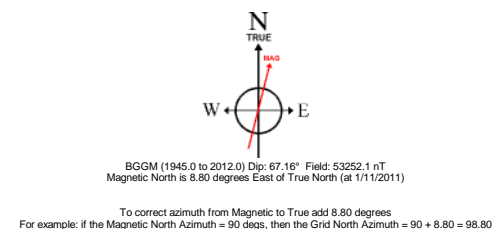
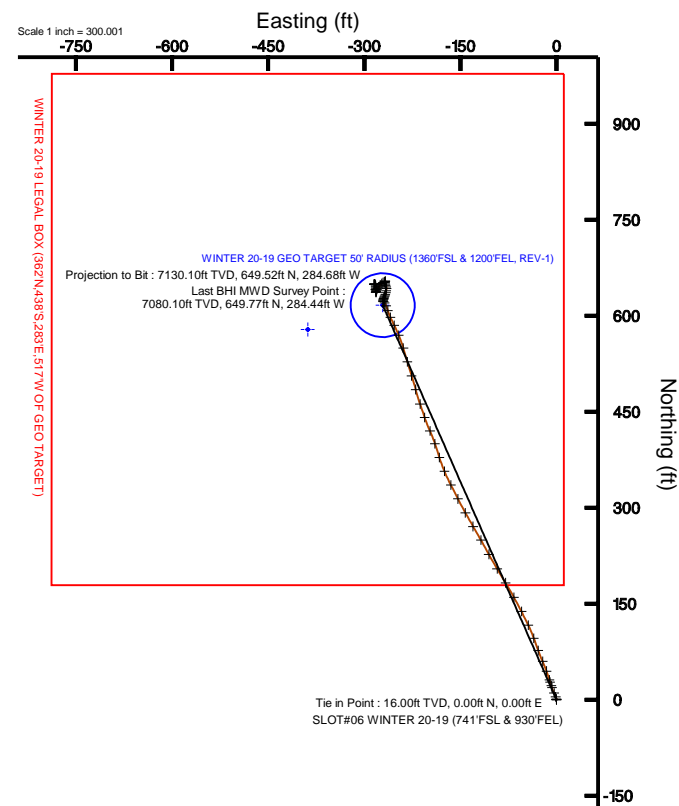
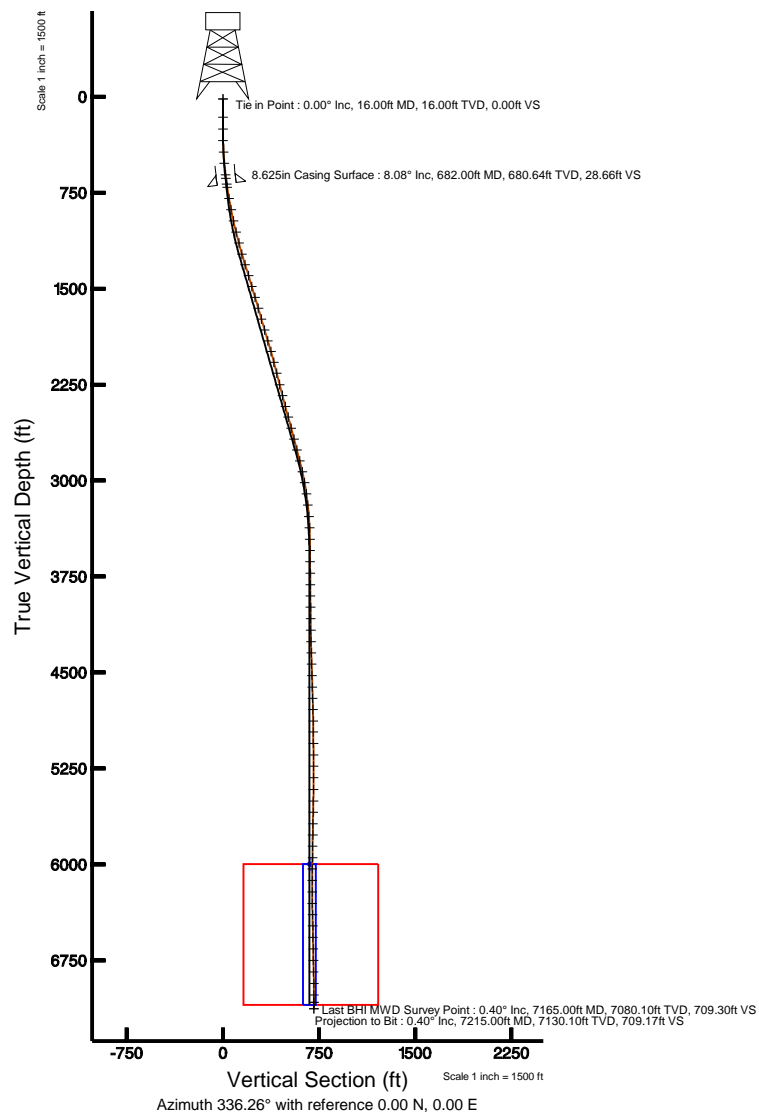


# KERR MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#06 WINTER 20-19 (741°FSL & 930°FEL)  
 Field: WELD COUNTY (KERR MCGEE) Well: WINTER 20-19  
 Facility: SEC.19-T6N-R64W Wellbore: WINTER 20-19 PWB

Plot reference wellpath is WINTER 20-19 (REV-A.0) PWP

|  |  |
|--|--|
| True vertical depths are referenced to XTREME 16 (RKB)         | Grid System: NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet |
| Measured depths are referenced to XTREME 16 (RKB)              | North Reference: True north  |
| XTREME 16 (RKB) to Mean Sea Level: 4720 feet                   | Scale: True distance   |
| Mean Sea Level to Mud line (Facility: SEC.19-T6N-R64W): 0 feet | Depths are in feet   |
| Coordinates are in feet referenced to Slot                     | Created by: painsetr on 3/22/2011  |





# Actual Wellpath Report

WINTER 20-19 AWP

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INTEQ

## REFERENCE WELLPATH IDENTIFICATION

|          |                                 |          |  |
|----------|---------------------------------|----------|--|
| Operator | KERR MCGEE OIL & GAS ONSHORE LP | Slot     | SLOT#06 WINTER 20-19 (741'FSL & 930'FEL) |
| Area     | COLORADO                        | Well     | WINTER 20-19                             |
| Field    | WELD COUNTY (KERR MCGEE)        | Wellbore | WINTER 20-19 AWB                         |
| Facility | SEC.19-T6N-R64W                 |          |  |

## REPORT SETUP INFORMATION

|                     |   |                      |                                |
|---------------------|---|----------------------|--------------------------------|
| Projection System   | NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet | Software System      | WellArchitect® 2.0             |
| North Reference     | True  | User                 | Painsetr                       |
| Scale               | 0.999964  | Report Generated     | 3/22/2011 at 3:53:44 PM        |
| Convergence at slot | 0.59° East  | Database/Source file | WA_DENVER/WINTER_20-19_AWB.xml |

## WELLPATH LOCATION

|                       | Local coordinates |          | Grid coordinates |                | Geographic coordinates |                 |
|-----------------------|-------------------|----------|------------------|----------------|------------------------|-----------------|
|                       | North[ft]         | East[ft] | Easting[USft]    | Northing[USft] | Latitude               | Longitude       |
| Slot Location         | -1177.72          | 2328.66  | 3254014.51       | 1413997.39     | 40°27'58.446"N         | 104°35'13.362"W |
| Facility Reference Pt |                   |          | 3251674.04       | 1415151.26     | 40°28'10.085"N         | 104°35'43.490"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 16 (RKB) to Facility Vertical Datum     | 4720.00ft         |
| Horizontal Reference Pt  | Slot              | XTREME 16 (RKB) to Mean Sea Level              | 4720.00ft         |
| Vertical Reference Pt    | XTREME 16 (RKB)   | Facility Vertical Datum to Mud Line (Facility) | 0.00ft            |
| MD Reference Pt          | XTREME 16 (RKB)   | Section Origin                                 | N 0.00, E 0.00 ft |
| Field Vertical Reference | Mean Sea Level    | Section Azimuth                                | 336.26°           |



# Actual Wellpath Report

WINTER 20-19 AWP

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INTEQ

## REFERENCE WELLPATH IDENTIFICATION

|          |                                 |          |  |
|----------|---------------------------------|----------|--|
| Operator | KERR MCGEE OIL & GAS ONSHORE LP | Slot     | SLOT#06 WINTER 20-19 (741'FSL & 930'FEL) |
| Area     | COLORADO                        | Well     | WINTER 20-19                             |
| Field    | WELD COUNTY (KERR MCGEE)        | Wellbore | WINTER 20-19 AWB                         |
| Facility | SEC.19-T6N-R64W                 |          |  |

## WELLPATH DATA (84 stations) † = interpolated/extrapolated station

| MD<br>[ft] | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[ft] | Vert Sect<br>[ft] | North<br>[ft] | East<br>[ft] | DLS<br>[°/100ft] | Comments     |
|------------|--------------------|----------------|-------------|-------------------|---------------|--------------|------------------|--------------|
| 0.00†      | 0.000              | 165.600        | 0.00        | 0.00              | 0.00          | 0.00         | 0.00             |              |
| 16.00      | 0.000              | 165.600        | 16.00       | 0.00              | 0.00          | 0.00         | 0.00             | Tie in Point |
| 158.00     | 0.300              | 165.600        | 158.00      | -0.37             | -0.36         | 0.09         | 0.21             |              |
| 251.00     | 0.100              | 101.600        | 251.00      | -0.65             | -0.61         | 0.23         | 0.29             |              |
| 342.00     | 1.500              | 347.000        | 341.99      | 0.47              | 0.53          | 0.04         | 1.70             |              |
| 431.00     | 3.300              | 340.000        | 430.91      | 4.17              | 4.07          | -1.10        | 2.05             |              |
| 520.00     | 5.000              | 336.100        | 519.67      | 10.61             | 10.03         | -3.54        | 1.94             |              |
| 609.00     | 6.500              | 340.000        | 608.22      | 19.51             | 18.31         | -6.84        | 1.74             |              |
| 637.00     | 7.000              | 341.700        | 636.03      | 22.79             | 21.42         | -7.92        | 1.92             |              |
| 708.00     | 8.700              | 343.100        | 706.36      | 32.43             | 30.66         | -10.84       | 2.41             |              |
| 797.00     | 9.900              | 339.600        | 794.19      | 46.75             | 44.28         | -15.46       | 1.49             |              |
| 887.00     | 11.100             | 337.500        | 882.68      | 63.14             | 59.53         | -21.47       | 1.40             |              |
| 976.00     | 12.400             | 339.000        | 969.81      | 81.25             | 76.37         | -28.17       | 1.50             |              |
| 1065.00    | 14.200             | 340.300        | 1056.42     | 101.68            | 95.57         | -35.28       | 2.05             |              |
| 1154.00    | 14.800             | 334.400        | 1142.59     | 123.94            | 116.10        | -43.87       | 1.79             |              |
| 1244.00    | 16.100             | 332.900        | 1229.34     | 147.88            | 137.58        | -54.52       | 1.51             |              |
| 1331.00    | 17.300             | 331.200        | 1312.67     | 172.81            | 159.65        | -66.25       | 1.49             |              |
| 1420.00    | 17.000             | 329.400        | 1397.71     | 198.91            | 182.45        | -79.25       | 0.69             |              |
| 1508.00    | 17.000             | 328.700        | 1481.87     | 224.44            | 204.51        | -92.48       | 0.23             |              |
| 1597.00    | 17.000             | 331.200        | 1566.98     | 250.30            | 227.03        | -105.51      | 0.82             |              |
| 1687.00    | 16.000             | 330.500        | 1653.27     | 275.74            | 249.36        | -117.96      | 1.13             |              |
| 1775.00    | 16.200             | 330.100        | 1737.82     | 300.01            | 270.55        | -130.05      | 0.26             |              |
| 1863.00    | 16.100             | 331.200        | 1822.35     | 324.37            | 291.89        | -142.04      | 0.37             |              |
| 1951.00    | 16.500             | 332.900        | 1906.81     | 349.00            | 313.70        | -153.62      | 0.71             |              |
| 2038.00    | 16.200             | 332.900        | 1990.29     | 373.45            | 335.51        | -164.77      | 0.34             |              |
| 2126.00    | 14.900             | 337.500        | 2075.07     | 397.02            | 356.89        | -174.69      | 2.04             |              |
| 2215.00    | 14.900             | 342.100        | 2161.08     | 419.84            | 378.35        | -182.59      | 1.33             |              |
| 2306.00    | 14.100             | 341.700        | 2249.18     | 442.52            | 400.01        | -189.67      | 0.89             |              |
| 2394.00    | 14.400             | 336.100        | 2334.48     | 464.13            | 420.19        | -197.47      | 1.60             |              |
| 2483.00    | 14.700             | 340.700        | 2420.63     | 486.46            | 440.97        | -205.68      | 1.34             |              |



# Actual Wellpath Report

WINTER 20-19 AWP

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## REFERENCE WELLPATH IDENTIFICATION

|          |                                 |          |  |
|----------|---------------------------------|----------|--|
| Operator | KERR MCGEE OIL & GAS ONSHORE LP | Slot     | SLOT#06 WINTER 20-19 (741'FSL & 930'FEL) |
| Area     | COLORADO                        | Well     | WINTER 20-19                             |
| Field    | WELD COUNTY (KERR MCGEE)        | Wellbore | WINTER 20-19 AWB                         |
| Facility | SEC.19-T6N-R64W                 |          |  |

## WELLPATH DATA (84 stations)

| MD<br>[ft] | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[ft] | Vert Sect<br>[ft] | North<br>[ft] | East<br>[ft] | DLS<br>[°/100ft] | Comments |
|------------|--------------------|----------------|-------------|-------------------|---------------|--------------|------------------|----------|
| 2568.00    | 15.800             | 341.400        | 2502.63     | 508.74            | 462.11        | -212.94      | 1.31             |          |
| 2659.00    | 14.500             | 345.300        | 2590.47     | 532.33            | 484.87        | -219.78      | 1.81             |          |
| 2747.00    | 14.900             | 341.700        | 2675.59     | 554.47            | 506.27        | -226.13      | 1.13             |          |
| 2836.00    | 15.000             | 344.500        | 2761.58     | 577.26            | 528.24        | -232.80      | 0.82             |          |
| 2923.00    | 15.000             | 343.500        | 2845.62     | 599.57            | 549.88        | -239.01      | 0.30             |          |
| 3012.00    | 12.200             | 336.100        | 2932.12     | 620.41            | 569.53        | -246.09      | 3.70             |          |
| 3099.00    | 10.500             | 334.700        | 3017.42     | 637.52            | 585.10        | -253.20      | 1.98             |          |
| 3187.00    | 8.000              | 335.100        | 3104.26     | 651.66            | 597.90        | -259.21      | 2.84             |          |
| 3276.00    | 6.300              | 343.100        | 3192.57     | 662.71            | 608.19        | -263.24      | 2.21             |          |
| 3365.00    | 4.200              | 335.600        | 3281.19     | 670.81            | 615.84        | -266.00      | 2.48             |          |
| 3454.00    | 2.500              | 329.800        | 3370.04     | 676.00            | 620.48        | -268.32      | 1.95             |          |
| 3542.00    | 0.900              | 287.900        | 3458.00     | 678.37            | 622.35        | -269.95      | 2.19             |          |
| 3630.00    | 0.600              | 330.100        | 3545.99     | 679.29            | 622.97        | -270.84      | 0.69             |          |
| 3719.00    | 0.900              | 21.800         | 3634.99     | 680.24            | 624.02        | -270.81      | 0.79             |          |
| 3809.00    | 0.900              | 18.300         | 3724.97     | 681.26            | 625.35        | -270.32      | 0.06             |          |
| 3899.00    | 0.700              | 15.800         | 3814.97     | 682.21            | 626.55        | -269.95      | 0.23             |          |
| 3987.00    | 0.500              | 22.500         | 3902.96     | 682.89            | 627.42        | -269.66      | 0.24             |          |
| 4073.00    | 0.800              | 21.500         | 3988.96     | 683.57            | 628.32        | -269.30      | 0.35             |          |
| 4164.00    | 1.000              | 22.900         | 4079.94     | 684.56            | 629.65        | -268.75      | 0.22             |          |
| 4254.00    | 1.300              | 24.600         | 4169.93     | 685.78            | 631.30        | -268.02      | 0.34             |          |
| 4343.00    | 1.700              | 18.300         | 4258.90     | 687.43            | 633.47        | -267.19      | 0.49             |          |
| 4432.00    | 1.900              | 10.600         | 4347.85     | 689.63            | 636.17        | -266.50      | 0.35             |          |
| 4520.00    | 2.400              | 12.300         | 4435.79     | 692.32            | 639.41        | -265.84      | 0.57             |          |
| 4609.00    | 2.100              | 11.300         | 4524.72     | 695.17            | 642.83        | -265.12      | 0.34             |          |
| 4699.00    | 1.700              | 321.700        | 4614.68     | 697.81            | 645.49        | -265.63      | 1.82             |          |
| 4788.00    | 1.500              | 336.800        | 4703.64     | 700.25            | 647.60        | -266.91      | 0.52             |          |
| 4876.00    | 1.300              | 356.900        | 4791.62     | 702.34            | 649.65        | -267.41      | 0.60             |          |
| 4964.00    | 1.300              | 352.300        | 4879.59     | 704.23            | 651.64        | -267.60      | 0.12             |          |
| 5051.00    | 0.300              | 355.400        | 4966.58     | 705.39            | 652.84        | -267.75      | 1.15             |          |
| 5140.00    | 0.400              | 19.000         | 5055.58     | 705.84            | 653.37        | -267.67      | 0.19             |          |



# Actual Wellpath Report

WINTER 20-19 AWP

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INTEQ

## REFERENCE WELLPATH IDENTIFICATION

|          |                                 |          |  |
|----------|---------------------------------|----------|--|
| Operator | KERR MCGEE OIL & GAS ONSHORE LP | Slot     | SLOT#06 WINTER 20-19 (741'FSL & 930'FEL) |
| Area     | COLORADO                        | Well     | WINTER 20-19                             |
| Field    | WELD COUNTY (KERR MCGEE)        | Wellbore | WINTER 20-19 AWB                         |
| Facility | SEC.19-T6N-R64W                 |          |  |

## WELLPATH DATA (84 stations)

| MD<br>[ft] | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[ft] | Vert Sect<br>[ft] | North<br>[ft] | East<br>[ft] | DLS<br>[°/100ft] | Comments                  |
|------------|--------------------|----------------|-------------|-------------------|---------------|--------------|------------------|---------------------------|
| 5230.00    | 0.600              | 18.600         | 5145.58     | 706.42            | 654.11        | -267.42      | 0.22             |                           |
| 5319.00    | 0.400              | 219.300        | 5234.58     | 706.63            | 654.31        | -267.47      | 1.11             |                           |
| 5409.00    | 1.700              | 237.000        | 5324.56     | 706.27            | 653.34        | -268.78      | 1.47             |                           |
| 5500.00    | 1.100              | 249.600        | 5415.53     | 706.10            | 652.31        | -270.73      | 0.74             |                           |
| 5591.00    | 2.200              | 229.600        | 5506.49     | 705.65            | 650.87        | -272.88      | 1.35             |                           |
| 5679.00    | 2.500              | 213.800        | 5594.42     | 704.14            | 648.18        | -275.24      | 0.81             |                           |
| 5769.00    | 2.000              | 215.200        | 5684.35     | 702.27            | 645.26        | -277.23      | 0.56             |                           |
| 5855.00    | 1.300              | 220.800        | 5770.32     | 701.08            | 643.30        | -278.74      | 0.83             |                           |
| 5945.00    | 1.000              | 225.700        | 5860.30     | 700.37            | 641.98        | -279.97      | 0.35             |                           |
| 6034.00    | 1.600              | 194.400        | 5949.28     | 699.12            | 640.23        | -280.83      | 1.02             |                           |
| 6122.00    | 1.100              | 195.500        | 6037.25     | 697.50            | 638.23        | -281.36      | 0.57             |                           |
| 6212.00    | 0.400              | 207.100        | 6127.24     | 696.63            | 637.12        | -281.74      | 0.79             |                           |
| 6301.00    | 0.200              | 348.100        | 6216.24     | 696.58            | 636.99        | -281.91      | 0.64             |                           |
| 6391.00    | 0.900              | 4.900          | 6306.24     | 697.36            | 637.85        | -281.88      | 0.79             |                           |
| 6479.00    | 1.200              | 345.700        | 6394.22     | 698.87            | 639.43        | -282.05      | 0.52             |                           |
| 6568.00    | 1.600              | 352.300        | 6483.20     | 700.99            | 641.57        | -282.45      | 0.48             |                           |
| 6658.00    | 0.900              | 19.000         | 6573.17     | 702.71            | 643.48        | -282.39      | 0.99             |                           |
| 6748.00    | 1.200              | 1.400          | 6663.16     | 704.09            | 645.09        | -282.13      | 0.49             |                           |
| 6837.00    | 1.300              | 1.100          | 6752.14     | 705.85            | 647.03        | -282.09      | 0.11             |                           |
| 6928.00    | 1.100              | 330.100        | 6843.12     | 707.65            | 648.82        | -282.51      | 0.74             |                           |
| 7018.00    | 0.700              | 295.000        | 6933.11     | 708.92            | 649.80        | -283.43      | 0.74             |                           |
| 7108.00    | 0.300              | 251.400        | 7023.11     | 709.36            | 649.96        | -284.16      | 0.58             |                           |
| 7165.00    | 0.400              | 224.700        | 7080.10     | 709.30            | 649.77        | -284.44      | 0.33             | Last BHI MWD Survey Point |
| 7215.00    | 0.400              | 224.700        | 7130.10     | 709.17            | 649.52        | -284.68      | 0.00             | Projection to Bit         |



# Actual Wellpath Report

WINTER 20-19 AWP

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INTEQ

## REFERENCE WELLPATH IDENTIFICATION

|          |                                 |          |  |
|----------|---------------------------------|----------|--|
| Operator | KERR MCGEE OIL & GAS ONSHORE LP | Slot     | SLOT#06 WINTER 20-19 (741'FSL & 930'FEL) |
| Area     | COLORADO                        | Well     | WINTER 20-19                             |
| Field    | WELD COUNTY (KERR MCGEE)        | Wellbore | WINTER 20-19 AWB                         |
| Facility | SEC.19-T6N-R64W                 |          |  |

## HOLE & CASING SECTIONS Ref Wellbore: WINTER 20-19 AWB Ref Wellpath: WINTER 20-19 AWP

| String/Diameter        | Start MD<br>[ft] | End MD<br>[ft] | Interval<br>[ft] | Start TVD<br>[ft] | End TVD<br>[ft] | Start N/S<br>[ft] | Start E/W<br>[ft] | End N/S<br>[ft] | End E/W<br>[ft] |
|------------------------|------------------|----------------|------------------|-------------------|-----------------|-------------------|-------------------|-----------------|-----------------|
| 8.625in Casing Surface | 16.00            | 682.00         | 666.00           | 16.00             | 680.64          | 0.00              | 0.00              | 27.04           | -9.72           |
| 7.875in Open Hole      | 682.00           | 7215.00        | 6533.00          | 680.64            | 7130.10         | 27.04             | -9.72             | 649.52          | -284.68         |

## TARGETS

| Name  | MD<br>[ft] | TVD<br>[ft] | North<br>[ft] | East<br>[ft] | Grid East<br>[srv ft] | Grid North<br>[srv ft] | Latitude       | Longitude       | Shape  |
|---|------------|-------------|---------------|--------------|-----------------------|------------------------|----------------|-----------------|--------|
| WINTER 20-19 GEO TARGET<br>50' RADIUS (1360'FSL &<br>1200'FEL, REV-1) |            | 6000.00     | 616.79        | -271.29      | 3253736.90            | 1414611.33             | 40°28'04.541"N | 104°35'16.872"W | circle |
| WINTER 20-19 LEGAL BOX<br>(362'N,438'S,283'E,517'W OF<br>GEO TARGET)  |            | 6000.00     | 578.79        | -388.29      | 3253620.30            | 1414572.13             | 40°28'04.165"N | 104°35'18.386"W | square |

## WELLPATH COMPOSITION Ref Wellbore: WINTER 20-19 AWB Ref Wellpath: WINTER 20-19 AWP

| Start MD<br>[ft] | End MD<br>[ft] | Positional Uncertainty Model | Log Name/Comment           | Wellbore         |
|------------------|----------------|------------------------------|----------------------------|------------------|
| 16.00            | 7165.00        | NaviTrak (Standard)          | BHI MWD Surveys <158-7165> | WINTER 20-19 AWB |
| 7165.00          | 7215.00        | Blind Drilling (std)         | Projection to bit          | WINTER 20-19 AWB |



# Actual Wellpath Report

WINTER 20-19 AWP

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**INTEQ**

## REFERENCE WELLPATH IDENTIFICATION

|          |                                 |          |  |
|----------|---------------------------------|----------|--|
| Operator | KERR MCGEE OIL & GAS ONSHORE LP | Slot     | SLOT#06 WINTER 20-19 (741'FSL & 930'FEL) |
| Area     | COLORADO                        | Well     | WINTER 20-19                             |
| Field    | WELD COUNTY (KERR MCGEE)        | Wellbore | WINTER 20-19 AWB                         |
| Facility | SEC.19-T6N-R64W                 |          |  |

## WELLPATH COMMENTS

| MD<br>[ft] | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[ft] | Comment                   |
|------------|--------------------|----------------|-------------|---------------------------|
| 16.00      | 0.000              | 165.600        | 16.00       | Tie in Point              |
| 7165.00    | 0.400              | 224.700        | 7080.10     | Last BHI MWD Survey Point |
| 7215.00    | 0.400              | 224.700        | 7130.10     | Projection to Bit         |