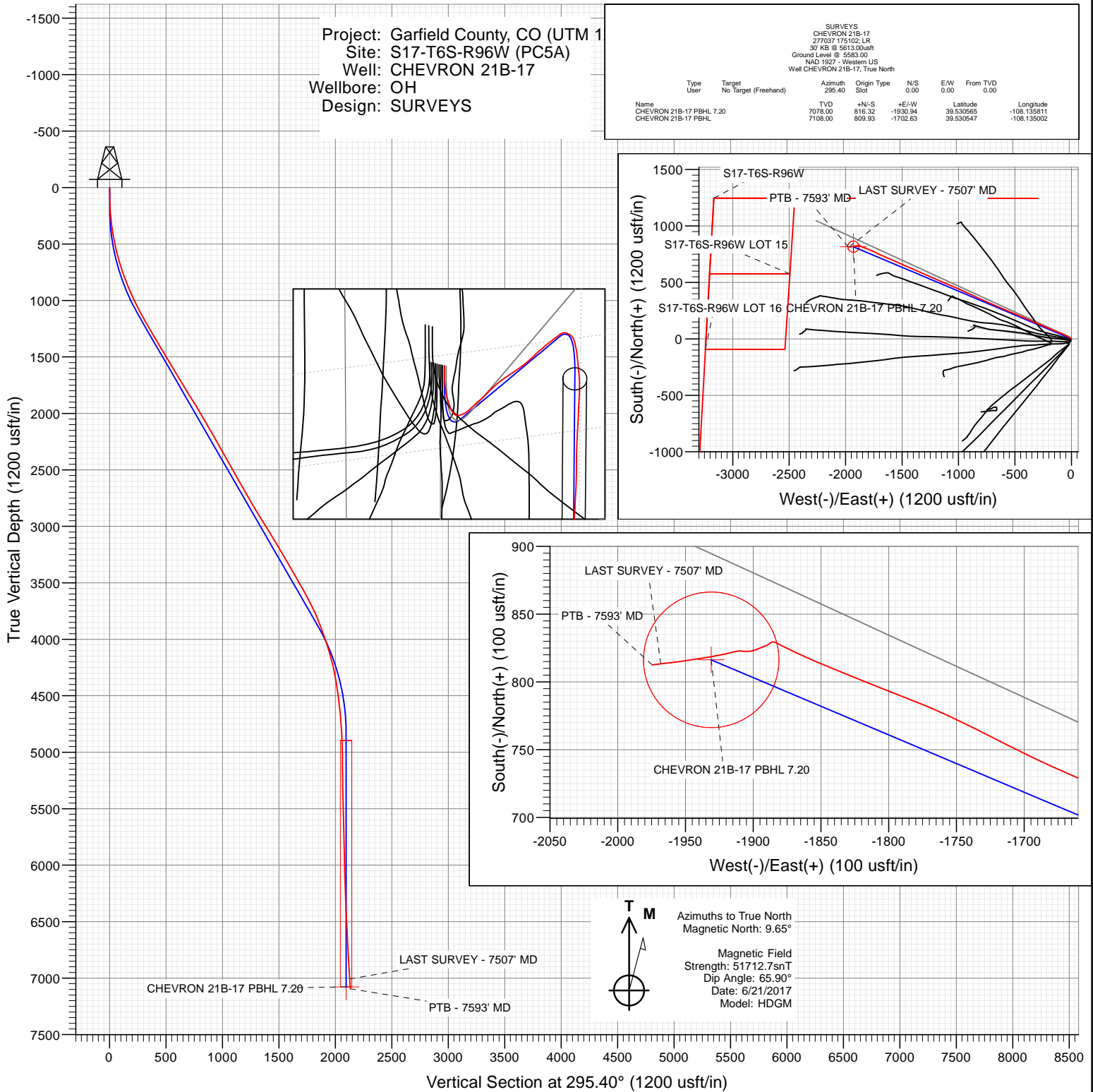




Project: Garfield County, CO (UTM 1
Site: S17-T6S-R96W (PC5A)
Well: CHEVRON 21B-17
Wellbore: OH
Design: SURVEYS

| SURVEYS | | | | | | | | | |
|---------------------------------|----------------------|---------|-------------|----------|-----------|-------------|--|--|--|
| CHEVRON 21B-17 | | | | | | | | | |
| 277037 175102 LR | | | | | | | | | |
| 30 KB @ 5613.00usft | | | | | | | | | |
| Ground Level @ 5583.00 | | | | | | | | | |
| NAD 1927 - Western US | | | | | | | | | |
| Well CHEVRON 21B-17, True North | | | | | | | | | |
| Type | Target | Azimuth | Origin Type | N/S | E/W | From TVD | | | |
| User | No Target (Freehand) | 295.40 | Spot | 0.00 | 0.00 | 0.00 | | | |
| Name | | TVD | +N/-S | +E/-W | Latitude | Longitude | | | |
| CHEVRON 21B-17 PBHL 7.20 | | 7078.00 | 816.32 | -1930.94 | 39.530565 | -108.135811 | | | |
| CHEVRON 21B-17 PBHL | | 7108.00 | 809.93 | -1702.63 | 39.530547 | -108.135002 | | | |



WELL DETAILS: CHEVRON 21B-17

| | | | | | | |
|-------|-------|-------------|---------------|------------|-----------|-------------|
| +N/-S | +E/-W | Northing | Ground Level: | 5583.00 | Latitude | Longitude |
| 0.00 | 0.00 | 14367214.80 | Easting | 2450042.60 | 39.528325 | -108.128968 |



Cathedral Energy Services

Survey Report

| | | | |
|------------------|-------------------------------|-------------------------------------|-----------------------------|
| Company: | Caerus Oil & Gas | Local Co-ordinate Reference: | Well CHEVRON 21B-17 |
| Project: | Garfield County, CO (UTM 12N) | TVD Reference: | 30' KB @ 5613.00usft |
| Site: | S17-T6S-R96W (PC5A) | MD Reference: | 30' KB @ 5613.00usft |
| Well: | CHEVRON 21B-17 | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | SURVEYS | Database: | USA EDM 5000 Multi Users DB |

| | | | |
|--------------------|--|----------------------|----------------|
| Project | Garfield County, CO (UTM 12N) | | |
| Map System: | Universal Transverse Mercator (US Survey Feet) | System Datum: | Mean Sea Level |
| Geo Datum: | NAD 1927 - Western US | | |
| Map Zone: | Zone 12N (114 W to 108 W) | | |

| | | | | | |
|-----------------------|-----------|---------------------|--------------------|-------------------|-------------|
| Site | | S17-T6S-R96W (PC5A) | | | |
| Site Position: | | Northing: | 14,367,212.50 usft | Latitude: | 39.528318 |
| From: | Map | Easting: | 2,450,041.70 usft | Longitude: | -108.128972 |
| Position Uncertainty: | 0.00 usft | Slot Radius: | 13-3/16 " | Grid Convergence: | 1.83 ° |

| Well | CHEVRON 21B-17 | | | | | |
|----------------------|----------------|-----------|---------------------|--------------------|---------------|---------------|
| Well Position | +N/-S | 0.00 usft | Northing: | 14,367,214.80 usft | Latitude: | 39.528325 |
| | +E/-W | 0.00 usft | Easting: | 2,450,042.60 usft | Longitude: | -108.128968 |
| Position Uncertainty | | 0.00 usft | Wellhead Elevation: | 0.00 usft | Ground Level: | 5,583.00 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | OH | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | HDGM | 6/21/2017 | 9.65 | 65.90 | 51,712.70000000 |

| | | | | | |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|------|
| Design | SURVEYS | | | | |
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) | |
| | 0.00 | 0.00 | 0.00 | 295.40 | |

| | | | | | |
|-----------------------|------------------|--------------------------|------------------|--------------------|--|
| Survey Program | Date | 6/29/2017 | | | |
| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description | |
| 118.00 | 7,593.00 | Survey #1 (OH) | MWD+HDGM | OWSG MWD + HDGM | |

| | | | | | | | | | | |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|-------------------------------|----------------------------|------------------------------|--|
| Survey | | | | | | | | | | |
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usf) | Build Rate (°/100u) | Formations / Comments | |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| 118.00 | 1.45 | 300.49 | 117.99 | 0.76 | -1.29 | 1.49 | 1.23 | 1.23 | | |
| 148.00 | 2.29 | 293.02 | 147.97 | 1.18 | -2.17 | 2.46 | 2.91 | 2.80 | | |
| 209.00 | 4.04 | 300.05 | 208.88 | 2.74 | -5.15 | 5.82 | 2.93 | 2.87 | | |
| 301.00 | 6.77 | 307.52 | 300.46 | 7.66 | -12.25 | 14.36 | 3.06 | 2.97 | | |
| 394.00 | 8.97 | 308.05 | 392.58 | 15.47 | -22.31 | 26.79 | 2.37 | 2.37 | | |
| 486.00 | 11.51 | 296.71 | 483.11 | 24.02 | -36.16 | 42.97 | 3.51 | 2.76 | | |
| 577.00 | 13.98 | 295.04 | 571.87 | 32.75 | -54.24 | 63.04 | 2.74 | 2.71 | | |
| 672.00 | 16.57 | 292.40 | 663.50 | 42.78 | -77.16 | 88.05 | 2.82 | 2.73 | | |
| 766.00 | 18.94 | 291.09 | 753.02 | 53.37 | -103.79 | 116.65 | 2.56 | 2.52 | | |
| 860.00 | 21.67 | 292.23 | 841.17 | 65.43 | -134.10 | 149.20 | 2.93 | 2.90 | | |
| 954.00 | 24.87 | 293.55 | 927.51 | 79.90 | -168.29 | 186.29 | 3.45 | 3.40 | | |
| 1,083.00 | 25.53 | 292.14 | 1,044.24 | 101.21 | -218.91 | 241.16 | 0.69 | 0.51 | | |

Cathedral Energy Services

Survey Report

| | | | |
|------------------|-------------------------------|-------------------------------------|-----------------------------|
| Company: | Caerus Oil & Gas | Local Co-ordinate Reference: | Well CHEVRON 21B-17 |
| Project: | Garfield County, CO (UTM 12N) | TVD Reference: | 30' KB @ 5613.00usft |
| Site: | S17-T6S-R96W (PC5A) | MD Reference: | 30' KB @ 5613.00usft |
| Well: | CHEVRON 21B-17 | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | SURVEYS | Database: | USA EDM 5000 Multi Users DB |

Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usf) | Build Rate (°/100u) | Formations / Comments |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|---------------------|-----------------------|
| 1,178.00 | 28.13 | 294.69 | 1,129.00 | 118.29 | -258.22 | 284.00 | 2.99 | 2.74 | |
| 1,272.00 | 30.63 | 293.99 | 1,210.91 | 137.28 | -300.24 | 330.10 | 2.68 | 2.66 | |
| 1,367.00 | 31.07 | 292.49 | 1,292.47 | 156.50 | -345.00 | 378.78 | 0.93 | 0.46 | |
| 1,461.00 | 30.98 | 291.79 | 1,373.02 | 174.76 | -389.88 | 427.15 | 0.40 | -0.10 | |
| 1,556.00 | 30.76 | 293.64 | 1,454.56 | 193.58 | -434.84 | 475.84 | 1.03 | -0.23 | |
| 1,649.00 | 29.97 | 293.02 | 1,534.81 | 212.20 | -478.00 | 522.82 | 0.91 | -0.85 | |
| 1,744.00 | 31.16 | 293.20 | 1,616.61 | 231.16 | -522.43 | 571.09 | 1.26 | 1.25 | |
| 1,838.00 | 31.03 | 290.73 | 1,697.10 | 249.32 | -567.45 | 619.54 | 1.36 | -0.14 | |
| 1,933.00 | 31.86 | 294.25 | 1,778.16 | 268.28 | -613.21 | 669.02 | 2.12 | 0.87 | |
| 2,027.00 | 31.82 | 292.67 | 1,858.01 | 288.02 | -658.70 | 718.57 | 0.89 | -0.04 | |
| 2,122.00 | 31.25 | 294.78 | 1,938.99 | 308.01 | -704.19 | 768.23 | 1.31 | -0.60 | |
| 2,216.00 | 30.06 | 293.28 | 2,019.85 | 327.53 | -747.95 | 816.14 | 1.50 | -1.27 | |
| 2,311.00 | 30.94 | 295.22 | 2,101.71 | 347.34 | -791.90 | 864.34 | 1.39 | 0.93 | |
| 2,405.00 | 29.00 | 294.07 | 2,183.13 | 366.93 | -834.57 | 911.29 | 2.15 | -2.06 | |
| 2,499.00 | 29.93 | 295.13 | 2,264.97 | 386.19 | -876.61 | 957.52 | 1.13 | 0.99 | |
| 2,594.00 | 29.97 | 295.39 | 2,347.29 | 406.42 | -919.50 | 1,004.95 | 0.14 | 0.04 | |
| 2,688.00 | 29.66 | 295.22 | 2,428.85 | 426.40 | -961.75 | 1,051.69 | 0.34 | -0.33 | |
| 2,783.00 | 29.05 | 293.46 | 2,511.65 | 445.60 | -1,004.18 | 1,098.24 | 1.11 | -0.64 | |
| 2,877.00 | 28.78 | 291.61 | 2,593.93 | 463.02 | -1,046.15 | 1,143.63 | 0.99 | -0.29 | |
| 2,972.00 | 29.36 | 292.32 | 2,676.97 | 480.29 | -1,088.96 | 1,189.71 | 0.71 | 0.61 | |
| 3,066.00 | 30.02 | 293.11 | 2,758.62 | 498.27 | -1,131.90 | 1,236.21 | 0.82 | 0.70 | |
| 3,161.00 | 31.55 | 294.43 | 2,840.24 | 517.88 | -1,176.39 | 1,284.81 | 1.76 | 1.61 | |
| 3,255.00 | 31.60 | 293.73 | 2,920.32 | 537.96 | -1,221.33 | 1,334.02 | 0.39 | 0.05 | |
| 3,350.00 | 31.86 | 293.20 | 3,001.12 | 557.85 | -1,267.16 | 1,383.95 | 0.40 | 0.27 | |
| 3,444.00 | 31.20 | 294.87 | 3,081.25 | 577.86 | -1,312.05 | 1,433.09 | 1.16 | -0.70 | |
| 3,539.00 | 31.03 | 293.72 | 3,162.58 | 598.06 | -1,356.79 | 1,482.17 | 0.65 | -0.18 | |
| 3,633.00 | 30.76 | 292.84 | 3,243.24 | 617.14 | -1,401.13 | 1,530.40 | 0.56 | -0.29 | |
| 3,728.00 | 30.02 | 294.69 | 3,325.19 | 636.50 | -1,445.11 | 1,578.44 | 1.26 | -0.78 | |
| 3,822.00 | 29.66 | 294.25 | 3,406.73 | 655.87 | -1,487.68 | 1,625.20 | 0.45 | -0.38 | |
| 3,916.00 | 29.97 | 293.02 | 3,488.29 | 674.61 | -1,530.50 | 1,671.92 | 0.73 | 0.33 | |
| 4,011.00 | 29.84 | 292.67 | 3,570.64 | 692.99 | -1,574.14 | 1,719.23 | 0.23 | -0.14 | |
| 4,105.00 | 27.29 | 292.76 | 3,653.19 | 710.35 | -1,615.60 | 1,764.13 | 2.71 | -2.71 | |
| 4,200.00 | 25.23 | 293.02 | 3,738.38 | 726.69 | -1,654.32 | 1,806.12 | 2.17 | -2.17 | |
| 4,294.00 | 22.15 | 295.04 | 3,824.45 | 742.03 | -1,688.83 | 1,843.86 | 3.39 | -3.28 | |
| 4,389.00 | 20.61 | 297.24 | 3,912.91 | 757.27 | -1,719.92 | 1,878.49 | 1.83 | -1.62 | |
| 4,483.00 | 18.94 | 295.83 | 4,001.36 | 771.49 | -1,748.36 | 1,910.28 | 1.85 | -1.78 | |
| 4,578.00 | 17.10 | 292.05 | 4,091.70 | 783.45 | -1,775.19 | 1,939.64 | 2.29 | -1.94 | |
| 4,672.00 | 14.24 | 291.09 | 4,182.20 | 792.80 | -1,798.79 | 1,964.97 | 3.05 | -3.04 | |
| 4,766.00 | 11.95 | 292.23 | 4,273.75 | 800.64 | -1,818.59 | 1,986.22 | 2.45 | -2.44 | |
| 4,861.00 | 9.93 | 292.40 | 4,367.02 | 807.48 | -1,835.27 | 2,004.22 | 2.13 | -2.13 | |
| 4,955.00 | 8.09 | 292.05 | 4,459.85 | 813.06 | -1,848.89 | 2,018.92 | 1.96 | -1.96 | |
| 5,049.00 | 6.68 | 294.07 | 4,553.07 | 817.77 | -1,860.01 | 2,030.99 | 1.52 | -1.50 | |
| 5,144.00 | 5.85 | 296.01 | 4,647.50 | 822.15 | -1,869.41 | 2,041.36 | 0.90 | -0.87 | |
| 5,238.00 | 4.66 | 296.18 | 4,741.11 | 825.93 | -1,877.14 | 2,049.96 | 1.27 | -1.27 | |
| 5,333.00 | 2.94 | 297.24 | 4,835.90 | 828.75 | -1,882.77 | 2,056.26 | 1.81 | -1.81 | |
| 5,427.00 | 1.14 | 253.29 | 4,929.84 | 829.58 | -1,885.81 | 2,059.36 | 2.41 | -1.91 | |
| 5,522.00 | 1.67 | 227.45 | 5,024.81 | 828.38 | -1,887.74 | 2,060.58 | 0.86 | 0.56 | |
| 5,616.00 | 1.06 | 247.32 | 5,118.78 | 827.11 | -1,889.55 | 2,061.68 | 0.81 | -0.65 | |
| 5,711.00 | 1.36 | 252.41 | 5,213.76 | 826.44 | -1,891.43 | 2,063.09 | 0.34 | 0.32 | |
| 5,900.00 | 2.55 | 246.00 | 5,402.65 | 824.05 | -1,897.41 | 2,067.47 | 0.64 | 0.63 | |
| 5,994.00 | 1.67 | 257.69 | 5,496.58 | 822.90 | -1,900.66 | 2,069.91 | 1.04 | -0.94 | |
| 6,089.00 | 1.27 | 267.62 | 5,591.55 | 822.57 | -1,903.07 | 2,071.94 | 0.50 | -0.42 | |
| 6,183.00 | 1.23 | 274.30 | 5,685.53 | 822.60 | -1,905.11 | 2,073.80 | 0.16 | -0.04 | |

Cathedral Energy Services

Survey Report

| | | | |
|------------------|-------------------------------|-------------------------------------|-----------------------------|
| Company: | Caerus Oil & Gas | Local Co-ordinate Reference: | Well CHEVRON 21B-17 |
| Project: | Garfield County, CO (UTM 12N) | TVD Reference: | 30' KB @ 5613.00usft |
| Site: | S17-T6S-R96W (PC5A) | MD Reference: | 30' KB @ 5613.00usft |
| Well: | CHEVRON 21B-17 | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | SURVEYS | Database: | USA EDM 5000 Multi Users DB |

Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usf) | Build Rate (°/100u) | Formations / Comments |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|---------------------|------------------------|
| 6,278.00 | 1.36 | 276.23 | 5,780.51 | 822.80 | -1,907.25 | 2,075.82 | 0.14 | 0.14 | |
| 6,373.00 | 1.71 | 269.90 | 5,875.47 | 822.92 | -1,909.79 | 2,078.16 | 0.41 | 0.37 | |
| 6,467.00 | 1.93 | 256.55 | 5,969.42 | 822.55 | -1,912.73 | 2,080.66 | 0.51 | 0.23 | |
| 6,562.00 | 2.02 | 253.82 | 6,064.37 | 821.71 | -1,915.89 | 2,083.16 | 0.14 | 0.09 | |
| 6,656.00 | 2.20 | 260.15 | 6,158.30 | 820.94 | -1,919.26 | 2,085.87 | 0.31 | 0.19 | |
| 6,751.00 | 2.51 | 257.78 | 6,253.22 | 820.18 | -1,923.09 | 2,089.01 | 0.34 | 0.33 | |
| 6,845.00 | 2.42 | 258.48 | 6,347.14 | 819.35 | -1,927.05 | 2,092.22 | 0.10 | -0.10 | |
| 6,940.00 | 2.86 | 260.06 | 6,442.04 | 818.54 | -1,931.35 | 2,095.76 | 0.47 | 0.46 | |
| 7,034.00 | 3.56 | 262.17 | 6,535.89 | 817.74 | -1,936.55 | 2,100.12 | 0.76 | 0.74 | |
| 7,129.00 | 3.74 | 259.97 | 6,630.70 | 816.80 | -1,942.52 | 2,105.11 | 0.24 | 0.19 | |
| 7,318.00 | 3.82 | 262.52 | 6,819.28 | 814.91 | -1,954.83 | 2,115.42 | 0.10 | 0.04 | |
| 7,507.00 | 4.31 | 263.84 | 7,007.81 | 813.32 | -1,968.14 | 2,126.76 | 0.26 | 0.26 | LAST SURVEY - 7507' MD |
| 7,593.00 | 4.31 | 263.84 | 7,093.56 | 812.63 | -1,974.56 | 2,132.26 | 0.00 | 0.00 | PTB - 7593' MD |

Targets

| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
|--|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-----------|-------------|
| - hit/miss target | | | | | | | | | |
| - Shape | | | | | | | | | |
| CHEVRON 21B-17 PBH | 0.00 | 0.00 | 7,078.00 | 816.32 | -1,930.94 | 14,367,969.10 | 2,448,086.60 | 39.530565 | -108.135811 |
| - actual wellpath misses target center by 42.49usft at 7574.19usft MD (7074.81 TVD, 812.78 N, -1973.16 E) | | | | | | | | | |
| - Circle (radius 50.00) | | | | | | | | | |
| CHEVRON 21B-17 PBH | 0.00 | 0.00 | 7,108.00 | 809.93 | -1,702.63 | 14,367,970.00 | 2,448,315.00 | 39.530547 | -108.135002 |
| - actual wellpath misses target center by 272.27usft at 7587.10usft MD (7087.68 TVD, 812.68 N, -1974.12 E) | | | | | | | | | |
| - Point | | | | | | | | | |

Design Annotations

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | Comment |
|------------------------|-----------------------|-------------------|--------------|
| | | +N/-S (usft) | +E/-W (usft) |
| 7,507.00 | 7,007.81 | 813.32 | -1,968.14 |
| 7,593.00 | 7,093.56 | 812.63 | -1,974.56 |
| LAST SURVEY - 7507' MD | | | |
| PTB - 7593' MD | | | |

Checked By: _____ Approved By: _____ Date: _____