

| | | | |
|-----------|--------------------------|-----------|--|
| Location: | COLORADO | Slot: | SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL, SEC.17) |
| Field: | WELD COUNTY (KERR MCGEE) | Well: | MELBON 23C-8HZ |
| Facility: | SEC.17-T2N-R65W | Wellbore: | MELBON 23C-8HZ PWB |

| | | | |
|-----------|--------------------------|-----------|--|
| Location: | COLORADO | Slot: | SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL, SEC.17) |
| Field: | WELD COUNTY (KERR MCGEE) | Well: | MELBON 23C-8HZ |
| Facility: | SEC.17-T2N-R65W | Wellbore: | MELBON 23C-8HZ PWB |

| | |
|--|--|
| True vertical depths are referenced to Rig on SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL) (RT) | Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet |
| Measured depths are referenced to Rig on SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL) (RT) | North Reference: True north |
| Rig on SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL) (RT) to Mean Sea Level: 4966 feet | Scale: True distance |
| Mean Sea Level to Mud line (At Slot: SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL, SEC 17)): 0 feet | Depths are in feet |
| Coordinates are in feet referenced to Slot | Created by: wilsjef02 on 11/29/2012 |

| Facility Name | | | Grid East (US ft) | Grid North (US ft) | Latitude | Longitude |
|--|--------------|--------------|-------------------|--------------------|----------------|-----------------|
| SEC.17-T2N.R65W | | | 3225409.555 | 1294541.951 | 40°08'20.765"N | 104°41'37.506"W |
| Slot | Local N (ft) | Local E (ft) | Grid East (US ft) | Grid North (US ft) | Latitude | Longitude |
| SLOT #6 MELBON 23C-BHZ (2499 FNL & 1155 FWL, SEC.17) | 0.51 | 150.05 | 3225569.587 | 1294543.822 | 40°08'20.760"N | 104°41'35.674"W |
| Rig on SLOT #6 MELBON 23C-BHZ (2499 FNL & 1155 FWL) (RT) to Mud line (At Slot: SLOT #6 MELBON 23C-BHZ (2499 FNL & 1155 FWL, SEC.17)) | | | | | 4960ft | |
| Mean Sea Level to Mud line (At Slot: SLOT #6 MELBON 23C-BHZ (2499 FNL & 1155 FWL, SEC.17)) | | | | | 0ft | |
| Rig on SLOT #6 MELBON 23C-BHZ (2499 FNL & 1155 FWL) (RT) to Mean Sea Level | | | | | 4960ft | |

| Design Comment | MD (ft) | Inc (°) | Az (°) | TVD (ft) | Local N (ft) | Local E (ft) | DLS (°/100ft) | VS (ft) |
|--------------------|----------|---------|--------|----------|--------------|--------------|---------------|---------|
| Tie On | 17.00 | 0.000 | 94.000 | 17.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| End of Tangent | 1300.00 | 0.000 | 94.000 | 1300.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| End of Build (J) | 2130.00 | 16.600 | 94.000 | 2118.44 | -8.33 | 119.11 | 2.00 | 24.25 |
| End of Tangent (J) | 5757.76 | 16.600 | 94.000 | 5595.00 | -80.62 | 1152.99 | 0.00 | 234.74 |
| End of Drop (J) | 6587.76 | 0.000 | 0.543 | 6413.44 | -88.95 | 1272.10 | 2.00 | 258.98 |
| End of Tangent (J) | 6927.37 | 0.000 | 0.543 | 6753.05 | -88.95 | 1272.10 | 0.00 | 258.98 |
| End of Build | 7828.73 | 90.137 | 0.543 | 7326.00 | 485.34 | 1277.54 | 10.00 | 813.28 |
| End of 3D Arc | 12024.42 | 90.137 | 0.543 | 7316.00 | 4680.83 | 1317.30 | 0.00 | 4862.66 |

| Name | MD (ft) | TVD (ft) | Local N (ft) | Local E (ft) | Grid East (US ft) | Grid North (US ft) | Latitude | Longitude |
|--|----------|----------|--------------|--------------|-------------------|--------------------|----------------|-----------------|
| DECHANT X-09-15 (NOBLE) | | 0.00 | 3092.96 | 2095.30 | 3227626.57 | 1297655.58 | 40°08'51.324"N | 104°14'08.552"W |
| FIELDS X8-14 (NOBLE) | | 0.00 | 3162.82 | 1046.95 | 3226577.67 | 1297715.90 | 40°08'52.010"N | 104°14'22.092"W |
| SECTION 17 E/W MDLINE | | 0.00 | -0.20 | -155.41 | 3225404.19 | 1294542.21 | 40°08'20.758"N | 104°13'37.575"W |
| SECTION 17 LINES | | 0.00 | -0.20 | -155.41 | 3225404.19 | 1294542.21 | 40°08'20.758"N | 104°13'37.575"W |
| SECTION 17 N/S MDLINE | | 0.00 | -0.20 | -155.41 | 3225404.19 | 1294542.21 | 40°08'20.758"N | 104°13'37.575"W |
| SECTION 8 E/W MDLINE | | 0.00 | -0.20 | -155.41 | 3225404.19 | 1294542.21 | 40°08'20.758"N | 104°13'37.575"W |
| SECTION 8 LINES | | 0.00 | -0.20 | -155.41 | 3225404.19 | 1294542.21 | 40°08'20.758"N | 104°13'37.575"W |
| SECTION 8 N/S MDLINE | | 0.00 | -0.20 | -155.41 | 3225404.19 | 1294542.21 | 40°08'20.758"N | 104°13'37.575"W |
| DECHANT X-09-24D (NOBLE) | | 7120.42 | 3800.16 | 1610.53 | 3227135.40 | 1298358.32 | 40°08'58.313"N | 104°14'14.834"W |
| MELBON 23C-09Z BHL (2162' FSL & 2430' FWL) REV-2 | 12024.42 | 7316.00 | 4680.83 | 1317.30 | 3226834.19 | 1299236.24 | 40°09'07.016"N | 104°14'18.610"W |
| MELBON 23C-09Z BHL ON PLAT (2182' FSL & 2450' FWL) REV-1 | | 7316.00 | 4680.83 | 1337.30 | 3226854.18 | 1299236.43 | 40°09'07.016"N | 104°14'18.352"W |





Planned Wellpath Report

MELBON 23C-8HZ (PERMIT REV-3) PWP

Page 1 of 7



REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|--|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL, SEC.17) |
| Area | COLORADO | Well | MELBON 23C-8HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | MELBON 23C-8HZ PWB |
| Facility | SEC.17-T2N-R65W | | |

REPORT SETUP INFORMATION

| | | | |
|---------------------|---|----------------------|--|
| Projection System | NAD83 / Lambert Colorado SP, Northern Zone (501), US feet | Software System | WellArchitect® 3.0.2 |
| North Reference | True | User | Wilsjef02 |
| Scale | 0.999959 | Report Generated | 11/29/2012 at 08:17:12 |
| Convergence at slot | 0.52° East | Database/Source file | WellArchitectDB/MELBON_23C-8HZ_PWB.xml |

WELLPATH LOCATION

| | Local coordinates | | Grid coordinates | | Geographic coordinates | |
|-----------------------|-------------------|----------|------------------|-----------------|------------------------|-----------------|
| | North[ft] | East[ft] | Easting[US ft] | Northing[US ft] | Latitude | Longitude |
| Slot Location | 0.51 | 150.05 | 3225559.59 | 1294543.82 | 40°08'20.760"N | 104°41'35.574"W |
| Facility Reference Pt | | | 3225409.56 | 1294541.95 | 40°08'20.755"N | 104°41'37.506"W |
| Field Reference Pt | | | 3197771.84 | 1268891.29 | 40°04'09.600"N | 104°47'36.000"W |

WELLPATH DATUM

| | | |
|--------------------------|--|---|
| Calculation method | Minimum curvature | Rig on SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL) (RT) to Facility Vertical Datum |
| Horizontal Reference Pt | Slot | Rig on SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL) (RT) to Mean Sea Level |
| Vertical Reference Pt | Rig on SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL) (RT) | Rig on SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL) (RT) to Mud Line at Slot (SLOT #6 MELBON 23C-8HZ (2499' FNL & |
| MD Reference Pt | Rig on SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL) (RT) | Section Origin |
| Field Vertical Reference | Mean Sea Level | Section Azimuth |



Planned Wellpath Report

MELBON 23C-8HZ (PERMIT REV-3) PWP

Page 2 of 7



REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|--|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL, SEC.17) |
| Area | COLORADO | Well | MELBON 23C-8HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | MELBON 23C-8HZ PWB |
| Facility | SEC.17-T2N-R65W | | |

WELLPATH DATA (136 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 | 94.000 | 0.00 | 0.00 | 0.00 | 0.00 | 40°08'20.760"N | 104°41'35.574"W | 0.00 | |
| 17.00 | 0.000 | 94.000 | 17.00 | 0.00 | 0.00 | 0.00 | 40°08'20.760"N | 104°41'35.574"W | 0.00 | Tie On |
| 117.00† | 0.000 | 94.000 | 117.00 | 0.00 | 0.00 | 0.00 | 40°08'20.760"N | 104°41'35.574"W | 0.00 | |
| 217.00† | 0.000 | 94.000 | 217.00 | 0.00 | 0.00 | 0.00 | 40°08'20.760"N | 104°41'35.574"W | 0.00 | |
| 317.00† | 0.000 | 94.000 | 317.00 | 0.00 | 0.00 | 0.00 | 40°08'20.760"N | 104°41'35.574"W | 0.00 | |
| 417.00† | 0.000 | 94.000 | 417.00 | 0.00 | 0.00 | 0.00 | 40°08'20.760"N | 104°41'35.574"W | 0.00 | |
| 517.00† | 0.000 | 94.000 | 517.00 | 0.00 | 0.00 | 0.00 | 40°08'20.760"N | 104°41'35.574"W | 0.00 | |
| 617.00† | 0.000 | 94.000 | 617.00 | 0.00 | 0.00 | 0.00 | 40°08'20.760"N | 104°41'35.574"W | 0.00 | |
| 717.00† | 0.000 | 94.000 | 717.00 | 0.00 | 0.00 | 0.00 | 40°08'20.760"N | 104°41'35.574"W | 0.00 | |
| 817.00† | 0.000 | 94.000 | 817.00 | 0.00 | 0.00 | 0.00 | 40°08'20.760"N | 104°41'35.574"W | 0.00 | |
| 917.00† | 0.000 | 94.000 | 917.00 | 0.00 | 0.00 | 0.00 | 40°08'20.760"N | 104°41'35.574"W | 0.00 | |
| 1017.00† | 0.000 | 94.000 | 1017.00 | 0.00 | 0.00 | 0.00 | 40°08'20.760"N | 104°41'35.574"W | 0.00 | |
| 1117.00† | 0.000 | 94.000 | 1117.00 | 0.00 | 0.00 | 0.00 | 40°08'20.760"N | 104°41'35.574"W | 0.00 | |
| 1217.00† | 0.000 | 94.000 | 1217.00 | 0.00 | 0.00 | 0.00 | 40°08'20.760"N | 104°41'35.574"W | 0.00 | |
| 1300.00 | 0.000 | 94.000 | 1300.00 | 0.00 | 0.00 | 0.00 | 40°08'20.760"N | 104°41'35.574"W | 0.00 | End of Tangent |
| 1317.00† | 0.340 | 94.000 | 1317.00 | 0.01 | 0.00 | 0.05 | 40°08'20.760"N | 104°41'35.573"W | 2.00 | |
| 1417.00† | 2.340 | 94.000 | 1416.97 | 0.49 | -0.17 | 2.38 | 40°08'20.758"N | 104°41'35.543"W | 2.00 | |
| 1517.00† | 4.340 | 94.000 | 1516.79 | 1.67 | -0.57 | 8.19 | 40°08'20.754"N | 104°41'35.468"W | 2.00 | |
| 1617.00† | 6.340 | 94.000 | 1616.35 | 3.56 | -1.22 | 17.48 | 40°08'20.748"N | 104°41'35.349"W | 2.00 | |
| 1717.00† | 8.340 | 94.000 | 1715.53 | 6.15 | -2.11 | 30.22 | 40°08'20.739"N | 104°41'35.185"W | 2.00 | |
| 1817.00† | 10.340 | 94.000 | 1814.20 | 9.45 | -3.25 | 46.41 | 40°08'20.728"N | 104°41'34.976"W | 2.00 | |
| 1917.00† | 12.340 | 94.000 | 1912.24 | 13.44 | -4.62 | 66.03 | 40°08'20.714"N | 104°41'34.724"W | 2.00 | |
| 2017.00† | 14.340 | 94.000 | 2009.54 | 18.13 | -6.23 | 89.04 | 40°08'20.698"N | 104°41'34.428"W | 2.00 | |
| 2117.00† | 16.340 | 94.000 | 2105.97 | 23.50 | -8.07 | 115.43 | 40°08'20.680"N | 104°41'34.088"W | 2.00 | |
| 2130.00 | 16.600 | 94.000 | 2118.44 | 24.25 | -8.33 | 119.11 | 40°08'20.678"N | 104°41'34.040"W | 2.00 | End of Build (J) |
| 2217.00† | 16.600 | 94.000 | 2201.81 | 29.30 | -10.06 | 143.90 | 40°08'20.661"N | 104°41'33.721"W | 0.00 | |
| 2317.00† | 16.600 | 94.000 | 2297.64 | 35.10 | -12.06 | 172.40 | 40°08'20.641"N | 104°41'33.354"W | 0.00 | |
| 2417.00† | 16.600 | 94.000 | 2393.48 | 40.90 | -14.05 | 200.90 | 40°08'20.621"N | 104°41'32.987"W | 0.00 | |
| 2517.00† | 16.600 | 94.000 | 2489.31 | 46.70 | -16.04 | 229.40 | 40°08'20.601"N | 104°41'32.620"W | 0.00 | |
| 2617.00† | 16.600 | 94.000 | 2585.14 | 52.51 | -18.03 | 257.90 | 40°08'20.582"N | 104°41'32.253"W | 0.00 | |
| 2717.00† | 16.600 | 94.000 | 2680.97 | 58.31 | -20.03 | 286.40 | 40°08'20.562"N | 104°41'31.886"W | 0.00 | |
| 2817.00† | 16.600 | 94.000 | 2776.80 | 64.11 | -22.02 | 314.90 | 40°08'20.542"N | 104°41'31.519"W | 0.00 | |
| 2917.00† | 16.600 | 94.000 | 2872.64 | 69.91 | -24.01 | 343.40 | 40°08'20.523"N | 104°41'31.153"W | 0.00 | |
| 3017.00† | 16.600 | 94.000 | 2968.47 | 75.71 | -26.01 | 371.89 | 40°08'20.503"N | 104°41'30.786"W | 0.00 | |
| 3117.00† | 16.600 | 94.000 | 3064.30 | 81.52 | -28.00 | 400.39 | 40°08'20.483"N | 104°41'30.419"W | 0.00 | |
| 3217.00† | 16.600 | 94.000 | 3160.13 | 87.32 | -29.99 | 428.89 | 40°08'20.464"N | 104°41'30.052"W | 0.00 | |
| 3317.00† | 16.600 | 94.000 | 3255.97 | 93.12 | -31.98 | 457.39 | 40°08'20.444"N | 104°41'29.685"W | 0.00 | |
| 3417.00† | 16.600 | 94.000 | 3351.80 | 98.92 | -33.98 | 485.89 | 40°08'20.424"N | 104°41'29.318"W | 0.00 | |
| 3517.00† | 16.600 | 94.000 | 3447.63 | 104.72 | -35.97 | 514.39 | 40°08'20.404"N | 104°41'28.951"W | 0.00 | |
| 3617.00† | 16.600 | 94.000 | 3543.46 | 110.53 | -37.96 | 542.89 | 40°08'20.385"N | 104°41'28.584"W | 0.00 | |
| 3717.00† | 16.600 | 94.000 | 3639.29 | 116.33 | -39.96 | 571.39 | 40°08'20.365"N | 104°41'28.217"W | 0.00 | |
| 3817.00† | 16.600 | 94.000 | 3735.13 | 122.13 | -41.95 | 599.89 | 40°08'20.345"N | 104°41'27.850"W | 0.00 | |
| 3917.00† | 16.600 | 94.000 | 3830.96 | 127.93 | -43.94 | 628.39 | 40°08'20.326"N | 104°41'27.483"W | 0.00 | |
| 4017.00† | 16.600 | 94.000 | 3926.79 | 133.74 | -45.93 | 656.89 | 40°08'20.306"N | 104°41'27.116"W | 0.00 | |
| 4092.35† | 16.600 | 94.000 | 3999.00 | 138.11 | -47.44 | 678.36 | 40°08'20.291"N | 104°41'26.840"W | 0.00 | PARKMAN |

REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|--|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL, SEC.17) |
| Area | COLORADO | Well | MELBON 23C-8HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | MELBON 23C-8HZ PWB |
| Facility | SEC.17-T2N-R65W | | |

WELLPATH DATA (136 stations) † = interpolated/extrapolated station

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Latitude | Longitude | DLS [°/100ft] | Comments |
|------------|--------------------|----------------|-------------|-------------------|---------------|--------------|----------------|-----------------|------------------|--------------------|
| 4117.00† | 16.600 | 94.000 | 4022.62 | 139.54 | -47.93 | 685.39 | 40°08'20.286"N | 104°41'26.749"W | 0.00 | |
| 4217.00† | 16.600 | 94.000 | 4118.46 | 145.34 | -49.92 | 713.89 | 40°08'20.267"N | 104°41'26.382"W | 0.00 | |
| 4317.00† | 16.600 | 94.000 | 4214.29 | 151.14 | -51.91 | 742.38 | 40°08'20.247"N | 104°41'26.015"W | 0.00 | |
| 4417.00† | 16.600 | 94.000 | 4310.12 | 156.94 | -53.91 | 770.88 | 40°08'20.227"N | 104°41'25.648"W | 0.00 | |
| 4517.00† | 16.600 | 94.000 | 4405.95 | 162.75 | -55.90 | 799.38 | 40°08'20.207"N | 104°41'25.281"W | 0.00 | |
| 4617.00† | 16.600 | 94.000 | 4501.79 | 168.55 | -57.89 | 827.88 | 40°08'20.188"N | 104°41'24.914"W | 0.00 | |
| 4712.18† | 16.600 | 94.000 | 4593.00 | 174.07 | -59.79 | 855.01 | 40°08'20.169"N | 104°41'24.565"W | 0.00 | SUSSEX |
| 4717.00† | 16.600 | 94.000 | 4597.62 | 174.35 | -59.88 | 856.38 | 40°08'20.168"N | 104°41'24.547"W | 0.00 | |
| 4817.00† | 16.600 | 94.000 | 4693.45 | 180.15 | -61.88 | 884.88 | 40°08'20.148"N | 104°41'24.180"W | 0.00 | |
| 4917.00† | 16.600 | 94.000 | 4789.28 | 185.95 | -63.87 | 913.38 | 40°08'20.129"N | 104°41'23.814"W | 0.00 | |
| 5017.00† | 16.600 | 94.000 | 4885.11 | 191.76 | -65.86 | 941.88 | 40°08'20.109"N | 104°41'23.447"W | 0.00 | |
| 5117.00† | 16.600 | 94.000 | 4980.95 | 197.56 | -67.86 | 970.38 | 40°08'20.089"N | 104°41'23.080"W | 0.00 | |
| 5217.00† | 16.600 | 94.000 | 5076.78 | 203.36 | -69.85 | 998.88 | 40°08'20.070"N | 104°41'22.713"W | 0.00 | |
| 5317.00† | 16.600 | 94.000 | 5172.61 | 209.16 | -71.84 | 1027.38 | 40°08'20.050"N | 104°41'22.346"W | 0.00 | |
| 5417.00† | 16.600 | 94.000 | 5268.44 | 214.96 | -73.83 | 1055.88 | 40°08'20.030"N | 104°41'21.979"W | 0.00 | |
| 5517.00† | 16.600 | 94.000 | 5364.28 | 220.77 | -75.83 | 1084.38 | 40°08'20.010"N | 104°41'21.612"W | 0.00 | |
| 5617.00† | 16.600 | 94.000 | 5460.11 | 226.57 | -77.82 | 1112.87 | 40°08'19.991"N | 104°41'21.245"W | 0.00 | |
| 5717.00† | 16.600 | 94.000 | 5555.94 | 232.37 | -79.81 | 1141.37 | 40°08'19.971"N | 104°41'20.878"W | 0.00 | |
| 5757.76 | 16.600 | 94.000 | 5595.00 | 234.74 | -80.62 | 1152.99 | 40°08'19.963"N | 104°41'20.728"W | 0.00 | End of Tangent (J) |
| 5817.00† | 15.415 | 94.000 | 5651.94 | 238.05 | -81.76 | 1169.29 | 40°08'19.952"N | 104°41'20.519"W | 2.00 | |
| 5917.00† | 13.415 | 94.000 | 5748.79 | 243.11 | -83.50 | 1194.12 | 40°08'19.935"N | 104°41'20.199"W | 2.00 | |
| 6017.00† | 11.415 | 94.000 | 5846.45 | 247.48 | -85.00 | 1215.57 | 40°08'19.920"N | 104°41'19.923"W | 2.00 | |
| 6117.00† | 9.415 | 94.000 | 5944.79 | 251.15 | -86.26 | 1233.60 | 40°08'19.907"N | 104°41'19.690"W | 2.00 | |
| 6217.00† | 7.415 | 94.000 | 6043.71 | 254.12 | -87.28 | 1248.20 | 40°08'19.897"N | 104°41'19.503"W | 2.00 | |
| 6317.00† | 5.415 | 94.000 | 6143.08 | 256.39 | -88.06 | 1259.34 | 40°08'19.889"N | 104°41'19.359"W | 2.00 | |
| 6417.00† | 3.415 | 94.000 | 6242.78 | 257.95 | -88.60 | 1267.02 | 40°08'19.884"N | 104°41'19.260"W | 2.00 | |
| 6517.00† | 1.415 | 94.000 | 6342.69 | 258.81 | -88.89 | 1271.22 | 40°08'19.881"N | 104°41'19.206"W | 2.00 | |
| 6587.76 | 0.000 | 0.543 | 6413.44 | 258.98 | -88.95 | 1272.10 | 40°08'19.881"N | 104°41'19.195"W | 2.00 | End of Drop (J) |
| 6617.00† | 0.000 | 0.543 | 6442.68 | 258.98 | -88.95 | 1272.10 | 40°08'19.881"N | 104°41'19.195"W | 0.00 | |
| 6717.00† | 0.000 | 0.543 | 6542.68 | 258.98 | -88.95 | 1272.10 | 40°08'19.881"N | 104°41'19.195"W | 0.00 | |
| 6817.00† | 0.000 | 0.543 | 6642.68 | 258.98 | -88.95 | 1272.10 | 40°08'19.881"N | 104°41'19.195"W | 0.00 | |
| 6917.00† | 0.000 | 0.543 | 6742.68 | 258.98 | -88.95 | 1272.10 | 40°08'19.881"N | 104°41'19.195"W | 0.00 | |
| 6927.37 | 0.000 | 0.543 | 6753.05 | 258.98 | -88.95 | 1272.10 | 40°08'19.881"N | 104°41'19.195"W | 0.00 | End of Tangent (J) |
| 7017.00† | 8.963 | 0.543 | 6842.31 | 265.74 | -81.96 | 1272.16 | 40°08'19.950"N | 104°41'19.194"W | 10.00 | |
| 7117.00† | 18.963 | 0.543 | 6939.23 | 289.00 | -57.86 | 1272.39 | 40°08'20.188"N | 104°41'19.191"W | 10.00 | |
| 7153.12† | 22.575 | 0.543 | 6973.00 | 301.36 | -45.05 | 1272.51 | 40°08'20.314"N | 104°41'19.189"W | 10.00 | SHARON SPRINGS |
| 7217.00† | 28.963 | 0.543 | 7030.50 | 328.15 | -17.30 | 1272.78 | 40°08'20.589"N | 104°41'19.186"W | 10.00 | |
| 7225.61† | 29.824 | 0.543 | 7038.00 | 332.22 | -13.07 | 1272.82 | 40°08'20.630"N | 104°41'19.185"W | 10.00 | NIOBRARA A |
| 7256.06† | 32.869 | 0.543 | 7064.00 | 347.51 | 2.76 | 1272.97 | 40°08'20.787"N | 104°41'19.184"W | 10.00 | NIOBRARA B |
| 7317.00† | 38.963 | 0.543 | 7113.33 | 381.99 | 38.49 | 1273.30 | 40°08'21.140"N | 104°41'19.179"W | 10.00 | |
| 7385.65† | 45.828 | 0.543 | 7164.00 | 426.64 | 84.75 | 1273.74 | 40°08'21.597"N | 104°41'19.173"W | 10.00 | NIOBRARA C |
| 7417.00† | 48.963 | 0.543 | 7185.22 | 448.91 | 107.82 | 1273.96 | 40°08'21.825"N | 104°41'19.171"W | 10.00 | |
| 7517.00† | 58.963 | 0.543 | 7243.98 | 526.85 | 188.58 | 1274.73 | 40°08'22.623"N | 104°41'19.161"W | 10.00 | |
| 7617.00† | 68.963 | 0.543 | 7287.82 | 613.46 | 278.31 | 1275.58 | 40°08'23.510"N | 104°41'19.150"W | 10.00 | |
| 7650.76† | 72.339 | 0.543 | 7299.00 | 644.20 | 310.16 | 1275.88 | 40°08'23.825"N | 104°41'19.146"W | 10.00 | FORT HAYS |



Planned Wellpath Report

MELBON 23C-8HZ (PERMIT REV-3) PWP
Page 4 of 7



REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|--|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL, SEC.17) |
| Area | COLORADO | Well | MELBON 23C-8HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | MELBON 23C-8HZ PWB |
| Facility | SEC.17-T2N-R65W | | |

WELLPATH DATA (136 stations) † = interpolated/extrapolated station

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Latitude | Longitude | DLS [°/100ft] | Comments |
|------------|--------------------|----------------|-------------|-------------------|---------------|--------------|----------------|-----------------|------------------|--------------|
| 7717.00† | 78.963 | 0.543 | 7315.41 | 706.10 | 374.30 | 1276.49 | 40°08'24.458"N | 104°41'19.138"W | 10.00 | |
| 7817.00† | 88.963 | 0.543 | 7325.91 | 801.96 | 473.61 | 1277.43 | 40°08'25.440"N | 104°41'19.126"W | 10.00 | |
| 7828.73 | 90.137 | 0.543 | 7326.00 | 813.28 | 485.34 | 1277.54 | 40°08'25.556"N | 104°41'19.124"W | 10.00 | End of Build |
| 7917.00† | 90.137 | 0.543 | 7325.79 | 898.47 | 573.61 | 1278.38 | 40°08'26.428"N | 104°41'19.113"W | 0.00 | |
| 8017.00† | 90.137 | 0.543 | 7325.55 | 994.98 | 673.60 | 1279.33 | 40°08'27.416"N | 104°41'19.101"W | 0.00 | |
| 8117.00† | 90.137 | 0.543 | 7325.32 | 1091.50 | 773.60 | 1280.27 | 40°08'28.404"N | 104°41'19.089"W | 0.00 | |
| 8217.00† | 90.137 | 0.543 | 7325.08 | 1188.01 | 873.59 | 1281.22 | 40°08'29.393"N | 104°41'19.077"W | 0.00 | |
| 8317.00† | 90.137 | 0.543 | 7324.84 | 1284.52 | 973.59 | 1282.17 | 40°08'30.381"N | 104°41'19.064"W | 0.00 | |
| 8417.00† | 90.137 | 0.543 | 7324.60 | 1381.04 | 1073.58 | 1283.12 | 40°08'31.369"N | 104°41'19.052"W | 0.00 | |
| 8517.00† | 90.137 | 0.543 | 7324.36 | 1477.55 | 1173.58 | 1284.07 | 40°08'32.357"N | 104°41'19.040"W | 0.00 | |
| 8617.00† | 90.137 | 0.543 | 7324.12 | 1574.06 | 1273.57 | 1285.01 | 40°08'33.345"N | 104°41'19.028"W | 0.00 | |
| 8717.00† | 90.137 | 0.543 | 7323.89 | 1670.57 | 1373.57 | 1285.96 | 40°08'34.333"N | 104°41'19.015"W | 0.00 | |
| 8817.00† | 90.137 | 0.543 | 7323.65 | 1767.09 | 1473.56 | 1286.91 | 40°08'35.322"N | 104°41'19.003"W | 0.00 | |
| 8917.00† | 90.137 | 0.543 | 7323.41 | 1863.60 | 1573.56 | 1287.86 | 40°08'36.310"N | 104°41'18.991"W | 0.00 | |
| 9017.00† | 90.137 | 0.543 | 7323.17 | 1960.11 | 1673.55 | 1288.80 | 40°08'37.298"N | 104°41'18.978"W | 0.00 | |
| 9117.00† | 90.137 | 0.543 | 7322.93 | 2056.63 | 1773.55 | 1289.75 | 40°08'38.286"N | 104°41'18.966"W | 0.00 | |
| 9217.00† | 90.137 | 0.543 | 7322.69 | 2153.14 | 1873.54 | 1290.70 | 40°08'39.274"N | 104°41'18.954"W | 0.00 | |
| 9317.00† | 90.137 | 0.543 | 7322.45 | 2249.65 | 1973.54 | 1291.65 | 40°08'40.262"N | 104°41'18.942"W | 0.00 | |
| 9417.00† | 90.137 | 0.543 | 7322.22 | 2346.16 | 2073.53 | 1292.60 | 40°08'41.250"N | 104°41'18.929"W | 0.00 | |
| 9517.00† | 90.137 | 0.543 | 7321.98 | 2442.68 | 2173.53 | 1293.54 | 40°08'42.239"N | 104°41'18.917"W | 0.00 | |
| 9617.00† | 90.137 | 0.543 | 7321.74 | 2539.19 | 2273.52 | 1294.49 | 40°08'43.227"N | 104°41'18.905"W | 0.00 | |
| 9717.00† | 90.137 | 0.543 | 7321.50 | 2635.70 | 2373.52 | 1295.44 | 40°08'44.215"N | 104°41'18.893"W | 0.00 | |
| 9817.00† | 90.137 | 0.543 | 7321.26 | 2732.22 | 2473.51 | 1296.39 | 40°08'45.203"N | 104°41'18.880"W | 0.00 | |
| 9917.00† | 90.137 | 0.543 | 7321.02 | 2828.73 | 2573.51 | 1297.33 | 40°08'46.191"N | 104°41'18.868"W | 0.00 | |
| 10017.00† | 90.137 | 0.543 | 7320.79 | 2925.24 | 2673.51 | 1298.28 | 40°08'47.179"N | 104°41'18.856"W | 0.00 | |
| 10117.00† | 90.137 | 0.543 | 7320.55 | 3021.75 | 2773.50 | 1299.23 | 40°08'48.168"N | 104°41'18.844"W | 0.00 | |
| 10217.00† | 90.137 | 0.543 | 7320.31 | 3118.27 | 2873.50 | 1300.18 | 40°08'49.156"N | 104°41'18.831"W | 0.00 | |
| 10317.00† | 90.137 | 0.543 | 7320.07 | 3214.78 | 2973.49 | 1301.12 | 40°08'50.144"N | 104°41'18.819"W | 0.00 | |
| 10417.00† | 90.137 | 0.543 | 7319.83 | 3311.29 | 3073.49 | 1302.07 | 40°08'51.132"N | 104°41'18.807"W | 0.00 | |
| 10517.00† | 90.137 | 0.543 | 7319.59 | 3407.81 | 3173.48 | 1303.02 | 40°08'52.120"N | 104°41'18.794"W | 0.00 | |
| 10617.00† | 90.137 | 0.543 | 7319.36 | 3504.32 | 3273.48 | 1303.97 | 40°08'53.108"N | 104°41'18.782"W | 0.00 | |
| 10717.00† | 90.137 | 0.543 | 7319.12 | 3600.83 | 3373.47 | 1304.91 | 40°08'54.097"N | 104°41'18.770"W | 0.00 | |
| 10817.00† | 90.137 | 0.543 | 7318.88 | 3697.34 | 3473.47 | 1305.86 | 40°08'55.085"N | 104°41'18.758"W | 0.00 | |
| 10917.00† | 90.137 | 0.543 | 7318.64 | 3793.86 | 3573.46 | 1306.81 | 40°08'56.073"N | 104°41'18.745"W | 0.00 | |
| 11017.00† | 90.137 | 0.543 | 7318.40 | 3890.37 | 3673.46 | 1307.76 | 40°08'57.061"N | 104°41'18.733"W | 0.00 | |
| 11117.00† | 90.137 | 0.543 | 7318.16 | 3986.88 | 3773.45 | 1308.70 | 40°08'58.049"N | 104°41'18.721"W | 0.00 | |
| 11217.00† | 90.137 | 0.543 | 7317.93 | 4083.39 | 3873.45 | 1309.65 | 40°08'59.037"N | 104°41'18.709"W | 0.00 | |
| 11317.00† | 90.137 | 0.543 | 7317.69 | 4179.91 | 3973.44 | 1310.60 | 40°09'00.026"N | 104°41'18.696"W | 0.00 | |
| 11417.00† | 90.137 | 0.543 | 7317.45 | 4276.42 | 4073.44 | 1311.55 | 40°09'01.014"N | 104°41'18.684"W | 0.00 | |
| 11517.00† | 90.137 | 0.543 | 7317.21 | 4372.93 | 4173.43 | 1312.49 | 40°09'02.002"N | 104°41'18.672"W | 0.00 | |
| 11617.00† | 90.137 | 0.543 | 7316.97 | 4469.45 | 4273.43 | 1313.44 | 40°09'02.990"N | 104°41'18.659"W | 0.00 | |
| 11717.00† | 90.137 | 0.543 | 7316.73 | 4565.96 | 4373.42 | 1314.39 | 40°09'03.978"N | 104°41'18.647"W | 0.00 | |
| 11817.00† | 90.137 | 0.543 | 7316.49 | 4662.47 | 4473.42 | 1315.34 | 40°09'04.966"N | 104°41'18.635"W | 0.00 | |
| 11917.00† | 90.137 | 0.543 | 7316.26 | 4758.98 | 4573.41 | 1316.28 | 40°09'05.954"N | 104°41'18.623"W | 0.00 | |
| 12017.00† | 90.137 | 0.543 | 7316.02 | 4855.50 | 4673.41 | 1317.23 | 40°09'06.943"N | 104°41'18.610"W | 0.00 | |



Planned Wellpath Report

MELBON 23C-8HZ (PERMIT REV-3) PWP

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REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|--|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL, SEC.17) |
| Area | COLORADO | Well | MELBON 23C-8HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | MELBON 23C-8HZ PWB |
| Facility | SEC.17-T2N-R65W | | |

WELLPATH DATA (136 stations)

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Latitude | Longitude | DLS [°/100ft] | Comments |
|------------|--------------------|----------------|----------------------|-------------------|---------------|--------------|----------------|-----------------|------------------|---------------|
| 12024.42 | 90.137 | 0.543 | 7316.00 ¹ | 4862.66 | 4680.83 | 1317.30 | 40°09'07.016"N | 104°41'18.610"W | 0.00 | End of 3D Arc |

HOLE & CASING SECTIONS - Ref Wellbore: MELBON 23C-8HZ PWB Ref Wellpath: MELBON 23C-8HZ (PERMIT REV-3) PWP

| 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 | 1035.00 | 1018.00 | 17.00 | 1035.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9.625in Casing | 17.00 | 1035.00 | 1018.00 | 17.00 | 1035.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8.75in Open Hole | 1035.00 | 7828.73 | 6793.73 | 1035.00 | 7326.00 | 0.00 | 0.00 | 485.34 | 1277.54 |
| 7in Casing | 17.00 | 7828.73 | 7811.73 | 17.00 | 7326.00 | 0.00 | 0.00 | 485.34 | 1277.54 |
| 6.125in Open Hole | 7828.73 | 12024.42 | 4195.69 | 7326.00 | 7316.00 | 485.34 | 1277.54 | 4680.83 | 1317.30 |
| 4.5in Casing Production | 17.00 | 12024.42 | 12007.42 | 17.00 | 7316.00 | 0.00 | 0.00 | 4680.83 | 1317.30 |



Planned Wellpath Report

MELBON 23C-8HZ (PERMIT REV-3) PWP
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REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|--|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL, SEC.17) |
| Area | COLORADO | Well | MELBON 23C-8HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | MELBON 23C-8HZ PWB |
| Facility | SEC.17-T2N-R65W | | |

TARGETS

| Name | MD [ft] | TVD [ft] | North [ft] | East [ft] | Grid East [US ft] | Grid North [US ft] | Latitude | Longitude | Shape |
|--|------------|-------------|---------------|--------------|----------------------|-----------------------|----------------|-----------------|---------|
| DECHANT X-08-15 (NOBLE) | | 0.00 | 3092.96 | 2095.30 | 3227626.57 | 1297655.58 | 40°08'51.324"N | 104°41'08.592"W | circle |
| FIELDS X8-14 (NOBLE) | | 0.00 | 3162.82 | 1046.95 | 3226577.67 | 1297715.90 | 40°08'52.015"N | 104°41'22.092"W | circle |
| SECTION 17 E/W MIDLINE | | 0.00 | -0.20 | -155.41 | 3225404.19 | 1294542.21 | 40°08'20.758"N | 104°41'37.575"W | polygon |
| SECTION 17 LINES | | 0.00 | -0.20 | -155.41 | 3225404.19 | 1294542.21 | 40°08'20.758"N | 104°41'37.575"W | polygon |
| SECTION 17 N/S MIDLINE | | 0.00 | -0.20 | -155.41 | 3225404.19 | 1294542.21 | 40°08'20.758"N | 104°41'37.575"W | polygon |
| SECTION 8 E/W MIDLINE | | 0.00 | -0.20 | -155.41 | 3225404.19 | 1294542.21 | 40°08'20.758"N | 104°41'37.575"W | polygon |
| SECTION 8 LINES | | 0.00 | -0.20 | -155.41 | 3225404.19 | 1294542.21 | 40°08'20.758"N | 104°41'37.575"W | polygon |
| SECTION 8 N/S MIDLINE | | 0.00 | -0.20 | -155.41 | 3225404.19 | 1294542.21 | 40°08'20.758"N | 104°41'37.575"W | polygon |
| DECHANT X-08-24D (NOBLE) | | 7120.00 | 3800.16 | 1610.53 | 3227135.40 | 1298358.32 | 40°08'58.313"N | 104°41'14.834"W | circle |
| 1) MELBON 23C-8HZ BHL (2182' FSL & 2430' FWL) REV-2 | 12024.42 | 7316.00 | 4680.83 | 1317.30 | 3226834.19 | 1299236.24 | 40°09'07.016"N | 104°41'18.610"W | point |
| MELBON 23C-8HZ BHL ON PLAT (2182' FSL & 2450' FWL) REV-1 | | 7316.00 | 4680.83 | 1337.30 | 3226854.18 | 1299236.43 | 40°09'07.016"N | 104°41'18.352"W | point |

SURVEY PROGRAM - Ref Wellbore: MELBON 23C-8HZ PWB Ref Wellpath: MELBON 23C-8HZ (PERMIT REV-3) PWP

| Start MD [ft] | End MD [ft] | Positional Uncertainty Model | Log Name/Comment | Wellbore |
|------------------|----------------|------------------------------|------------------|--------------------|
| 17.00 | 7828.73 | NaviTrak (Standard) | | MELBON 23C-8HZ PWB |
| 7828.73 | 12024.42 | OnTrak (Standard) | | MELBON 23C-8HZ PWB |



Planned Wellpath Report
MELBON 23C-8HZ (PERMIT REV-3) PWP
Page 7 of 7



REFERENCE WELLPATH IDENTIFICATION

| | | | |
|----------|---------------------------------|----------|--|
| Operator | KERR-MCGEE OIL & GAS ONSHORE LP | Slot | SLOT #6 MELBON 23C-8HZ (2499' FNL & 1155' FWL, SEC.17) |
| Area | COLORADO | Well | MELBON 23C-8HZ |
| Field | WELD COUNTY (KERR MCGEE) | Wellbore | MELBON 23C-8HZ PWB |
| Facility | SEC.17-T2N-R65W | | |

WELLPATH COMMENTS

| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Comment |
|------------|--------------------|----------------|-------------|----------------|
| 4092.35 | 16.600 | 94.000 | 3999.00 | PARKMAN |
| 4712.18 | 16.600 | 94.000 | 4593.00 | SUSSEX |
| 7153.12 | 22.575 | 0.543 | 6973.00 | SHARON SPRINGS |
| 7225.61 | 29.824 | 0.543 | 7038.00 | NIOBRARA A |
| 7256.06 | 32.869 | 0.543 | 7064.00 | NIOBRARA B |
| 7385.65 | 45.828 | 0.543 | 7164.00 | NIOBRARA C |
| 7650.76 | 72.339 | 0.543 | 7299.00 | FORT HAYS |