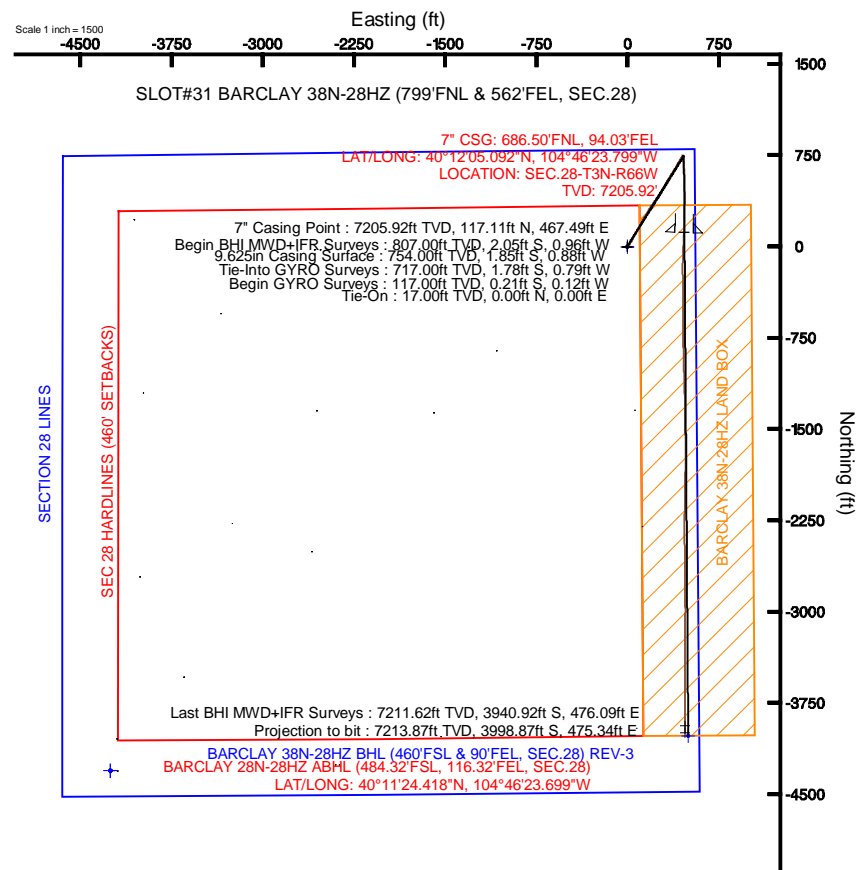
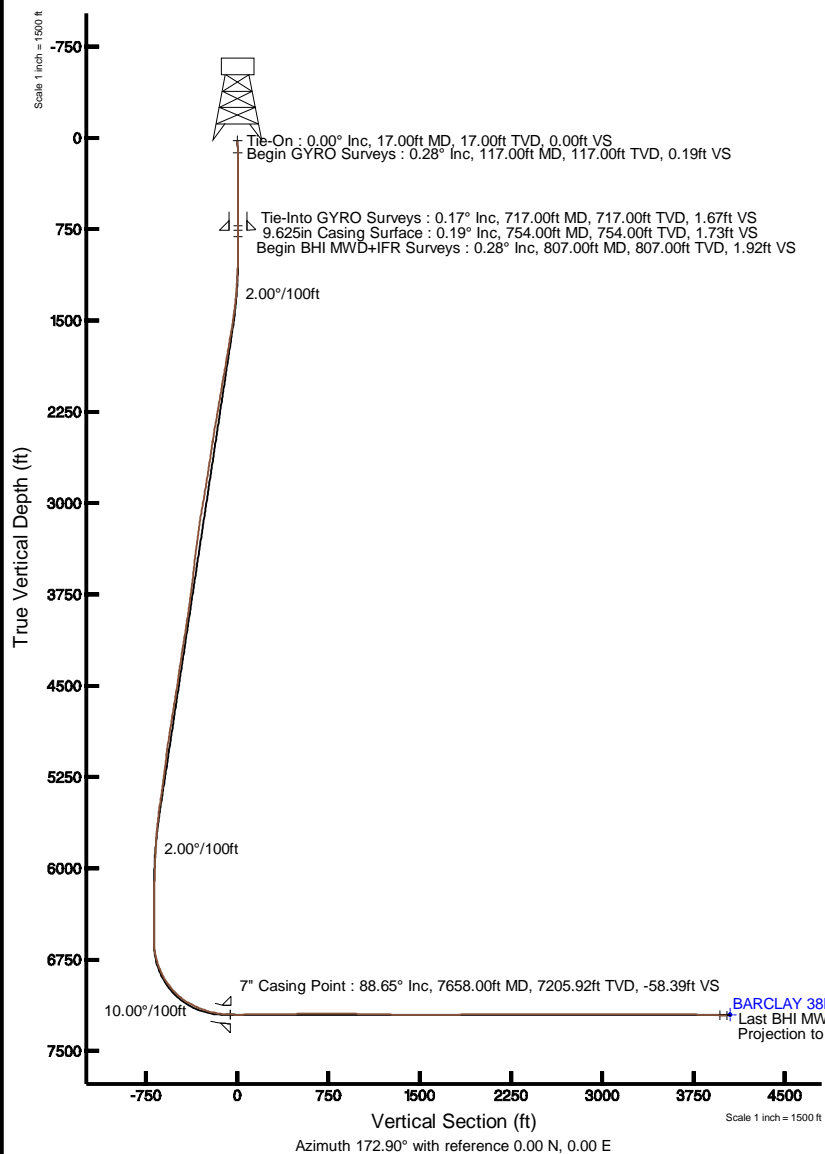


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#31 BARCLAY 38N-28HZ (799°FNL & 562°FEL, SEC.28)
 Field: WELD COUNTY (KERR MCGEE) Well: BARCLAY 38N-28HZ
 Facility: SEC.28-T3N-R66W Wellbore: BARCLAY 38N-28HZ PWB

Plot reference wellpath is BARCLAY 38N-28HZ (REV-A.0) PWP

| | |
|--|--|
| True vertical depths are referenced to XTREME 8 (RKB) | Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet |
| Measured depths are referenced to XTREME 8 (RKB) | North Reference: True north |
| XTREME 8 (RKB) to Mean Sea Level: 4962 feet | Scale: True distance |
| Mean Sea Level to Mud line (At Slot: SLOT#31 BARCLAY 38N-28HZ (799°FNL & 562°FEL, SEC.28)): 0 feet | Depths are in feet |
| Coordinates are in feet referenced to Slot | Created by: precain on 2/22/2013 |





Actual Wellpath Report

BARCLAY 38N-28HZ AWP

Page 1 of 7



| REFERENCE WELLPATH IDENTIFICATION | | | |
|-----------------------------------|---------------------------------|----------|--|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT#31 BARCLAY 38N-28HZ (799'FNL & 562'FEL, SEC.28) |
| Area | COLORADO | Well | BARCLAY 38N-28HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | BARCLAY 38N-28HZ AWB |
| Facility | SEC.28-T3N-R66W | | |

| REPORT SETUP INFORMATION | | | |
|--------------------------|---|----------------------|--|
| Projection System | NAD83 / Lambert Colorado SP, Northern Zone (501), US feet | Software System | WellArchitect@ 3.0.2 |
| North Reference | True | User | Precain |
| Scale | 0.999957 | Report Generated | 2/22/2013 at 3:03:00 PM |
| Convergence at slot | 0.47° East | Database/Source file | WellArchitectDB/BARCLAY_38N-28HZ_AWB.xml |

| WELLPATH LOCATION | | | | | | |
|-----------------------|-------------------|----------|------------------|-----------------|------------------------|-----------------|
| | Local coordinates | | Grid coordinates | | Geographic coordinates | |
| | North[ft] | East[ft] | Easting[US ft] | Northing[US ft] | Latitude | Longitude |
| Slot Location | 4312.55 | 4254.74 | 3202523.83 | 1316928.61 | 40°12'03.935"N | 104°46'29.824"W |
| Facility Reference Pt | | | 3198303.94 | 1312582.33 | 40°11'21.322"N | 104°47'24.657"W |
| Field Reference Pt | | | 3197771.84 | 1268891.29 | 40°04'09.600"N | 104°47'36.000"W |

| WELLPATH DATUM | | | |
|--------------------------|-------------------|---|-------------------|
| Calculation method | Minimum curvature | XTREME 8 (RKB) to Facility Vertical Datum | 4962.00ft |
| Horizontal Reference Pt | Slot | XTREME 8 (RKB) to Mean Sea Level | 4962.00ft |
| Vertical Reference Pt | XTREME 8 (RKB) | XTREME 8 (RKB) to Mud Line at Slot (SLOT#31 BARCLAY 38N-28HZ (799'FNL & 562'FEL, SEC.28)) | 4962.00ft |
| MD Reference Pt | XTREME 8 (RKB) | Section Origin | N 0.00, E 0.00 ft |
| Field Vertical Reference | Mean Sea Level | Section Azimuth | 173.22° |



Actual Wellpath Report

BARCLAY 38N-28HZ AWP

Page 2 of 7



| REFERENCE WELLPATH IDENTIFICATION | | | |
|-----------------------------------|---------------------------------|----------|--|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT#31 BARCLAY 38N-28HZ (799'FNL & 562'FEL, SEC.28) |
| Area | COLORADO | Well | BARCLAY 38N-28HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | BARCLAY 38N-28HZ AWB |
| Facility | SEC.28-T3N-R66W | | |

| WELLPATH DATA (153 stations) † = interpolated/extrapolated station | | | | | | | | | | |
|--|--------------------|----------------|-------------|-------------------|---------------|--------------|----------------|-----------------|------------------|---------------------------|
| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Latitude | Longitude | DLS [°/100ft] | Comments |
| 0.00† | 0.000 | 210.620 | 0.00 | 0.00 | 0.00 | 0.00 | 40°12'03.935"N | 104°46'29.824"W | 0.00 | |
| 17.00 | 0.000 | 210.620 | 17.00 | 0.00 | 0.00 | 0.00 | 40°12'03.935"N | 104°46'29.824"W | 0.00 | Tie-On |
| 117.00 | 0.280 | 210.620 | 117.00 | 0.19 | -0.21 | -0.12 | 40°12'03.933"N | 104°46'29.826"W | 0.28 | Begin GYRO Surveys |
| 217.00 | 0.270 | 184.510 | 217.00 | 0.62 | -0.66 | -0.27 | 40°12'03.929"N | 104°46'29.827"W | 0.12 | |
| 317.00 | 0.250 | 206.200 | 317.00 | 1.03 | -1.09 | -0.38 | 40°12'03.924"N | 104°46'29.829"W | 0.10 | |
| 417.00 | 0.120 | 228.470 | 417.00 | 1.28 | -1.35 | -0.56 | 40°12'03.922"N | 104°46'29.831"W | 0.15 | |
| 517.00 | 0.210 | 201.530 | 517.00 | 1.50 | -1.59 | -0.70 | 40°12'03.919"N | 104°46'29.833"W | 0.12 | |
| 617.00 | 0.070 | 68.020 | 617.00 | 1.64 | -1.74 | -0.71 | 40°12'03.918"N | 104°46'29.833"W | 0.26 | |
| 717.00 | 0.170 | 244.840 | 717.00 | 1.67 | -1.78 | -0.79 | 40°12'03.917"N | 104°46'29.834"W | 0.24 | Tie-Into GYRO Surveys |
| 807.00 | 0.280 | 193.290 | 807.00 | 1.92 | -2.05 | -0.96 | 40°12'03.915"N | 104°46'29.836"W | 0.24 | Begin BHI MWD+IFR Surveys |
| 867.00 | 0.160 | 235.640 | 867.00 | 2.10 | -2.24 | -1.07 | 40°12'03.913"N | 104°46'29.838"W | 0.32 | |
| 957.00 | 1.400 | 67.750 | 956.99 | 1.86 | -1.89 | -0.15 | 40°12'03.916"N | 104°46'29.826"W | 1.73 | |
| 1048.00 | 3.030 | 55.100 | 1047.92 | 0.43 | -0.10 | 2.85 | 40°12'03.934"N | 104°46'29.787"W | 1.86 | |
| 1138.00 | 3.910 | 35.900 | 1137.75 | -2.94 | 3.75 | 6.60 | 40°12'03.972"N | 104°46'29.739"W | 1.61 | |
| 1229.00 | 5.660 | 37.430 | 1228.43 | -8.44 | 9.83 | 11.15 | 40°12'04.032"N | 104°46'29.680"W | 1.93 | |
| 1320.00 | 7.470 | 36.630 | 1318.83 | -15.96 | 18.14 | 17.41 | 40°12'04.114"N | 104°46'29.600"W | 1.99 | |
| 1411.00 | 8.650 | 28.400 | 1408.94 | -25.85 | 28.91 | 24.19 | 40°12'04.221"N | 104°46'29.512"W | 1.81 | |
| 1496.00 | 10.390 | 27.620 | 1492.76 | -37.40 | 41.32 | 30.78 | 40°12'04.343"N | 104°46'29.427"W | 2.05 | |
| 1581.00 | 11.550 | 27.070 | 1576.21 | -50.79 | 55.69 | 38.21 | 40°12'04.485"N | 104°46'29.332"W | 1.37 | |
| 1667.00 | 11.670 | 26.260 | 1660.45 | -65.23 | 71.16 | 45.98 | 40°12'04.638"N | 104°46'29.231"W | 0.24 | |
| 1752.00 | 11.760 | 28.130 | 1743.68 | -79.54 | 86.50 | 53.86 | 40°12'04.790"N | 104°46'29.130"W | 0.46 | |
| 1837.00 | 12.270 | 31.310 | 1826.82 | -93.75 | 101.86 | 62.64 | 40°12'04.942"N | 104°46'29.017"W | 0.98 | |
| 1923.00 | 12.260 | 29.480 | 1910.85 | -108.31 | 117.62 | 71.88 | 40°12'05.097"N | 104°46'28.898"W | 0.45 | |
| 2008.00 | 11.920 | 29.400 | 1993.97 | -122.67 | 133.12 | 80.63 | 40°12'05.250"N | 104°46'28.785"W | 0.40 | |
| 2093.00 | 11.820 | 30.110 | 2077.15 | -136.72 | 148.30 | 89.31 | 40°12'05.400"N | 104°46'28.673"W | 0.21 | |
| 2178.00 | 11.840 | 29.150 | 2160.34 | -150.74 | 163.45 | 97.93 | 40°12'05.550"N | 104°46'28.562"W | 0.23 | |
| 2264.00 | 12.330 | 30.470 | 2244.44 | -165.20 | 179.07 | 106.88 | 40°12'05.705"N | 104°46'28.447"W | 0.65 | |
| 2349.00 | 12.210 | 30.370 | 2327.50 | -179.59 | 194.64 | 116.03 | 40°12'05.858"N | 104°46'28.329"W | 0.14 | |
| 2434.00 | 11.730 | 31.070 | 2410.65 | -193.57 | 209.80 | 125.03 | 40°12'06.008"N | 104°46'28.213"W | 0.59 | |
| 2519.00 | 10.650 | 31.720 | 2494.03 | -206.54 | 223.88 | 133.62 | 40°12'06.147"N | 104°46'28.102"W | 1.28 | |
| 2605.00 | 10.510 | 29.030 | 2578.57 | -219.12 | 237.50 | 141.60 | 40°12'06.282"N | 104°46'27.999"W | 0.60 | |
| 2690.00 | 10.540 | 26.830 | 2662.14 | -231.89 | 251.21 | 148.87 | 40°12'06.417"N | 104°46'27.905"W | 0.47 | |
| 2775.00 | 10.870 | 30.320 | 2745.66 | -244.75 | 265.07 | 156.43 | 40°12'06.554"N | 104°46'27.808"W | 0.86 | |
| 2861.00 | 11.690 | 31.870 | 2830.00 | -258.03 | 279.47 | 165.12 | 40°12'06.697"N | 104°46'27.696"W | 1.02 | |
| 2946.00 | 12.020 | 32.240 | 2913.19 | -271.63 | 294.27 | 174.39 | 40°12'06.843"N | 104°46'27.577"W | 0.40 | |
| 3031.00 | 12.870 | 31.550 | 2996.19 | -285.93 | 309.82 | 184.07 | 40°12'06.997"N | 104°46'27.452"W | 1.02 | |
| 3116.00 | 12.140 | 30.800 | 3079.17 | -300.44 | 325.57 | 193.60 | 40°12'07.152"N | 104°46'27.329"W | 0.88 | |
| 3201.00 | 11.340 | 36.560 | 3162.40 | -313.60 | 339.96 | 203.15 | 40°12'07.294"N | 104°46'27.206"W | 1.67 | |
| 3287.00 | 11.530 | 35.660 | 3246.69 | -326.09 | 353.73 | 213.20 | 40°12'07.431"N | 104°46'27.076"W | 0.30 | |
| 3372.00 | 9.580 | 34.250 | 3330.25 | -337.70 | 366.48 | 222.13 | 40°12'07.557"N | 104°46'26.961"W | 2.31 | |
| 3457.00 | 8.940 | 35.520 | 3414.14 | -347.92 | 377.70 | 229.95 | 40°12'07.667"N | 104°46'26.860"W | 0.79 | |
| 3542.00 | 9.440 | 38.600 | 3498.05 | -357.70 | 388.53 | 238.14 | 40°12'07.774"N | 104°46'26.755"W | 0.82 | |
| 3627.00 | 9.310 | 42.540 | 3581.91 | -367.08 | 399.04 | 247.13 | 40°12'07.878"N | 104°46'26.639"W | 0.77 | |
| 3713.00 | 9.970 | 37.480 | 3666.70 | -376.95 | 410.07 | 256.37 | 40°12'07.987"N | 104°46'26.520"W | 1.25 | |
| 3798.00 | 9.880 | 34.050 | 3750.43 | -387.73 | 421.96 | 264.93 | 40°12'08.105"N | 104°46'26.410"W | 0.70 | |



Actual Wellpath Report

BARCLAY 38N-28HZ AWP

Page 3 of 7



REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|--|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT#31 BARCLAY 38N-28HZ (799'FNL & 562'FEL, SEC.28) |
| Area | COLORADO | Well | BARCLAY 38N-28HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | BARCLAY 38N-28HZ AWB |
| Facility | SEC.28-T3N-R66W | | |

WELLPATH DATA (153 stations)

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Latitude | Longitude | DLS [°/100ft] | Comments |
|------------|--------------------|----------------|-------------|-------------------|---------------|--------------|----------------|-----------------|------------------|----------|
| 3883.00 | 10.210 | 28.490 | 3834.13 | -399.40 | 434.62 | 272.60 | 40°12'08.230"N | 104°46'26.311"W | 1.20 | |
| 3969.00 | 9.680 | 28.600 | 3918.84 | -411.52 | 447.67 | 279.70 | 40°12'08.359"N | 104°46'26.219"W | 0.62 | |
| 4054.00 | 10.500 | 30.700 | 4002.52 | -423.49 | 460.60 | 287.08 | 40°12'08.487"N | 104°46'26.124"W | 1.06 | |
| 4139.00 | 11.630 | 29.560 | 4085.94 | -436.54 | 474.71 | 295.26 | 40°12'08.626"N | 104°46'26.019"W | 1.35 | |
| 4225.00 | 11.190 | 27.480 | 4170.24 | -450.42 | 489.66 | 303.38 | 40°12'08.774"N | 104°46'25.914"W | 0.70 | |
| 4311.00 | 10.920 | 28.190 | 4254.64 | -463.99 | 504.24 | 311.08 | 40°12'08.918"N | 104°46'25.815"W | 0.35 | |
| 4395.00 | 9.500 | 27.840 | 4337.31 | -476.22 | 517.38 | 318.08 | 40°12'09.048"N | 104°46'25.725"W | 1.69 | |
| 4480.00 | 10.180 | 27.760 | 4421.06 | -488.18 | 530.23 | 324.85 | 40°12'09.175"N | 104°46'25.637"W | 0.80 | |
| 4566.00 | 10.850 | 32.180 | 4505.62 | -500.74 | 543.81 | 332.70 | 40°12'09.309"N | 104°46'25.536"W | 1.22 | |
| 4651.00 | 11.840 | 31.890 | 4588.95 | -513.76 | 557.98 | 341.57 | 40°12'09.449"N | 104°46'25.422"W | 1.17 | |
| 4736.00 | 11.530 | 30.950 | 4672.19 | -527.29 | 572.67 | 350.55 | 40°12'09.594"N | 104°46'25.306"W | 0.43 | |
| 4821.00 | 12.170 | 33.200 | 4755.38 | -540.88 | 587.46 | 359.82 | 40°12'09.740"N | 104°46'25.187"W | 0.93 | |
| 4907.00 | 11.540 | 32.560 | 4839.55 | -554.48 | 602.29 | 369.42 | 40°12'09.887"N | 104°46'25.063"W | 0.75 | |
| 4992.00 | 11.240 | 31.710 | 4922.87 | -567.54 | 616.51 | 378.35 | 40°12'10.027"N | 104°46'24.948"W | 0.40 | |
| 5078.00 | 9.950 | 32.550 | 5007.41 | -579.84 | 629.90 | 386.75 | 40°12'10.160"N | 104°46'24.840"W | 1.51 | |
| 5163.00 | 9.440 | 31.950 | 5091.19 | -590.96 | 642.00 | 394.39 | 40°12'10.279"N | 104°46'24.741"W | 0.61 | |
| 5248.00 | 8.490 | 31.680 | 5175.15 | -601.31 | 653.26 | 401.37 | 40°12'10.390"N | 104°46'24.651"W | 1.12 | |
| 5334.00 | 9.240 | 28.860 | 5260.12 | -611.90 | 664.71 | 408.04 | 40°12'10.504"N | 104°46'24.565"W | 1.01 | |
| 5419.00 | 9.520 | 29.110 | 5343.99 | -623.14 | 676.83 | 414.75 | 40°12'10.623"N | 104°46'24.479"W | 0.33 | |
| 5504.00 | 10.790 | 29.030 | 5427.65 | -635.29 | 689.92 | 422.03 | 40°12'10.753"N | 104°46'24.385"W | 1.49 | |
| 5589.00 | 10.170 | 30.420 | 5511.24 | -647.72 | 703.35 | 429.70 | 40°12'10.885"N | 104°46'24.286"W | 0.79 | |
| 5674.00 | 7.760 | 33.900 | 5595.19 | -658.05 | 714.59 | 436.70 | 40°12'10.997"N | 104°46'24.196"W | 2.90 | |
| 5760.00 | 7.520 | 36.260 | 5680.43 | -666.56 | 723.95 | 443.26 | 40°12'11.089"N | 104°46'24.111"W | 0.46 | |
| 5845.00 | 5.990 | 35.920 | 5764.84 | -673.89 | 732.02 | 449.16 | 40°12'11.169"N | 104°46'24.035"W | 1.80 | |
| 5930.00 | 4.320 | 36.800 | 5849.49 | -679.47 | 738.18 | 453.68 | 40°12'11.230"N | 104°46'23.977"W | 1.97 | |
| 6015.00 | 2.900 | 37.490 | 5934.32 | -683.33 | 742.45 | 456.90 | 40°12'11.272"N | 104°46'23.935"W | 1.67 | |
| 6101.00 | 1.860 | 24.080 | 6020.24 | -686.08 | 745.45 | 458.80 | 40°12'11.301"N | 104°46'23.911"W | 1.36 | |
| 6186.00 | 1.200 | 10.760 | 6105.21 | -688.11 | 747.58 | 459.52 | 40°12'11.323"N | 104°46'23.902"W | 0.88 | |
| 6271.00 | 0.850 | 348.860 | 6190.20 | -689.59 | 749.08 | 459.57 | 40°12'11.337"N | 104°46'23.901"W | 0.61 | |
| 6356.00 | 0.650 | 327.560 | 6275.19 | -690.66 | 750.10 | 459.19 | 40°12'11.347"N | 104°46'23.906"W | 0.40 | |
| 6442.00 | 0.680 | 302.600 | 6361.19 | -691.42 | 750.79 | 458.50 | 40°12'11.354"N | 104°46'23.915"W | 0.34 | |
| 6527.00 | 1.120 | 290.980 | 6446.18 | -692.13 | 751.36 | 457.30 | 40°12'11.360"N | 104°46'23.930"W | 0.56 | |
| 6612.00 | 1.230 | 284.870 | 6531.16 | -692.85 | 751.89 | 455.64 | 40°12'11.365"N | 104°46'23.952"W | 0.20 | |
| 6630.00 | 1.290 | 292.440 | 6549.15 | -693.02 | 752.01 | 455.26 | 40°12'11.366"N | 104°46'23.957"W | 0.98 | |
| 6697.00 | 1.540 | 190.680 | 6616.14 | -692.53 | 751.42 | 454.40 | 40°12'11.360"N | 104°46'23.968"W | 3.29 | |
| 6740.00 | 6.270 | 168.390 | 6659.03 | -689.64 | 748.55 | 454.77 | 40°12'11.332"N | 104°46'23.963"W | 11.35 | |
| 6783.00 | 10.720 | 168.530 | 6701.55 | -683.31 | 742.33 | 456.04 | 40°12'11.271"N | 104°46'23.947"W | 10.35 | |
| 6825.00 | 14.520 | 172.160 | 6742.53 | -674.15 | 733.28 | 457.53 | 40°12'11.181"N | 104°46'23.927"W | 9.24 | |
| 6868.00 | 18.000 | 172.360 | 6783.80 | -662.11 | 721.35 | 459.15 | 40°12'11.063"N | 104°46'23.907"W | 8.09 | |
| 6910.00 | 21.840 | 173.100 | 6823.28 | -647.80 | 707.16 | 460.95 | 40°12'10.923"N | 104°46'23.883"W | 9.16 | |
| 6953.00 | 25.520 | 174.010 | 6862.65 | -630.54 | 690.00 | 462.88 | 40°12'10.754"N | 104°46'23.858"W | 8.60 | |
| 6996.00 | 29.150 | 173.090 | 6900.85 | -610.80 | 670.38 | 465.11 | 40°12'10.560"N | 104°46'23.830"W | 8.50 | |
| 7038.00 | 33.330 | 177.020 | 6936.75 | -589.04 | 648.69 | 466.94 | 40°12'10.345"N | 104°46'23.806"W | 11.07 | |
| 7081.00 | 37.750 | 177.660 | 6971.73 | -564.12 | 623.73 | 468.09 | 40°12'10.099"N | 104°46'23.791"W | 10.32 | |
| 7123.00 | 42.180 | 177.980 | 7003.92 | -537.24 | 596.78 | 469.11 | 40°12'09.832"N | 104°46'23.778"W | 10.56 | |



Actual Wellpath Report

BARCLAY 38N-28HZ AWP

Page 4 of 7



REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|--|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT#31 BARCLAY 38N-28HZ (799'FNL & 562'FEL, SEC.28) |
| Area | COLORADO | Well | BARCLAY 38N-28HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | BARCLAY 38N-28HZ AWB |
| Facility | SEC.28-T3N-R66W | | |

WELLPATH DATA (153 stations) † = interpolated/extrapolated station

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Latitude | Longitude | DLS [°/100ft] | Comments |
|------------|--------------------|----------------|-------------|-------------------|---------------|--------------|----------------|-----------------|------------------|-----------------|
| 7166.00 | 46.460 | 178.560 | 7034.67 | -507.32 | 566.76 | 470.01 | 40°12'09.536"N | 104°46'23.767"W | 10.00 | |
| 7209.00 | 50.980 | 178.730 | 7063.03 | -475.16 | 534.46 | 470.78 | 40°12'09.216"N | 104°46'23.757"W | 10.52 | |
| 7251.00 | 55.800 | 178.820 | 7088.07 | -441.61 | 500.77 | 471.50 | 40°12'08.884"N | 104°46'23.747"W | 11.48 | |
| 7294.00 | 60.180 | 178.820 | 7110.86 | -405.33 | 464.32 | 472.25 | 40°12'08.523"N | 104°46'23.738"W | 10.19 | |
| 7336.00 | 64.010 | 178.860 | 7130.51 | -368.40 | 427.22 | 473.00 | 40°12'08.157"N | 104°46'23.728"W | 9.12 | |
| 7379.00 | 66.110 | 180.450 | 7148.65 | -329.66 | 388.23 | 473.23 | 40°12'07.771"N | 104°46'23.725"W | 5.92 | |
| 7422.00 | 70.560 | 181.230 | 7164.52 | -290.06 | 348.28 | 472.64 | 40°12'07.377"N | 104°46'23.733"W | 10.49 | |
| 7464.00 | 74.500 | 181.670 | 7177.12 | -250.42 | 308.24 | 471.62 | 40°12'06.981"N | 104°46'23.746"W | 9.43 | |
| 7507.00 | 76.230 | 181.880 | 7187.99 | -209.28 | 266.66 | 470.33 | 40°12'06.570"N | 104°46'23.762"W | 4.05 | |
| 7550.00 | 80.050 | 180.520 | 7196.82 | -167.61 | 224.60 | 469.46 | 40°12'06.154"N | 104°46'23.774"W | 9.41 | |
| 7592.00 | 84.540 | 180.980 | 7202.45 | -126.36 | 182.99 | 468.91 | 40°12'05.743"N | 104°46'23.781"W | 10.75 | |
| 7623.00 | 87.260 | 181.040 | 7204.67 | -95.73 | 152.08 | 468.37 | 40°12'05.438"N | 104°46'23.788"W | 8.78 | |
| 7658.00† | 88.650 | 181.842 | 7205.92 | -61.11 | 117.11 | 467.49 | 40°12'05.092"N | 104°46'23.799"W | 4.58 | 7" Casing Point |
| 7692.00 | 90.000 | 182.620 | 7206.32 | -27.53 | 83.14 | 466.16 | 40°12'04.757"N | 104°46'23.816"W | 4.58 | |
| 7734.00 | 89.910 | 183.280 | 7206.35 | 13.86 | 41.20 | 464.00 | 40°12'04.342"N | 104°46'23.844"W | 1.59 | |
| 7819.00 | 91.510 | 182.600 | 7205.30 | 97.63 | -43.68 | 459.64 | 40°12'03.503"N | 104°46'23.900"W | 2.05 | |
| 7905.00 | 91.630 | 181.000 | 7202.94 | 182.64 | -129.61 | 456.94 | 40°12'02.654"N | 104°46'23.935"W | 1.86 | |
| 7990.00 | 90.060 | 179.470 | 7201.69 | 266.99 | -214.59 | 456.59 | 40°12'01.814"N | 104°46'23.940"W | 2.58 | |
| 8076.00 | 89.910 | 179.750 | 7201.71 | 352.45 | -300.59 | 457.18 | 40°12'00.965"N | 104°46'23.932"W | 0.37 | |
| 8161.00 | 90.310 | 179.670 | 7201.55 | 436.91 | -385.59 | 457.61 | 40°12'00.125"N | 104°46'23.927"W | 0.48 | |
| 8246.00 | 91.020 | 179.780 | 7200.56 | 521.35 | -470.58 | 458.02 | 40°11'59.285"N | 104°46'23.921"W | 0.85 | |
| 8331.00 | 89.630 | 179.670 | 7200.08 | 605.80 | -555.57 | 458.42 | 40°11'58.445"N | 104°46'23.916"W | 1.64 | |
| 8417.00 | 89.720 | 179.130 | 7200.57 | 691.30 | -641.57 | 459.33 | 40°11'57.595"N | 104°46'23.905"W | 0.64 | |
| 8502.00 | 90.190 | 179.160 | 7200.63 | 775.85 | -726.56 | 460.59 | 40°11'56.755"N | 104°46'23.888"W | 0.55 | |
| 8587.00 | 90.550 | 179.360 | 7200.08 | 860.37 | -811.55 | 461.69 | 40°11'55.915"N | 104°46'23.874"W | 0.48 | |
| 8672.00 | 88.890 | 178.390 | 7200.50 | 944.95 | -896.53 | 463.36 | 40°11'55.075"N | 104°46'23.853"W | 2.26 | |
| 8758.00 | 88.980 | 178.550 | 7202.10 | 1030.58 | -982.48 | 465.66 | 40°11'54.226"N | 104°46'23.823"W | 0.21 | |
| 8843.00 | 89.020 | 177.880 | 7203.58 | 1115.24 | -1067.43 | 468.30 | 40°11'53.387"N | 104°46'23.789"W | 0.79 | |
| 8928.00 | 89.170 | 178.510 | 7204.92 | 1199.91 | -1152.37 | 470.98 | 40°11'52.547"N | 104°46'23.755"W | 0.76 | |
| 9014.00 | 88.060 | 177.440 | 7207.00 | 1285.59 | -1238.29 | 474.02 | 40°11'51.698"N | 104°46'23.715"W | 1.79 | |
| 9099.00 | 89.330 | 179.770 | 7208.94 | 1370.18 | -1323.24 | 476.09 | 40°11'50.859"N | 104°46'23.689"W | 3.12 | |
| 9184.00 | 90.620 | 179.050 | 7208.98 | 1454.69 | -1408.23 | 476.96 | 40°11'50.019"N | 104°46'23.677"W | 1.74 | |
| 9270.00 | 90.400 | 180.120 | 7208.21 | 1540.15 | -1494.22 | 477.58 | 40°11'49.169"N | 104°46'23.669"W | 1.27 | |
| 9355.00 | 89.880 | 178.850 | 7208.00 | 1624.64 | -1579.22 | 478.35 | 40°11'48.329"N | 104°46'23.660"W | 1.61 | |
| 9440.00 | 90.180 | 179.540 | 7207.96 | 1709.18 | -1664.21 | 479.54 | 40°11'47.489"N | 104°46'23.644"W | 0.89 | |
| 9526.00 | 91.170 | 180.830 | 7206.95 | 1794.54 | -1750.20 | 479.26 | 40°11'46.640"N | 104°46'23.648"W | 1.89 | |
| 9611.00 | 90.990 | 180.670 | 7205.34 | 1878.79 | -1835.18 | 478.15 | 40°11'45.800"N | 104°46'23.662"W | 0.28 | |
| 9696.00 | 90.150 | 180.960 | 7204.50 | 1963.04 | -1920.16 | 476.94 | 40°11'44.960"N | 104°46'23.678"W | 1.05 | |
| 9781.00 | 89.970 | 180.960 | 7204.41 | 2047.26 | -2005.15 | 475.52 | 40°11'44.120"N | 104°46'23.696"W | 0.21 | |
| 9867.00 | 89.820 | 180.810 | 7204.57 | 2132.50 | -2091.14 | 474.19 | 40°11'43.270"N | 104°46'23.713"W | 0.25 | |
| 9952.00 | 89.720 | 180.960 | 7204.91 | 2216.74 | -2176.13 | 472.88 | 40°11'42.430"N | 104°46'23.730"W | 0.21 | |
| 10037.00 | 89.970 | 180.460 | 7205.14 | 2301.01 | -2261.12 | 471.82 | 40°11'41.591"N | 104°46'23.744"W | 0.66 | |
| 10122.00 | 90.920 | 179.570 | 7204.48 | 2385.41 | -2346.12 | 471.80 | 40°11'40.751"N | 104°46'23.744"W | 1.53 | |
| 10208.00 | 90.580 | 179.530 | 7203.35 | 2470.88 | -2432.11 | 472.48 | 40°11'39.901"N | 104°46'23.736"W | 0.40 | |
| 10293.00 | 90.370 | 179.920 | 7202.65 | 2555.33 | -2517.11 | 472.89 | 40°11'39.061"N | 104°46'23.730"W | 0.52 | |



Actual Wellpath Report

BARCLAY 38N-28HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|--|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT#31 BARCLAY 38N-28HZ (799'FNL & 562'FEL, SEC.28) |
| Area | COLORADO | Well | BARCLAY 38N-28HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | BARCLAY 38N-28HZ AWB |
| Facility | SEC.28-T3N-R66W | | |

WELLPATH DATA (153 stations)

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Latitude | Longitude | DLS [°/100ft] | Comments |
|----------|-----------------|-------------|----------|----------------|------------|-----------|----------------|-----------------|---------------|--------------------------|
| 10378.00 | 90.460 | 179.420 | 7202.03 | 2639.79 | -2602.10 | 473.38 | 40°11'38.221"N | 104°46'23.724"W | 0.60 | |
| 10464.00 | 89.880 | 179.390 | 7201.78 | 2725.29 | -2688.10 | 474.27 | 40°11'37.371"N | 104°46'23.713"W | 0.68 | |
| 10549.00 | 88.950 | 178.380 | 7202.64 | 2809.86 | -2773.07 | 475.92 | 40°11'36.531"N | 104°46'23.691"W | 1.62 | |
| 10634.00 | 89.970 | 180.310 | 7203.45 | 2894.37 | -2858.06 | 476.89 | 40°11'35.692"N | 104°46'23.679"W | 2.57 | |
| 10719.00 | 89.050 | 178.920 | 7204.17 | 2978.84 | -2943.05 | 477.46 | 40°11'34.852"N | 104°46'23.671"W | 1.96 | |
| 10805.00 | 90.340 | 180.810 | 7204.63 | 3064.25 | -3029.04 | 477.67 | 40°11'34.002"N | 104°46'23.669"W | 2.66 | |
| 10890.00 | 90.310 | 180.340 | 7204.15 | 3148.55 | -3114.04 | 476.81 | 40°11'33.162"N | 104°46'23.680"W | 0.55 | |
| 10975.00 | 90.120 | 180.450 | 7203.83 | 3232.88 | -3199.04 | 476.23 | 40°11'32.322"N | 104°46'23.687"W | 0.26 | |
| 11060.00 | 88.700 | 180.570 | 7204.70 | 3317.19 | -3284.03 | 475.47 | 40°11'31.482"N | 104°46'23.697"W | 1.68 | |
| 11146.00 | 89.880 | 179.590 | 7205.77 | 3402.57 | -3370.02 | 475.35 | 40°11'30.633"N | 104°46'23.699"W | 1.78 | |
| 11231.00 | 90.520 | 179.860 | 7205.47 | 3487.02 | -3455.01 | 475.76 | 40°11'29.793"N | 104°46'23.693"W | 0.82 | |
| 11316.00 | 90.280 | 179.600 | 7204.88 | 3571.47 | -3540.01 | 476.16 | 40°11'28.953"N | 104°46'23.688"W | 0.42 | |
| 11401.00 | 89.600 | 179.850 | 7204.97 | 3655.92 | -3625.01 | 476.57 | 40°11'28.113"N | 104°46'23.683"W | 0.85 | |
| 11487.00 | 89.230 | 180.450 | 7205.85 | 3741.29 | -3711.00 | 476.34 | 40°11'27.263"N | 104°46'23.686"W | 0.82 | |
| 11572.00 | 88.860 | 179.830 | 7207.26 | 3825.66 | -3795.99 | 476.14 | 40°11'26.423"N | 104°46'23.689"W | 0.85 | |
| 11657.00 | 88.150 | 179.830 | 7209.48 | 3910.06 | -3880.96 | 476.39 | 40°11'25.583"N | 104°46'23.686"W | 0.84 | |
| 11717.00 | 87.770 | 180.740 | 7211.62 | 3969.57 | -3940.92 | 476.09 | 40°11'24.991"N | 104°46'23.689"W | 1.64 | Last BHI MWD+IFR Surveys |
| 11775.00 | 87.770 | 180.740 | 7213.87 | 4027.03 | -3998.87 | 475.34 | 40°11'24.418"N | 104°46'23.699"W | 0.00 | Projection to bit |

HOLE & CASING SECTIONS - Ref Wellbore: BARCLAY 38N-28HZ AWB Ref Wellpath: BARCLAY 38N-28HZ AWP

| String/Diameter | Start MD [ft] | End MD [ft] | Interval [ft] | Start TVD [ft] | End TVD [ft] | Start N/S [ft] | Start E/W [ft] | End N/S [ft] | End E/W [ft] |
|-------------------------|---------------|-------------|---------------|----------------|--------------|----------------|----------------|--------------|--------------|
| 13.5in Open Hole | 17.00 | 754.00 | 737.00 | 17.00 | 754.00 | 0.00 | 0.00 | -1.85 | -0.88 |
| 9.625in Casing Surface | 17.00 | 754.00 | 737.00 | 17.00 | 754.00 | 0.00 | 0.00 | -1.85 | -0.88 |
| 8.75in Open Hole | 754.00 | 7668.00 | 6914.00 | 754.00 | 7206.12 | -1.85 | -0.88 | 107.12 | 467.14 |
| 7in Casing Intermediate | 17.00 | 7658.00 | 7641.00 | 17.00 | 7205.92 | 0.00 | 0.00 | 117.11 | 467.49 |
| 6.125in Open Hole | 7658.00 | 11775.00 | 4117.00 | 7205.92 | 7213.87 | 117.11 | 467.49 | -3998.87 | 475.34 |



Actual Wellpath Report

BARCLAY 38N-28HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|--|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT#31 BARCLAY 38N-28HZ (799'FNL & 562'FEL, SEC.28) |
| Area | COLORADO | Well | BARCLAY 38N-28HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | BARCLAY 38N-28HZ AWB |
| Facility | SEC.28-T3N-R66W | | |

TARGETS

| Name | MD [ft] | TVD [ft] | North [ft] | East [ft] | Grid East [US ft] | Grid North [US ft] | Latitude | Longitude | Shape |
|---|---------|----------|------------|-----------|-------------------|--------------------|----------------|-----------------|---------|
| SECTION 28 LINES | | 14.70 | -4311.82 | -4255.32 | 3198304.10 | 1312582.33 | 40°11'21.322"N | 104°47'24.655"W | polygon |
| BARCLAY 38N-28HZ BHL ON PLAT (460'FSL & 50'FEL, SEC.28) REV-1 | | 7177.00 | -4023.38 | 541.46 | 3203098.15 | 1312909.98 | 40°11'24.176"N | 104°46'22.847"W | point |
| BARCLAY 38N-28HZ LAND BOX | | 7200.00 | 0.00 | 0.00 | 3202523.83 | 1316928.61 | 40°12'03.935"N | 104°46'29.824"W | polygon |
| BARCLAY 38N-28HZ BHL (460'FSL & 90'FEL, SEC.28) REV-3 | | 7207.00 | -4023.38 | 501.46 | 3203058.15 | 1312909.65 | 40°11'24.176"N | 104°46'23.362"W | point |
| BARCLAY 38N-28HZ BHL ON PLAT (460'FSL & 50'FEL, SEC.28) REV-2 | | 7207.00 | -4023.38 | 541.46 | 3203098.15 | 1312909.97 | 40°11'24.176"N | 104°46'22.847"W | point |
| SEC 28 HARDLINES (460' SETBACKS) | | 7315.00 | -4311.82 | -4255.32 | 3198304.10 | 1312582.33 | 40°11'21.322"N | 104°47'24.655"W | polygon |

WELLPATH COMPOSITION - Ref Wellbore: BARCLAY 38N-28HZ AWB Ref Wellpath: BARCLAY 38N-28HZ AWP

| Start MD [ft] | End MD [ft] | Positional Uncertainty Model | Log Name/Comment | Wellbore |
|---------------|-------------|--------------------------------------|---|----------------------|
| 17.00 | 717.00 | Generic gyro - continuous (Standard) | GYRODATA SURVEYS <117-717> | BARCLAY 38N-28HZ AWB |
| 717.00 | 7623.00 | NaviTrak (MAGCORR,IFR) | BHI MWD+IFR SURVEYS 8 3/4" HOLE <807-7623> | BARCLAY 38N-28HZ AWB |
| 7623.00 | 11717.00 | OnTrak (MAGCORR,IFR) | BHI MWD +IFR SURVEYS 6 1/8" HOLE <7692-11717> | BARCLAY 38N-28HZ AWB |
| 11717.00 | 11775.00 | Blind Drilling (std) | Projection to bit | BARCLAY 38N-28HZ AWB |



Actual Wellpath Report

BARCLAY 38N-28HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|--|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT#31 BARCLAY 38N-28HZ (799'FNL & 562'FEL, SEC.28) |
| Area | COLORADO | Well | BARCLAY 38N-28HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | BARCLAY 38N-28HZ AWB |
| Facility | SEC.28-T3N-R66W | | |

WELLPATH COMMENTS

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Comment |
|------------|--------------------|----------------|-------------|---------------------------|
| 17.00 | 0.000 | 210.620 | 17.00 | Tie-On |
| 117.00 | 0.280 | 210.620 | 117.00 | Begin GYRO Surveys |
| 717.00 | 0.170 | 244.840 | 717.00 | Tie-Into GYRO Surveys |
| 807.00 | 0.280 | 193.290 | 807.00 | Begin BHI MWD+IFR Surveys |
| 7658.00 | 88.650 | 181.842 | 7205.92 | 7" Casing Point |
| 11717.00 | 87.770 | 180.740 | 7211.62 | Last BHI MWD+IFR Surveys |
| 11775.00 | 87.770 | 180.740 | 7213.87 | Projection to bit |