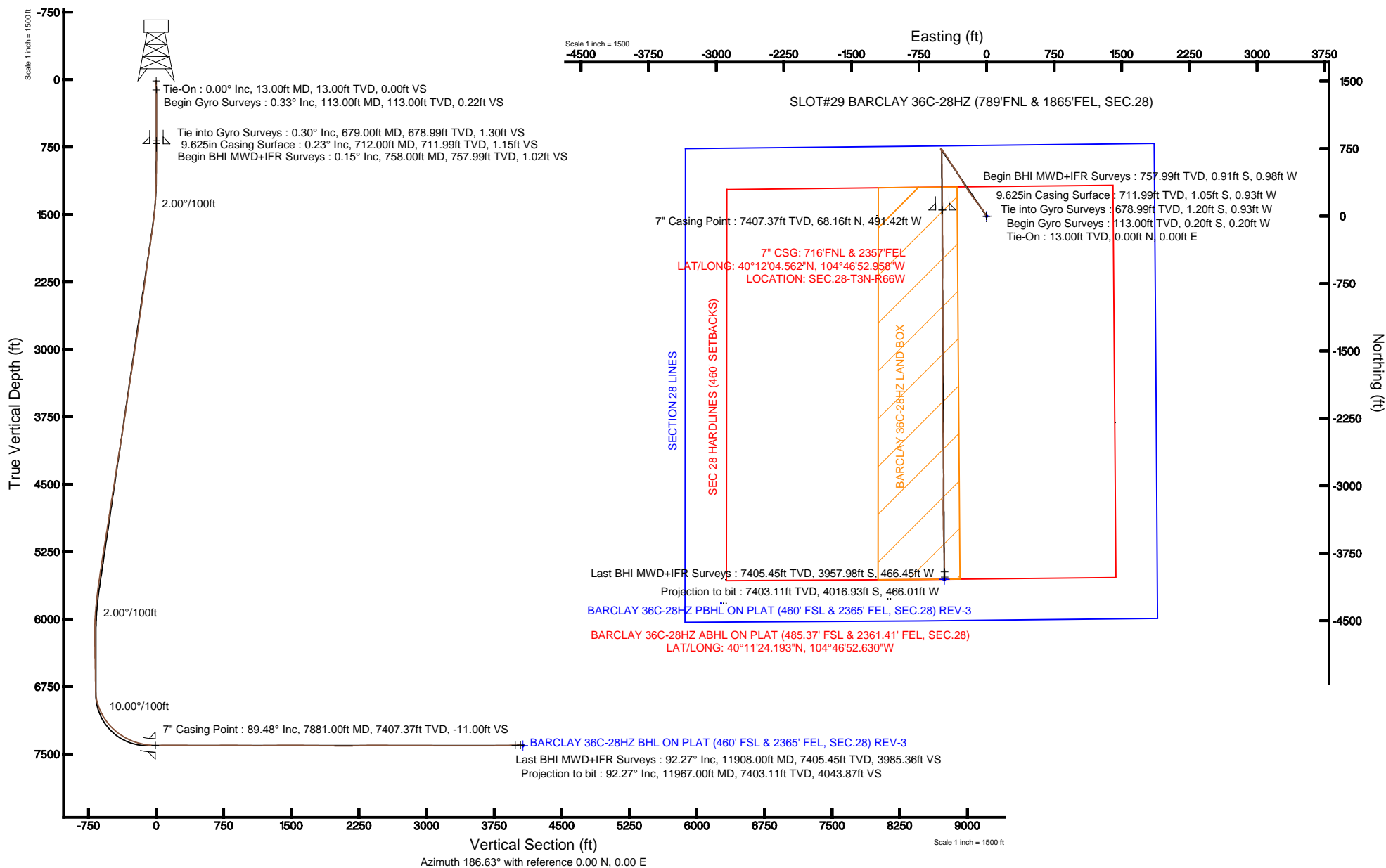


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#29 BARCLAY 36C-28HZ (789'FNL & 1865'FEL, SEC.28)
 Field: WELD COUNTY (KERR MCGEE) Well: BARCLAY 36C-28HZ
 Facility: SEC.28-T3N-R66W Wellbore: BARCLAY 36C-28HZ PWB

Plot reference wellpath is BARCLAY 36C-28HZ (REV-C.1) PWP

| | |
|---|--|
| True vertical depths are referenced to ENSIGN 145 (RT) | Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet |
| Measured depths are referenced to ENSIGN 145 (RT) | North Reference: True north |
| ENSGIN 145 (RT) to Mean Sea Level: 4979 feet | Scale: True distance |
| Mean Sea Level to Mud line (At Slot: SLOT#29 BARCLAY 36C-28HZ (789'FNL & 1865'FEL, SEC.28)): 0 feet | Depths are in feet |
| Coordinates are in feet referenced to Slot | Created by: wilsjeff02 on 3/19/2013 |





Actual Wellpath Report

BARCLAY 36C-28HZ AWP

Page 1 of 7



REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|---|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT#29 BARCLAY 36C-28HZ (789'FNL & 1865'FEL, SEC.28) |
| Area | COLORADO | Well | BARCLAY 36C-28HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | BARCLAY 36C-28HZ AWB |
| Facility | SEC.28-T3N-R66W | | |

REPORT SETUP INFORMATION

| | | | |
|---------------------|---|----------------------|--|
| Projection System | NAD83 / Lambert Colorado SP, Northern Zone (501), US feet | Software System | WellArchitect@ 3.0.0 |
| North Reference | True | User | Precain |
| Scale | 0.999957 | Report Generated | 1/29/2013 at 10:52:54 AM |
| Convergence at slot | 0.47° East | Database/Source file | WellArchitectDB/BARCLAY_36C-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 | 4307.61 | 2951.07 | 3201220.31 | 1316913.23 | 40°12'03.888"N | 104°46'46.625"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 | ENSIGN 145 (RT) to Facility Vertical Datum | 4979.00ft |
| Horizontal Reference Pt | Slot | ENSIGN 145 (RT) to Mean Sea Level | 4979.00ft |
| Vertical Reference Pt | ENSIGN 145 (RT) | ENSIGN 145 (RT) to Mud Line at Slot (SLOT#29 BARCLAY 36C-28HZ (789'FNL & 1865'FEL, SEC.28)) | 4979.00ft |
| MD Reference Pt | ENSIGN 145 (RT) | Section Origin | N 0.00, E 0.00 ft |
| Field Vertical Reference | Mean Sea Level | Section Azimuth | 186.62° |



Actual Wellpath Report

BARCLAY 36C-28HZ AWP

Page 2 of 7



REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|---|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT#29 BARCLAY 36C-28HZ (789'FNL & 1865'FEL, SEC.28) |
| Area | COLORADO | Well | BARCLAY 36C-28HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | BARCLAY 36C-28HZ AWB |
| Facility | SEC.28-T3N-R66W | | |

WELLPATH DATA (151 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 | 225.350 | 0.00 | 0.00 | 0.00 | 0.00 | 40°12'03.888"N | 104°46'46.625"W | 0.00 | |
| 13.00 | 0.000 | 225.350 | 13.00 | 0.00 | 0.00 | 0.00 | 40°12'03.888"N | 104°46'46.625"W | 0.00 | Tie-On |
| 113.00 | 0.330 | 225.350 | 113.00 | 0.22 | -0.20 | -0.20 | 40°12'03.886"N | 104°46'46.628"W | 0.33 | Begin Gyro Surveys |
| 213.00 | 0.440 | 234.570 | 213.00 | 0.71 | -0.63 | -0.72 | 40°12'03.882"N | 104°46'46.634"W | 0.13 | |
| 313.00 | 0.280 | 297.130 | 313.00 | 0.88 | -0.74 | -1.25 | 40°12'03.881"N | 104°46'46.641"W | 0.40 | |
| 413.00 | 0.150 | 50.180 | 413.00 | 0.70 | -0.54 | -1.37 | 40°12'03.883"N | 104°46'46.643"W | 0.37 | |
| 513.00 | 0.240 | 149.920 | 512.99 | 0.77 | -0.64 | -1.16 | 40°12'03.882"N | 104°46'46.640"W | 0.30 | |
| 613.00 | 0.390 | 167.740 | 612.99 | 1.26 | -1.15 | -0.99 | 40°12'03.877"N | 104°46'46.638"W | 0.18 | |
| 679.00 | 0.300 | 2.790 | 678.99 | 1.30 | -1.20 | -0.93 | 40°12'03.876"N | 104°46'46.637"W | 1.04 | Tie into Gyro Surveys |
| 758.00 | 0.150 | 324.520 | 757.99 | 1.02 | -0.91 | -0.98 | 40°12'03.879"N | 104°46'46.638"W | 0.26 | Begin BHI MWD+IFR Surveys |
| 789.00 | 0.130 | 358.050 | 788.99 | 0.95 | -0.84 | -1.01 | 40°12'03.880"N | 104°46'46.638"W | 0.27 | |
| 881.00 | 0.290 | 299.490 | 880.99 | 0.76 | -0.62 | -1.21 | 40°12'03.882"N | 104°46'46.641"W | 0.27 | |
| 973.00 | 0.370 | 304.640 | 972.99 | 0.53 | -0.34 | -1.66 | 40°12'03.885"N | 104°46'46.646"W | 0.09 | |
| 1065.00 | 1.220 | 321.270 | 1064.98 | -0.30 | 0.59 | -2.52 | 40°12'03.894"N | 104°46'46.657"W | 0.95 | |
| 1156.00 | 2.090 | 325.040 | 1155.94 | -2.22 | 2.71 | -4.07 | 40°12'03.915"N | 104°46'46.677"W | 0.96 | |
| 1248.00 | 3.070 | 329.640 | 1247.85 | -5.44 | 6.21 | -6.28 | 40°12'03.949"N | 104°46'46.706"W | 1.09 | |
| 1340.00 | 4.040 | 332.580 | 1339.67 | -10.10 | 11.21 | -9.02 | 40°12'03.999"N | 104°46'46.741"W | 1.07 | |
| 1432.00 | 5.860 | 332.710 | 1431.32 | -16.68 | 18.26 | -12.66 | 40°12'04.068"N | 104°46'46.788"W | 1.98 | |
| 1523.00 | 7.290 | 331.690 | 1521.72 | -25.27 | 27.47 | -17.53 | 40°12'04.160"N | 104°46'46.851"W | 1.58 | |
| 1615.00 | 9.300 | 330.390 | 1612.75 | -36.05 | 39.08 | -23.97 | 40°12'04.274"N | 104°46'46.934"W | 2.19 | |
| 1708.00 | 10.460 | 329.210 | 1704.37 | -48.82 | 52.86 | -32.01 | 40°12'04.410"N | 104°46'47.038"W | 1.27 | |
| 1800.00 | 11.190 | 324.700 | 1794.74 | -62.10 | 67.32 | -41.44 | 40°12'04.553"N | 104°46'47.159"W | 1.21 | |
| 1892.00 | 11.630 | 324.270 | 1884.92 | -75.60 | 82.14 | -52.02 | 40°12'04.700"N | 104°46'47.295"W | 0.49 | |
| 1987.00 | 11.720 | 323.020 | 1977.95 | -89.66 | 97.62 | -63.41 | 40°12'04.853"N | 104°46'47.442"W | 0.28 | |
| 2081.00 | 10.770 | 319.410 | 2070.15 | -102.54 | 111.92 | -74.87 | 40°12'04.994"N | 104°46'47.590"W | 1.26 | |
| 2176.00 | 11.370 | 319.900 | 2163.38 | -114.99 | 125.82 | -86.68 | 40°12'05.131"N | 104°46'47.742"W | 0.64 | |
| 2271.00 | 11.540 | 319.100 | 2256.49 | -127.83 | 140.16 | -98.93 | 40°12'05.273"N | 104°46'47.900"W | 0.24 | |
| 2366.00 | 11.590 | 321.380 | 2349.56 | -140.97 | 154.80 | -111.11 | 40°12'05.418"N | 104°46'48.057"W | 0.48 | |
| 2461.00 | 10.890 | 325.100 | 2442.74 | -154.41 | 169.62 | -122.20 | 40°12'05.564"N | 104°46'48.200"W | 1.06 | |
| 2555.00 | 11.200 | 323.500 | 2535.00 | -167.72 | 184.24 | -132.71 | 40°12'05.709"N | 104°46'48.335"W | 0.46 | |
| 2650.00 | 11.490 | 324.370 | 2628.14 | -181.46 | 199.35 | -143.71 | 40°12'05.858"N | 104°46'48.477"W | 0.35 | |
| 2745.00 | 10.670 | 324.120 | 2721.37 | -194.95 | 214.16 | -154.38 | 40°12'06.004"N | 104°46'48.615"W | 0.86 | |
| 2840.00 | 12.000 | 324.130 | 2814.52 | -208.71 | 229.29 | -165.32 | 40°12'06.154"N | 104°46'48.756"W | 1.40 | |
| 2934.00 | 11.780 | 325.370 | 2906.50 | -223.14 | 245.11 | -176.50 | 40°12'06.310"N | 104°46'48.900"W | 0.36 | |
| 3029.00 | 11.610 | 325.140 | 2999.53 | -237.59 | 260.93 | -187.47 | 40°12'06.467"N | 104°46'49.041"W | 0.19 | |
| 3124.00 | 10.900 | 326.220 | 3092.70 | -251.59 | 276.24 | -197.93 | 40°12'06.618"N | 104°46'49.176"W | 0.78 | |
| 3219.00 | 10.770 | 329.720 | 3186.01 | -265.53 | 291.37 | -207.40 | 40°12'06.767"N | 104°46'49.298"W | 0.71 | |
| 3314.00 | 11.380 | 326.280 | 3279.24 | -279.77 | 306.83 | -217.08 | 40°12'06.920"N | 104°46'49.423"W | 0.95 | |
| 3409.00 | 10.490 | 329.290 | 3372.51 | -293.79 | 322.06 | -226.70 | 40°12'07.071"N | 104°46'49.547"W | 1.11 | |
| 3504.00 | 10.730 | 328.030 | 3465.89 | -307.58 | 337.00 | -235.80 | 40°12'07.218"N | 104°46'49.664"W | 0.35 | |
| 3598.00 | 10.650 | 326.400 | 3558.26 | -321.06 | 351.66 | -245.24 | 40°12'07.363"N | 104°46'49.786"W | 0.33 | |
| 3693.00 | 10.890 | 328.330 | 3651.58 | -334.80 | 366.61 | -254.81 | 40°12'07.511"N | 104°46'49.909"W | 0.46 | |
| 3788.00 | 10.430 | 328.450 | 3744.94 | -348.61 | 381.57 | -264.02 | 40°12'07.659"N | 104°46'50.028"W | 0.48 | |
| 3883.00 | 11.090 | 327.740 | 3838.27 | -362.48 | 396.63 | -273.39 | 40°12'07.807"N | 104°46'50.148"W | 0.71 | |
| 3978.00 | 11.420 | 328.720 | 3931.45 | -377.02 | 412.39 | -283.15 | 40°12'07.963"N | 104°46'50.274"W | 0.40 | |



Actual Wellpath Report

BARCLAY 36C-28HZ AWP

Page 3 of 7



REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|---|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT#29 BARCLAY 36C-28HZ (789'FNL & 1865'FEL, SEC.28) |
| Area | COLORADO | Well | BARCLAY 36C-28HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | BARCLAY 36C-28HZ AWB |
| Facility | SEC.28-T3N-R66W | | |

WELLPATH DATA (151 stations)

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Latitude | Longitude | DLS [°/100ft] | Comments |
|------------|--------------------|----------------|-------------|-------------------|---------------|--------------|----------------|-----------------|------------------|----------|
| 4073.00 | 11.930 | 329.150 | 4024.48 | -392.23 | 428.86 | -293.07 | 40°12'08.126"N | 104°46'50.402"W | 0.54 | |
| 4167.00 | 11.880 | 329.570 | 4116.46 | -407.66 | 445.54 | -302.95 | 40°12'08.291"N | 104°46'50.529"W | 0.11 | |
| 4262.00 | 11.660 | 331.000 | 4209.46 | -423.27 | 462.37 | -312.56 | 40°12'08.457"N | 104°46'50.653"W | 0.38 | |
| 4357.00 | 10.640 | 329.590 | 4302.67 | -438.08 | 478.33 | -321.65 | 40°12'08.615"N | 104°46'50.770"W | 1.11 | |
| 4452.00 | 10.660 | 326.630 | 4396.03 | -451.81 | 493.23 | -330.93 | 40°12'08.762"N | 104°46'50.890"W | 0.58 | |
| 4547.00 | 11.740 | 325.030 | 4489.22 | -465.77 | 508.49 | -341.30 | 40°12'08.913"N | 104°46'51.024"W | 1.18 | |
| 4642.00 | 12.550 | 324.610 | 4582.09 | -480.67 | 524.83 | -352.82 | 40°12'09.074"N | 104°46'51.172"W | 0.86 | |
| 4737.00 | 12.180 | 324.830 | 4674.89 | -495.81 | 541.43 | -364.57 | 40°12'09.238"N | 104°46'51.323"W | 0.39 | |
| 4832.00 | 11.710 | 324.590 | 4767.83 | -510.45 | 557.48 | -375.93 | 40°12'09.397"N | 104°46'51.470"W | 0.50 | |
| 4926.00 | 10.860 | 325.630 | 4860.02 | -524.22 | 572.57 | -386.45 | 40°12'09.546"N | 104°46'51.606"W | 0.93 | |
| 5021.00 | 11.440 | 326.820 | 4953.22 | -538.21 | 587.84 | -396.66 | 40°12'09.697"N | 104°46'51.737"W | 0.66 | |
| 5116.00 | 10.710 | 329.010 | 5046.45 | -552.45 | 603.29 | -406.36 | 40°12'09.850"N | 104°46'51.862"W | 0.89 | |
| 5211.00 | 11.860 | 329.580 | 5139.61 | -567.23 | 619.28 | -415.85 | 40°12'10.008"N | 104°46'51.984"W | 1.22 | |
| 5306.00 | 11.580 | 329.780 | 5232.63 | -582.66 | 635.94 | -425.59 | 40°12'10.172"N | 104°46'52.110"W | 0.30 | |
| 5401.00 | 10.740 | 329.750 | 5325.84 | -597.37 | 651.82 | -434.85 | 40°12'10.329"N | 104°46'52.229"W | 0.88 | |
| 5496.00 | 11.580 | 325.900 | 5419.04 | -611.68 | 667.36 | -444.66 | 40°12'10.483"N | 104°46'52.356"W | 1.18 | |
| 5590.00 | 11.130 | 324.990 | 5511.20 | -625.61 | 682.61 | -455.15 | 40°12'10.633"N | 104°46'52.491"W | 0.52 | |
| 5685.00 | 10.440 | 324.400 | 5604.52 | -638.84 | 697.12 | -465.42 | 40°12'10.777"N | 104°46'52.623"W | 0.74 | |
| 5780.00 | 9.590 | 324.820 | 5698.07 | -651.11 | 710.58 | -474.99 | 40°12'10.910"N | 104°46'52.747"W | 0.90 | |
| 5875.00 | 8.590 | 324.120 | 5791.88 | -662.24 | 722.80 | -483.71 | 40°12'11.031"N | 104°46'52.859"W | 1.06 | |
| 5970.00 | 7.180 | 318.230 | 5885.98 | -671.42 | 732.98 | -491.82 | 40°12'11.131"N | 104°46'52.964"W | 1.71 | |
| 6065.00 | 4.930 | 323.450 | 5980.44 | -678.34 | 740.69 | -498.21 | 40°12'11.207"N | 104°46'53.046"W | 2.44 | |
| 6160.00 | 2.460 | 314.290 | 6075.24 | -682.56 | 745.39 | -502.10 | 40°12'11.254"N | 104°46'53.096"W | 2.67 | |
| 6255.00 | 1.710 | 269.260 | 6170.18 | -683.63 | 746.80 | -504.98 | 40°12'11.268"N | 104°46'53.133"W | 1.83 | |
| 6350.00 | 1.510 | 232.290 | 6265.15 | -682.57 | 746.01 | -507.38 | 40°12'11.260"N | 104°46'53.164"W | 1.09 | |
| 6445.00 | 1.250 | 221.350 | 6360.12 | -680.84 | 744.47 | -509.06 | 40°12'11.245"N | 104°46'53.186"W | 0.39 | |
| 6540.00 | 1.260 | 156.650 | 6455.10 | -679.09 | 742.73 | -509.33 | 40°12'11.228"N | 104°46'53.189"W | 1.41 | |
| 6634.00 | 2.200 | 134.010 | 6549.06 | -677.10 | 740.53 | -507.62 | 40°12'11.206"N | 104°46'53.167"W | 1.22 | |
| 6730.00 | 1.820 | 126.120 | 6645.00 | -675.23 | 738.35 | -505.07 | 40°12'11.184"N | 104°46'53.134"W | 0.49 | |
| 6841.00 | 1.500 | 124.010 | 6755.95 | -673.69 | 736.50 | -502.44 | 40°12'11.166"N | 104°46'53.100"W | 0.29 | |
| 6918.00 | 3.930 | 168.980 | 6832.87 | -670.71 | 733.34 | -501.10 | 40°12'11.135"N | 104°46'53.083"W | 3.97 | |
| 6950.00 | 8.060 | 172.820 | 6864.69 | -667.49 | 730.04 | -500.61 | 40°12'11.102"N | 104°46'53.077"W | 12.96 | |
| 6982.00 | 11.240 | 175.960 | 6896.23 | -662.24 | 724.70 | -500.11 | 40°12'11.049"N | 104°46'53.070"W | 10.07 | |
| 7013.00 | 14.480 | 176.330 | 6926.45 | -655.46 | 717.82 | -499.65 | 40°12'10.981"N | 104°46'53.064"W | 10.45 | |
| 7045.00 | 18.040 | 176.630 | 6957.16 | -646.64 | 708.88 | -499.10 | 40°12'10.893"N | 104°46'53.057"W | 11.13 | |
| 7076.00 | 21.630 | 177.710 | 6986.32 | -636.26 | 698.37 | -498.59 | 40°12'10.789"N | 104°46'53.051"W | 11.64 | |
| 7108.00 | 25.180 | 180.230 | 7015.68 | -623.67 | 685.67 | -498.38 | 40°12'10.664"N | 104°46'53.048"W | 11.52 | |
| 7140.00 | 26.280 | 180.680 | 7044.51 | -609.86 | 671.78 | -498.49 | 40°12'10.526"N | 104°46'53.049"W | 3.49 | |
| 7171.00 | 29.000 | 180.600 | 7071.97 | -595.55 | 657.40 | -498.65 | 40°12'10.384"N | 104°46'53.052"W | 8.78 | |
| 7203.00 | 32.010 | 179.300 | 7099.54 | -579.42 | 641.16 | -498.63 | 40°12'10.224"N | 104°46'53.051"W | 9.63 | |
| 7235.00 | 35.630 | 179.060 | 7126.12 | -561.77 | 623.35 | -498.37 | 40°12'10.048"N | 104°46'53.048"W | 11.32 | |
| 7266.00 | 38.420 | 177.830 | 7150.86 | -543.29 | 604.69 | -497.86 | 40°12'09.864"N | 104°46'53.041"W | 9.31 | |
| 7298.00 | 41.080 | 177.440 | 7175.47 | -523.08 | 584.25 | -497.01 | 40°12'09.661"N | 104°46'53.030"W | 8.35 | |
| 7330.00 | 44.110 | 179.040 | 7199.02 | -501.66 | 562.61 | -496.36 | 40°12'09.448"N | 104°46'53.022"W | 10.05 | |
| 7361.00 | 47.020 | 179.190 | 7220.72 | -479.72 | 540.48 | -496.02 | 40°12'09.229"N | 104°46'53.018"W | 9.39 | |



Actual Wellpath Report

BARCLAY 36C-28HZ AWP

Page 4 of 7



REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|---|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT#29 BARCLAY 36C-28HZ (789'FNL & 1865'FEL, SEC.28) |
| Area | COLORADO | Well | BARCLAY 36C-28HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | BARCLAY 36C-28HZ AWB |
| Facility | SEC.28-T3N-R66W | | |

WELLPATH DATA (151 stations) † = interpolated/extrapolated station

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Latitude | Longitude | DLS [°/100ft] | Comments |
|------------|--------------------|----------------|-------------|-------------------|---------------|--------------|----------------|-----------------|------------------|-----------------|
| 7393.00 | 49.490 | 180.320 | 7242.03 | -456.01 | 516.60 | -495.92 | 40°12'08.993"N | 104°46'53.016"W | 8.16 | |
| 7424.00 | 51.750 | 179.540 | 7261.69 | -432.22 | 492.64 | -495.89 | 40°12'08.756"N | 104°46'53.016"W | 7.55 | |
| 7456.00 | 54.550 | 178.870 | 7280.88 | -406.83 | 467.04 | -495.53 | 40°12'08.503"N | 104°46'53.011"W | 8.91 | |
| 7488.00 | 57.860 | 178.170 | 7298.68 | -380.50 | 440.46 | -494.84 | 40°12'08.241"N | 104°46'53.002"W | 10.50 | |
| 7519.00 | 60.260 | 178.670 | 7314.62 | -354.19 | 413.89 | -494.11 | 40°12'07.978"N | 104°46'52.993"W | 7.86 | |
| 7551.00 | 62.210 | 179.420 | 7330.01 | -326.38 | 385.84 | -493.64 | 40°12'07.701"N | 104°46'52.987"W | 6.43 | |
| 7583.00 | 64.880 | 180.570 | 7344.27 | -297.93 | 357.19 | -493.64 | 40°12'07.418"N | 104°46'52.987"W | 8.94 | |
| 7614.00 | 68.240 | 181.040 | 7356.60 | -269.64 | 328.76 | -494.04 | 40°12'07.137"N | 104°46'52.992"W | 10.93 | |
| 7646.00 | 71.650 | 179.630 | 7367.57 | -239.76 | 298.70 | -494.21 | 40°12'06.840"N | 104°46'52.994"W | 11.43 | |
| 7678.00 | 73.910 | 179.140 | 7377.04 | -209.44 | 268.14 | -493.89 | 40°12'06.538"N | 104°46'52.990"W | 7.21 | |
| 7709.00 | 75.510 | 178.370 | 7385.22 | -179.82 | 238.25 | -493.24 | 40°12'06.242"N | 104°46'52.982"W | 5.69 | |
| 7741.00 | 78.290 | 178.510 | 7392.47 | -148.97 | 207.10 | -492.39 | 40°12'05.934"N | 104°46'52.971"W | 8.70 | |
| 7772.00 | 80.380 | 179.630 | 7398.21 | -118.78 | 176.64 | -491.89 | 40°12'05.633"N | 104°46'52.964"W | 7.62 | |
| 7804.00 | 82.700 | 179.640 | 7402.92 | -87.36 | 144.99 | -491.69 | 40°12'05.321"N | 104°46'52.962"W | 7.25 | |
| 7837.00 | 86.790 | 179.860 | 7405.94 | -54.74 | 112.13 | -491.55 | 40°12'04.996"N | 104°46'52.960"W | 12.41 | |
| 7881.00† | 89.477 | 179.813 | 7407.37 | -11.08 | 68.16 | -491.42 | 40°12'04.562"N | 104°46'52.958"W | 6.11 | 7" Casing Point |
| 7902.00 | 90.760 | 179.790 | 7407.33 | 9.77 | 47.16 | -491.35 | 40°12'04.354"N | 104°46'52.957"W | 6.11 | |
| 7997.00 | 91.380 | 179.670 | 7405.55 | 104.07 | -47.82 | -490.90 | 40°12'03.415"N | 104°46'52.952"W | 0.66 | |
| 8092.00 | 90.150 | 179.510 | 7404.28 | 198.35 | -142.81 | -490.22 | 40°12'02.477"N | 104°46'52.943"W | 1.31 | |
| 8187.00 | 88.790 | 178.500 | 7405.16 | 292.50 | -237.78 | -488.57 | 40°12'01.538"N | 104°46'52.921"W | 1.78 | |
| 8282.00 | 88.580 | 179.390 | 7407.34 | 386.63 | -332.74 | -486.83 | 40°12'00.600"N | 104°46'52.899"W | 0.96 | |
| 8377.00 | 90.030 | 180.420 | 7408.50 | 480.96 | -427.73 | -486.67 | 40°11'59.661"N | 104°46'52.897"W | 1.87 | |
| 8471.00 | 90.670 | 180.470 | 7407.92 | 574.42 | -521.73 | -487.40 | 40°11'58.732"N | 104°46'52.906"W | 0.68 | |
| 8566.00 | 90.550 | 180.660 | 7406.91 | 668.88 | -616.72 | -488.33 | 40°11'57.794"N | 104°46'52.918"W | 0.24 | |
| 8661.00 | 90.360 | 180.780 | 7406.16 | 763.38 | -711.71 | -489.53 | 40°11'56.855"N | 104°46'52.934"W | 0.24 | |
| 8756.00 | 89.660 | 178.940 | 7406.14 | 857.71 | -806.70 | -489.30 | 40°11'55.916"N | 104°46'52.931"W | 2.07 | |
| 8851.00 | 89.290 | 178.680 | 7407.01 | 951.83 | -901.68 | -487.32 | 40°11'54.978"N | 104°46'52.905"W | 0.48 | |
| 8946.00 | 88.790 | 179.570 | 7408.60 | 1046.00 | -996.65 | -485.87 | 40°11'54.039"N | 104°46'52.886"W | 1.07 | |
| 9041.00 | 90.330 | 179.180 | 7409.33 | 1140.24 | -1091.64 | -484.84 | 40°11'53.100"N | 104°46'52.873"W | 1.67 | |
| 9135.00 | 91.200 | 180.150 | 7408.08 | 1233.54 | -1185.63 | -484.29 | 40°11'52.172"N | 104°46'52.866"W | 1.39 | |
| 9230.00 | 90.490 | 179.300 | 7406.67 | 1327.84 | -1280.61 | -483.83 | 40°11'51.233"N | 104°46'52.860"W | 1.17 | |
| 9325.00 | 90.210 | 180.270 | 7406.09 | 1422.16 | -1375.61 | -483.47 | 40°11'50.294"N | 104°46'52.855"W | 1.06 | |
| 9420.00 | 89.900 | 180.320 | 7406.00 | 1516.58 | -1470.61 | -483.96 | 40°11'49.355"N | 104°46'52.862"W | 0.33 | |
| 9515.00 | 89.660 | 180.370 | 7406.37 | 1611.01 | -1565.61 | -484.54 | 40°11'48.417"N | 104°46'52.869"W | 0.26 | |
| 9610.00 | 89.320 | 180.770 | 7407.21 | 1705.48 | -1660.60 | -485.48 | 40°11'47.478"N | 104°46'52.881"W | 0.55 | |
| 9705.00 | 88.580 | 180.600 | 7408.95 | 1799.95 | -1755.57 | -486.62 | 40°11'46.539"N | 104°46'52.896"W | 0.80 | |
| 9800.00 | 89.500 | 182.090 | 7410.55 | 1894.54 | -1850.53 | -488.85 | 40°11'45.601"N | 104°46'52.925"W | 1.84 | |
| 9895.00 | 88.950 | 179.820 | 7411.83 | 1989.06 | -1945.50 | -490.43 | 40°11'44.663"N | 104°46'52.945"W | 2.46 | |
| 9990.00 | 89.690 | 180.040 | 7412.96 | 2083.40 | -2040.49 | -490.31 | 40°11'43.724"N | 104°46'52.943"W | 0.81 | |
| 10085.00 | 91.900 | 178.870 | 7411.64 | 2177.65 | -2135.47 | -489.41 | 40°11'42.785"N | 104°46'52.932"W | 2.63 | |
| 10179.00 | 92.240 | 179.200 | 7408.25 | 2270.76 | -2229.40 | -487.83 | 40°11'41.857"N | 104°46'52.911"W | 0.50 | |
| 10274.00 | 90.460 | 178.570 | 7406.01 | 2364.87 | -2324.35 | -485.98 | 40°11'40.919"N | 104°46'52.887"W | 1.99 | |
| 10369.00 | 89.930 | 179.160 | 7405.68 | 2459.00 | -2419.33 | -484.10 | 40°11'39.980"N | 104°46'52.863"W | 0.83 | |
| 10464.00 | 89.250 | 179.170 | 7406.36 | 2553.19 | -2514.32 | -482.71 | 40°11'39.042"N | 104°46'52.845"W | 0.72 | |
| 10559.00 | 88.920 | 179.310 | 7407.88 | 2647.40 | -2609.30 | -481.45 | 40°11'38.103"N | 104°46'52.829"W | 0.38 | |



Actual Wellpath Report

BARCLAY 36C-28HZ AWP

Page 5 of 7



REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|---|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT#29 BARCLAY 36C-28HZ (789'FNL & 1865'FEL, SEC.28) |
| Area | COLORADO | Well | BARCLAY 36C-28HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | BARCLAY 36C-28HZ AWB |
| Facility | SEC.28-T3N-R66W | | |

WELLPATH DATA (151 stations)

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Latitude | Longitude | DLS [°/100ft] | Comments |
|----------|-----------------|-------------|----------|----------------|------------|-----------|----------------|-----------------|---------------|--------------------------|
| 10654.00 | 90.390 | 179.330 | 7408.45 | 2741.62 | -2704.29 | -480.33 | 40°11'37.164"N | 104°46'52.815"W | 1.55 | |
| 10749.00 | 90.120 | 179.440 | 7408.03 | 2835.86 | -2799.28 | -479.31 | 40°11'36.226"N | 104°46'52.801"W | 0.31 | |
| 10844.00 | 89.840 | 180.360 | 7408.06 | 2930.21 | -2894.28 | -479.14 | 40°11'35.287"N | 104°46'52.799"W | 1.01 | |
| 10939.00 | 89.590 | 180.920 | 7408.54 | 3024.69 | -2989.27 | -480.20 | 40°11'34.348"N | 104°46'52.813"W | 0.65 | |
| 11034.00 | 88.950 | 180.060 | 7409.75 | 3119.14 | -3084.26 | -481.01 | 40°11'33.409"N | 104°46'52.823"W | 1.13 | |
| 11129.00 | 89.660 | 181.290 | 7410.90 | 3213.62 | -3179.24 | -482.13 | 40°11'32.471"N | 104°46'52.838"W | 1.49 | |
| 11224.00 | 90.150 | 179.100 | 7411.06 | 3308.02 | -3274.23 | -482.46 | 40°11'31.532"N | 104°46'52.842"W | 2.36 | |
| 11318.00 | 90.460 | 179.650 | 7410.56 | 3401.27 | -3368.23 | -481.43 | 40°11'30.603"N | 104°46'52.829"W | 0.67 | |
| 11413.00 | 89.510 | 178.800 | 7410.58 | 3495.48 | -3463.22 | -480.15 | 40°11'29.664"N | 104°46'52.812"W | 1.34 | |
| 11507.00 | 90.210 | 177.570 | 7410.81 | 3588.46 | -3557.17 | -477.17 | 40°11'28.736"N | 104°46'52.774"W | 1.51 | |
| 11603.00 | 90.800 | 178.830 | 7409.96 | 3683.42 | -3653.11 | -474.15 | 40°11'27.788"N | 104°46'52.735"W | 1.45 | |
| 11698.00 | 90.580 | 178.170 | 7408.82 | 3777.46 | -3748.07 | -471.67 | 40°11'26.850"N | 104°46'52.703"W | 0.73 | |
| 11793.00 | 91.100 | 178.740 | 7407.43 | 3871.48 | -3843.03 | -469.11 | 40°11'25.911"N | 104°46'52.670"W | 0.81 | |
| 11888.00 | 90.670 | 178.470 | 7405.96 | 3965.55 | -3937.99 | -466.79 | 40°11'24.973"N | 104°46'52.640"W | 0.53 | |
| 11908.00 | 92.270 | 179.570 | 7405.45 | 3985.36 | -3957.98 | -466.45 | 40°11'24.775"N | 104°46'52.635"W | 9.71 | Last BHI MWD+IFR Surveys |
| 11967.00 | 92.270 | 179.570 | 7403.11 | 4043.87 | -4016.93 | -466.01 | 40°11'24.193"N | 104°46'52.630"W | 0.00 | Projection to bit |

HOLE & CASING SECTIONS - Ref Wellbore: BARCLAY 36C-28HZ AWB Ref Wellpath: BARCLAY 36C-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 | 13.00 | 712.00 | 699.00 | 13.00 | 711.99 | 0.00 | 0.00 | -1.05 | -0.93 |
| 9.625in Casing Surface | 13.00 | 712.00 | 699.00 | 13.00 | 711.99 | 0.00 | 0.00 | -1.05 | -0.93 |
| 8.75in Open Hole | 712.00 | 7898.00 | 7186.00 | 711.99 | 7407.37 | -1.05 | -0.93 | 51.16 | -491.37 |
| 7in Casing Intermediate | 13.00 | 7881.00 | 7868.00 | 13.00 | 7407.37 | 0.00 | 0.00 | 68.16 | -491.42 |
| 6.125in Open Hole | 7881.00 | 11967.00 | 4086.00 | 7407.37 | 7403.11 | 68.16 | -491.42 | -4016.93 | -466.01 |



Actual Wellpath Report

BARCLAY 36C-28HZ AWP

Page 6 of 7



REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|---|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT#29 BARCLAY 36C-28HZ (789'FNL & 1865'FEL, SEC.28) |
| Area | COLORADO | Well | BARCLAY 36C-28HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | BARCLAY 36C-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 | | 31.70 | -4307.26 | -2951.43 | 3198304.10 | 1312582.33 | 40°11'21.322"N | 104°47'24.655"W | polygon |
| SEC 28 HARDLINES (460' SETBACKS) | | 7332.00 | -4307.26 | -2951.43 | 3198304.10 | 1312582.33 | 40°11'21.322"N | 104°47'24.655"W | polygon |
| BARCLAY 36C-28HZ BHL ON PLAT (460' FSL & 2365' FEL, SEC.28) REV-3 | | 7409.00 | -4042.30 | -469.60 | 3200783.58 | 1312867.43 | 40°11'23.942"N | 104°46'52.676"W | point |
| BARCLAY 36C-28HZ BHL ON PLAT (460' FSL & 2365' FEL, SEC.28) REV-1 | | 7419.00 | -4042.30 | -469.60 | 3200783.58 | 1312867.43 | 40°11'23.942"N | 104°46'52.676"W | point |
| BARCLAY 36C-28HZ BHL ON PLAT (460' FSL & 2365' FEL, SEC.28) REV-2 | | 7429.00 | -4042.30 | -469.60 | 3200783.58 | 1312867.43 | 40°11'23.942"N | 104°46'52.676"W | point |
| BARCLAY 36C-28HZ LAND BOX | | 7450.00 | 0.00 | 0.00 | 3201220.31 | 1316913.23 | 40°12'03.888"N | 104°46'46.625"W | polygon |

WELLPATH COMPOSITION - Ref Wellbore: BARCLAY 36C-28HZ AWB Ref Wellpath: BARCLAY 36C-28HZ AWP

| Start MD [ft] | End MD [ft] | Positional Uncertainty Model | Log Name/Comment | Wellbore |
|---------------|-------------|--------------------------------------|--|----------------------|
| 13.00 | 679.00 | Generic gyro - continuous (Standard) | GYRODATA SURVEYS <113 - 679> | BARCLAY 36C-28HZ AWB |
| 679.00 | 7837.00 | NaviTrak (MAGCORR,IFR) | BHI MWD+IFR SURVEYS 8 3/4" HOLE <758-7837> | BARCLAY 36C-28HZ AWB |
| 7837.00 | 11908.00 | OnTrak (MAGCORR,IFR) | BHI MWD+IFR SURVEYS 6 1/8" HOLE <7902-11908> | BARCLAY 36C-28HZ AWB |
| 11908.00 | 11967.00 | Blind Drilling (std) | Projection to bit | BARCLAY 36C-28HZ AWB |



Actual Wellpath Report

BARCLAY 36C-28HZ AWP

Page 7 of 7



REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|---|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT#29 BARCLAY 36C-28HZ (789'FNL & 1865'FEL, SEC.28) |
| Area | COLORADO | Well | BARCLAY 36C-28HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | BARCLAY 36C-28HZ AWB |
| Facility | SEC.28-T3N-R66W | | |

WELLPATH COMMENTS

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Comment |
|------------|--------------------|----------------|-------------|---------------------------|
| 13.00 | 0.000 | 225.350 | 13.00 | Tie-On |
| 113.00 | 0.330 | 225.350 | 113.00 | Begin Gyro Surveys |
| 679.00 | 0.300 | 2.790 | 678.99 | Tie into Gyro Surveys |
| 758.00 | 0.150 | 324.520 | 757.99 | Begin BHI MWD+IFR Surveys |
| 7881.00 | 89.477 | 179.813 | 7407.37 | 7" Casing Point |
| 11908.00 | 92.270 | 179.570 | 7405.45 | Last BHI MWD+IFR Surveys |
| 11967.00 | 92.270 | 179.570 | 7403.11 | Projection to bit |