8 | 21.7 | 4.39 | 4.39 | 4.38 | |
| 1,127.0 | 9.40 | 176.30 | 1,125.7 | -26.6 | -1.5 | 26.5 | 2.62 | 2.62 | 2.58 | |
| 1,159.0 | 10.20 | 174.00 | 1,157.2 | -32.0 | -1.0 | 31.9 | 2.78 | 2.78 | 2.50 | |
| 1,191.0 | 11.50 | 174.00 | 1,188.6 | -38.0 | -0.4 | 37.9 | 4.06 | 4.06 | 4.06 | |

Cathedral Energy Services

Survey Report

| | | | |
|------------------|----------------------------|-------------------------------------|------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Keinath 33-16 (OP33) |
| Project: | S. Piceance | TVD Reference: | KBE @ 5060.0ft (SST#1) |
| Site: | SESE Sec33-T7S-R96W (OP33) | MD Reference: | KBE @ 5060.0ft (SST#1) |
| Well: | Keinath 33-16 (OP33) | North Reference: | True |
| Wellbore: | DD | Survey Calculation Method: | Minimum Curvature |
| Design: | DD | Database: | EDM 2003.16 US Multi User Db |

| Survey | | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|-----------------------|----------------------|-----------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Formations / Comments |
| 1,222.0 | 12.40 | 173.10 | 1,219.0 | -44.4 | 0.3 | 44.3 | 2.96 | 2.96 | 2.90 | |
| 1,253.0 | 13.20 | 172.80 | 1,249.2 | -51.2 | 1.2 | 51.2 | 2.59 | 2.59 | 2.58 | |
| 1,285.0 | 14.00 | 171.40 | 1,280.3 | -58.6 | 2.2 | 58.7 | 2.70 | 2.70 | 2.50 | |
| 1,348.0 | 15.40 | 171.70 | 1,341.2 | -74.5 | 4.6 | 74.6 | 2.23 | 2.23 | 2.22 | |
| 1,411.0 | 16.80 | 173.30 | 1,401.8 | -91.8 | 6.8 | 92.0 | 2.33 | 2.33 | 2.22 | |
| 1,474.0 | 18.10 | 175.20 | 1,461.9 | -110.6 | 8.7 | 110.8 | 2.25 | 2.25 | 2.06 | |
| 1,537.0 | 19.70 | 175.20 | 1,521.5 | -130.9 | 10.4 | 131.2 | 2.54 | 2.54 | 2.54 | |
| 1,632.0 | 20.30 | 178.80 | 1,610.7 | -163.3 | 12.1 | 163.7 | 1.44 | 1.44 | 0.63 | |
| 1,726.0 | 19.60 | 177.70 | 1,699.1 | -195.4 | 13.1 | 195.8 | 0.84 | 0.84 | -0.74 | |
| 1,821.0 | 19.30 | 177.40 | 1,788.7 | -227.0 | 14.4 | 227.4 | 0.33 | 0.33 | -0.32 | |
| 1,915.0 | 19.20 | 178.10 | 1,877.4 | -258.0 | 15.7 | 258.4 | 0.27 | 0.27 | -0.11 | |
| 2,009.0 | 18.60 | 179.10 | 1,966.4 | -288.4 | 16.4 | 288.8 | 0.73 | 0.73 | -0.64 | |
| 2,073.0 | 18.90 | 178.20 | 2,027.0 | -309.0 | 16.9 | 309.4 | 0.65 | 0.65 | 0.47 | |
| 2,168.0 | 18.10 | 177.90 | 2,117.0 | -339.1 | 17.9 | 339.5 | 0.85 | 0.85 | -0.84 | |
| 2,262.0 | 18.60 | 178.90 | 2,206.3 | -368.7 | 18.7 | 369.1 | 0.63 | 0.63 | 0.53 | |
| 2,357.0 | 19.50 | 178.60 | 2,296.1 | -399.7 | 19.4 | 400.1 | 0.95 | 0.95 | 0.95 | |
| 2,451.0 | 18.20 | 178.60 | 2,385.0 | -430.0 | 20.2 | 430.5 | 1.38 | 1.38 | -1.38 | |
| 2,547.0 | 18.60 | 178.70 | 2,476.1 | -460.3 | 20.9 | 460.8 | 0.42 | 0.42 | 0.42 | |
| 2,642.0 | 19.70 | 179.80 | 2,565.9 | -491.5 | 21.3 | 491.9 | 1.22 | 1.22 | 1.16 | |
| 2,674.0 | 19.20 | 178.50 | 2,596.0 | -502.1 | 21.4 | 502.6 | 2.07 | 2.07 | -1.56 | |
| 2,736.0 | 18.30 | 178.40 | 2,654.7 | -522.1 | 22.0 | 522.5 | 1.45 | 1.45 | -1.45 | |
| 2,799.0 | 16.60 | 178.80 | 2,714.8 | -540.9 | 22.4 | 541.4 | 2.71 | 2.71 | -2.70 | |
| 2,863.0 | 14.90 | 179.80 | 2,776.4 | -558.3 | 22.6 | 558.8 | 2.69 | 2.69 | -2.66 | |
| 2,894.0 | 14.90 | 179.80 | 2,806.4 | -566.3 | 22.7 | 566.7 | 0.00 | 0.00 | 0.00 | |
| 2,957.0 | 13.30 | 178.80 | 2,867.5 | -581.6 | 22.9 | 582.1 | 2.57 | 2.57 | -2.54 | |
| 2,989.0 | 13.20 | 180.10 | 2,898.6 | -589.0 | 22.9 | 589.4 | 0.98 | 0.98 | -0.31 | |
| 3,051.0 | 11.60 | 177.20 | 2,959.2 | -602.3 | 23.2 | 602.7 | 2.77 | 2.77 | -2.58 | |
| 3,145.0 | 10.90 | 179.10 | 3,051.4 | -620.6 | 23.8 | 621.1 | 0.84 | 0.84 | -0.74 | |
| 3,176.0 | 10.50 | 178.10 | 3,081.8 | -626.4 | 24.0 | 626.8 | 1.42 | 1.42 | -1.29 | |
| 3,208.0 | 10.50 | 176.90 | 3,113.3 | -632.2 | 24.2 | 632.6 | 0.68 | 0.68 | 0.00 | |
| 3,271.0 | 8.80 | 181.10 | 3,175.4 | -642.7 | 24.4 | 643.2 | 2.92 | 2.92 | -2.70 | |
| 3,334.0 | 8.10 | 178.20 | 3,237.7 | -652.0 | 24.5 | 652.4 | 1.30 | 1.30 | -1.11 | |
| 3,397.0 | 7.20 | 179.40 | 3,300.2 | -660.4 | 24.7 | 660.8 | 1.45 | 1.45 | -1.43 | |
| 3,460.0 | 6.10 | 182.60 | 3,362.7 | -667.7 | 24.5 | 668.1 | 1.84 | 1.84 | -1.75 | |
| 3,492.0 | 6.10 | 183.90 | 3,394.6 | -671.1 | 24.4 | 671.5 | 0.43 | 0.43 | 0.00 | |
| 3,524.0 | 5.40 | 180.30 | 3,426.4 | -674.3 | 24.2 | 674.7 | 2.46 | 2.46 | -2.19 | |
| 3,555.0 | 4.90 | 176.70 | 3,457.3 | -677.0 | 24.3 | 677.5 | 1.92 | 1.92 | -1.61 | |
| 3,587.0 | 4.00 | 174.30 | 3,489.2 | -679.5 | 24.5 | 679.9 | 2.87 | 2.87 | -2.81 | |
| 3,618.0 | 3.10 | 172.90 | 3,520.1 | -681.4 | 24.7 | 681.9 | 2.92 | 2.92 | -2.90 | |
| 3,649.0 | 2.00 | 177.80 | 3,551.1 | -682.8 | 24.8 | 683.2 | 3.61 | 3.61 | -3.55 | |
| 3,681.0 | 0.90 | 194.50 | 3,583.1 | -683.6 | 24.8 | 684.0 | 3.65 | 3.65 | -3.44 | |
| 3,713.0 | 0.70 | 216.50 | 3,615.1 | -684.0 | 24.6 | 684.4 | 1.13 | 1.13 | -0.63 | |
| 3,808.0 | 1.00 | 213.70 | 3,710.1 | -685.1 | 23.8 | 685.6 | 0.32 | 0.32 | 0.32 | |
| 3,903.0 | 0.60 | 233.60 | 3,805.1 | -686.1 | 22.9 | 686.5 | 0.51 | 0.51 | -0.42 | |
| 3,997.0 | 0.70 | 244.20 | 3,899.0 | -686.7 | 22.0 | 687.0 | 0.17 | 0.17 | 0.11 | |
| 4,091.0 | 0.70 | 231.70 | 3,993.0 | -687.3 | 21.1 | 687.6 | 0.16 | 0.16 | 0.00 | |
| 4,186.0 | 1.20 | 239.10 | 4,088.0 | -688.2 | 19.7 | 688.4 | 0.54 | 0.54 | 0.53 | |
| 4,279.0 | 0.70 | 254.90 | 4,181.0 | -688.8 | 18.4 | 689.0 | 0.60 | 0.60 | -0.54 | |
| 4,373.0 | 1.10 | 257.70 | 4,275.0 | -689.1 | 16.9 | 689.3 | 0.43 | 0.43 | 0.43 | |
| 4,468.0 | 1.30 | 259.40 | 4,370.0 | -689.5 | 15.0 | 689.6 | 0.21 | 0.21 | 0.21 | |
| 4,563.0 | 1.50 | 255.40 | 4,465.0 | -690.0 | 12.7 | 690.0 | 0.23 | 0.23 | 0.21 | |
| 4,688.0 | 2.20 | 256.40 | 4,589.9 | -691.0 | 8.8 | 690.8 | 0.56 | 0.56 | 0.56 | |
| 4,783.0 | 2.30 | 254.10 | 4,684.8 | -692.0 | 5.2 | 691.6 | 0.14 | 0.14 | 0.11 | |

Cathedral Energy Services

Survey Report

| | |
|--|---|
| Company: EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: Well Keinath 33-16 (OP33) |
| Project: S. Piceance | TVD Reference: KBE @ 5060.0ft (SST#1) |
| Site: SESE Sec33-T7S-R96W (OP33) | MD Reference: KBE @ 5060.0ft (SST#1) |
| Well: Keinath 33-16 (OP33) | North Reference: True |
| Wellbore: DD | Survey Calculation Method: Minimum Curvature |
| Design: DD | Database: EDM 2003.16 US Multi User Db |

| Survey | | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|-----------------------|----------------------|---------------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Formations / Comments |
| 4,846.0 | 1.80 | 249.70 | 4,747.8 | -692.7 | 3.1 | 692.3 | 0.83 | 0.83 | -0.79 | |
| 4,940.0 | 1.50 | 248.50 | 4,841.7 | -693.6 | 0.5 | 693.1 | 0.32 | 0.32 | -0.32 | |
| 5,034.0 | 1.60 | 228.60 | 4,935.7 | -694.9 | -1.6 | 694.4 | 0.58 | 0.58 | 0.11 | |
| 5,129.0 | 1.80 | 224.90 | 5,030.7 | -696.9 | -3.7 | 696.2 | 0.24 | 0.24 | 0.21 | |
| 5,253.0 | 1.70 | 229.30 | 5,154.6 | -699.5 | -6.4 | 698.7 | 0.14 | 0.14 | -0.08 | |
| 5,380.0 | 1.50 | 215.70 | 5,281.6 | -702.0 | -8.8 | 701.2 | 0.34 | 0.34 | -0.16 | |
| 5,465.0 | 1.40 | 208.50 | 5,366.5 | -703.9 | -10.0 | 702.9 | 0.24 | 0.24 | -0.12 | Last DP survey @ 5465' MD |
| 5,515.0 | 1.30 | 204.26 | 5,416.5 | -704.9 | -10.5 | 704.0 | 0.28 | 0.28 | -0.20 | Last Svy at 5515' |

| Targets | | | | | | | | | | | |
|--|-------------------|---------|---------------|--------------|----------|------------|------------|---------------|--------------|-----------|-------------|
| Target Name | - hit/miss target | - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
| Keinath 33-10 W/C | | | 0.00 | 0.00 | 0.0 | -14.2 | -13.3 | 1,577,423.25 | 2,263,157.51 | 39.389753 | -108.107483 |
| - survey misses by 19.4ft at 0.1ft MD (0.1 TVD, 0.0 N, 0.0 E) | | | | | | | | | | | |
| - Point | | | | | | | | | | | |
| Keinath 33-16 BH | | | 0.00 | 0.00 | 5,390.0 | -672.8 | 26.3 | 1,576,763.78 | 2,263,178.14 | 39.387945 | -108.107343 |
| - survey misses by 53.2ft at 5465.0ft MD (5366.5 TVD, -703.9 N, -10.0 E) | | | | | | | | | | | |
| - Rectangle (sides W120.0 H120.0 D0.0) | | | | | | | | | | | |

| Survey Annotations | | | | | |
|---------------------|---------------------|-------------------|------------|---------------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment | |
| | | +N/-S (ft) | +E/-W (ft) | | |
| 5,465.0 | 5,366.5 | -703.9 | -10.0 | Last DP survey @ 5465' MD | |
| 5,515.0 | 5,416.5 | -704.9 | -10.5 | Last Svy at 5515' | |

| | | |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|