





# Actual Wellpath Report

BADDING 13-35SX AWB

Page 1 of 5



| REFERENCE WELLPATH IDENTIFICATION |                                 |          |   |
|-----------------------------------|---------------------------------|----------|---|
| Operator                          | KERR MCGEE OIL & GAS ONSHORE LP | Slot     | SLOT#22 BADDING 13-35SX (1017'FSL & 1547'FWL) |
| Area                              | COLORADO                        | Well     | BADDING 13-35SX                               |
| Field                             | WELD COUNTY (KERR MCGEE)        | Wellbore | BADDING 13-35SX PWB                           |
| Facility                          | SEC.35-T2N-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                 | Cookdanm                          |
| Scale                    | 0.999961  | Report Generated     | 6/22/2011 at 8:34:34 PM           |
| Convergence at slot      | 0.49° East  | Database/Source file | WA_DENVER/BADDING_13-35SX_PWB.xml |

| WELLPATH LOCATION     |                   |          |                  |                 |                        |                 |
|-----------------------|-------------------|----------|------------------|-----------------|------------------------|-----------------|
|                       | Local coordinates |          | Grid coordinates |                 | Geographic coordinates |                 |
|                       | North[ft]         | East[ft] | Easting[US ft]   | Northing[US ft] | Latitude               | Longitude       |
| Slot Location         | 75.13             | -2098.74 | 3210337.83       | 1276561.53      | 40°05'24.378"N         | 104°44'53.531"W |
| Facility Reference Pt |                   |          | 3212437.05       | 1276504.37      | 40°05'23.636"N         | 104°44'26.527"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 15 (RKB) to Facility Vertical Datum  | 5123.00ft         |
| Horizontal Reference Pt  | Slot              | XTREME 15 (RKB) to Mean Sea Level   | 5123.00ft         |
| Vertical Reference Pt    | XTREME 15 (RKB)   | XTREME 15 (RKB) to Mud Line at Slot (SLOT#22 BADDING 13-35SX (1017'FSL & 1547'FWL)) | 5123.00ft         |
| MD Reference Pt          | XTREME 15 (RKB)   | Section Origin  | N 0.00, E 0.00 ft |
| Field Vertical Reference | Mean Sea Level    | Section Azimuth   | 258.26°           |



# Actual Wellpath Report

BADDING 13-35SX AWB

Page 2 of 5



| REFERENCE WELLPATH IDENTIFICATION |                                 |          |   |
|-----------------------------------|---------------------------------|----------|---|
| Operator                          | KERR MCGEE OIL & GAS ONSHORE LP | Slot     | SLOT#22 BADDING 13-35SX (1017'FSL & 1547'FWL) |
| Area                              | COLORADO                        | Well     | BADDING 13-35SX                               |
| Field                             | WELD COUNTY (KERR MCGEE)        | Wellbore | BADDING 13-35SX PWB                           |
| Facility                          | SEC.35-T2N-R66W                 |          |   |

| WELLPATH DATA (61 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              | 174.100        | 0.00        | 0.00              | 0.00          | 0.00         | 0.00             |          |
| 15.00   | 0.000              | 174.100        | 15.00       | 0.00              | 0.00          | 0.00         | 0.00             |          |
| 152.00  | 0.800              | 174.100        | 152.00      | 0.10              | -0.95         | 0.10         | 0.58             |          |
| 245.00  | 0.800              | 253.200        | 244.99      | 0.81              | -1.78         | -0.46        | 1.10             |          |
| 337.00  | 0.400              | 248.600        | 336.98      | 1.77              | -2.09         | -1.37        | 0.44             |          |
| 427.00  | 0.700              | 247.900        | 426.98      | 2.62              | -2.41         | -2.17        | 0.33             |          |
| 516.00  | 0.600              | 282.000        | 515.97      | 3.58              | -2.52         | -3.13        | 0.44             |          |
| 603.00  | 0.700              | 240.100        | 602.97      | 4.50              | -2.69         | -4.04        | 0.54             |          |
| 693.00  | 0.600              | 234.500        | 692.96      | 5.45              | -3.23         | -4.90        | 0.13             |          |
| 783.00  | 0.900              | 216.900        | 782.96      | 6.42              | -4.07         | -5.71        | 0.42             |          |
| 872.00  | 1.000              | 241.600        | 871.94      | 7.68              | -5.00         | -6.81        | 0.47             |          |
| 960.00  | 1.600              | 237.000        | 959.92      | 9.57              | -6.04         | -8.51        | 0.69             |          |
| 1049.00   | 1.800              | 246.100        | 1048.88     | 12.09             | -7.28         | -10.83       | 0.38             |          |
| 1156.00   | 1.800              | 252.100        | 1155.83     | 15.40             | -8.48         | -13.97       | 0.18             |          |
| 1236.00   | 1.900              | 252.100        | 1235.79     | 17.97             | -9.27         | -16.43       | 0.12             |          |
| 1327.00   | 3.300              | 255.600        | 1326.69     | 22.09             | -10.39        | -20.40       | 1.55             |          |
| 1415.00   | 5.400              | 254.200        | 1414.43     | 28.75             | -12.14        | -26.84       | 2.39             |          |
| 1504.00   | 7.300              | 254.900        | 1502.88     | 38.57             | -14.76        | -36.33       | 2.14             |          |
| 1593.00   | 9.300              | 257.400        | 1590.95     | 51.41             | -17.80        | -48.81       | 2.28             |          |
| 1682.00   | 11.400             | 257.700        | 1678.49     | 67.40             | -21.24        | -64.42       | 2.36             |          |
| 1770.00   | 13.200             | 263.700        | 1764.47     | 86.10             | -24.20        | -82.91       | 2.51             |          |
| 1859.00   | 14.900             | 265.100        | 1850.81     | 107.57            | -26.29        | -104.41      | 1.95             |          |
| 1949.00   | 15.700             | 264.800        | 1937.62     | 131.16            | -28.38        | -128.07      | 0.89             |          |
| 2037.00   | 16.700             | 263.000        | 2022.12     | 155.59            | -31.00        | -152.47      | 1.27             |          |
| 2126.00   | 17.900             | 257.000        | 2107.10     | 182.01            | -35.64        | -178.50      | 2.41             |          |
| 2216.00   | 19.000             | 256.000        | 2192.47     | 210.48            | -42.29        | -206.19      | 1.27             |          |
| 2305.00   | 19.500             | 252.800        | 2276.50     | 239.75            | -50.19        | -234.44      | 1.31             |          |
| 2396.00   | 19.400             | 254.900        | 2362.31     | 269.95            | -58.62        | -263.54      | 0.78             |          |
| 2486.00   | 19.000             | 253.500        | 2447.30     | 299.47            | -66.67        | -292.02      | 0.68             |          |
| 2575.00   | 18.600             | 252.800        | 2531.55     | 328.04            | -74.99        | -319.47      | 0.52             |          |
| 2664.00   | 18.200             | 250.300        | 2616.01     | 355.94            | -83.87        | -346.11      | 0.99             |          |
| 2752.00   | 18.900             | 252.800        | 2699.43     | 383.74            | -92.72        | -372.67      | 1.20             |          |
| 2841.00   | 18.100             | 253.500        | 2783.83     | 411.86            | -100.91       | -399.69      | 0.93             |          |
| 2931.00   | 17.100             | 257.000        | 2869.62     | 439.02            | -107.85       | -425.99      | 1.62             |          |
| 3021.00   | 17.400             | 258.400        | 2955.58     | 465.71            | -113.54       | -452.07      | 0.57             |          |
| 3109.00   | 17.400             | 256.000        | 3039.55     | 492.02            | -119.36       | -477.72      | 0.82             |          |
| 3198.00   | 16.400             | 259.500        | 3124.71     | 517.87            | -124.87       | -502.99      | 1.60             |          |
| 3287.00   | 16.500             | 266.200        | 3210.07     | 542.96            | -128.00       | -527.96      | 2.13             |          |
| 3376.00   | 17.200             | 268.600        | 3295.25     | 568.42            | -129.16       | -553.72      | 1.11             |          |
| 3463.00   | 17.100             | 268.600        | 3378.38     | 593.66            | -129.79       | -579.37      | 0.11             |          |
| 3553.00   | 15.800             | 265.500        | 3464.70     | 618.83            | -131.07       | -604.81      | 1.74             |          |
| 3642.00   | 16.100             | 263.700        | 3550.27     | 643.14            | -133.38       | -629.16      | 0.65             |          |
| 3732.00   | 17.200             | 260.200        | 3636.50     | 668.86            | -137.01       | -654.68      | 1.65             |          |
| 3822.00   | 16.000             | 256.000        | 3722.75     | 694.55            | -142.28       | -679.83      | 1.88             |          |
| 3911.00   | 15.600             | 253.200        | 3808.39     | 718.73            | -148.70       | -703.18      | 0.97             |          |



# Actual Wellpath Report

BADDING 13-35SX AWB

Page 3 of 5



| REFERENCE WELLPATH IDENTIFICATION |                                 |          |   |
|-----------------------------------|---------------------------------|----------|---|
| Operator                          | KERR MCGEE OIL & GAS ONSHORE LP | Slot     | SLOT#22 BADDING 13-35SX (1017'FSL & 1547'FWL) |
| Area                              | COLORADO                        | Well     | BADDING 13-35SX                               |
| Field                             | WELD COUNTY (KERR MCGEE)        | Wellbore | BADDING 13-35SX PWB                           |
| Facility                          | SEC.35-T2N-R66W                 |          |   |

| WELLPATH DATA (61 stations) |                 |             |          |                |            |           |               |                     |
|-----------------------------|-----------------|-------------|----------|----------------|------------|-----------|---------------|---------------------|
| MD [ft]                     | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | DLS [°/100ft] | Comments            |
| 4000.00                     | 17.100          | 258.400     | 3893.79  | 743.74         | -154.79    | -727.46   | 2.35          |                     |
| 4088.00                     | 18.200          | 258.800     | 3977.65  | 770.42         | -160.07    | -753.62   | 1.26          |                     |
| 4176.00                     | 16.800          | 254.900     | 4061.58  | 796.86         | -166.05    | -779.38   | 2.07          |                     |
| 4266.00                     | 16.700          | 254.200     | 4147.76  | 822.74         | -172.96    | -804.38   | 0.25          |                     |
| 4356.00                     | 17.800          | 260.200     | 4233.72  | 849.39         | -178.82    | -830.38   | 2.32          |                     |
| 4446.00                     | 16.900          | 256.300     | 4319.62  | 876.22         | -184.26    | -856.65   | 1.63          |                     |
| 4536.00                     | 18.800          | 258.400     | 4405.29  | 903.80         | -190.28    | -883.56   | 2.23          |                     |
| 4626.00                     | 17.900          | 259.100     | 4490.71  | 932.13         | -195.81    | -911.35   | 1.03          |                     |
| 4714.00                     | 16.700          | 259.500     | 4574.73  | 958.29         | -200.67    | -937.06   | 1.37          |                     |
| 4804.00                     | 17.800          | 255.300     | 4660.68  | 984.96         | -206.52    | -963.09   | 1.85          |                     |
| 4893.00                     | 18.100          | 255.300     | 4745.35  | 1012.35        | -213.48    | -989.62   | 0.34          |                     |
| 4980.00                     | 18.000          | 256.700     | 4828.07  | 1039.29        | -220.00    | -1015.77  | 0.51          |                     |
| 5069.00                     | 17.800          | 254.600     | 4912.76  | 1066.61        | -226.77    | -1042.27  | 0.76          |                     |
| 5160.00                     | 17.800          | 257.400     | 4999.41  | 1094.40        | -233.50    | -1069.25  | 0.94          |                     |
| 5249.00                     | 16.300          | 256.300     | 5084.49  | 1120.48        | -239.43    | -1094.66  | 1.72          | LAST BHI MWD SURVEY |
| 5299.00                     | 16.300          | 256.300     | 5132.48  | 1134.51        | -242.75    | -1108.30  | 0.00          | PROJECTION TO BIT   |

| HOLE & CASING SECTIONS - Ref Wellbore: BADDING 13-35SX PWB      Ref Wellpath: BADDING 13-35SX AWB |               |             |               |                |              |                |                |              |              |
|---|---------------|-------------|---------------|----------------|--------------|----------------|----------------|--------------|--------------|
| 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] |
| 12.25in Open Hole   | 15.00         | 1211.00     | 1196.00       | 15.00          | 1210.80      | 0.00           | 0.00           | -9.02        | -15.65       |
| 8.625in Casing Surface  | 15.00         | 1201.00     | 1186.00       | 15.00          | 1200.81      | 0.00           | 0.00           | -8.92        | -15.34       |
| 7.875in Open Hole   | 1201.00       | 5299.00     | 4098.00       | 1200.81        | 5132.48      | -8.92          | -15.34         | -242.75      | -1108.30     |



# Actual Wellpath Report

BADDING 13-35SX AWB

Page 4 of 5



| REFERENCE WELLPATH IDENTIFICATION |                                 |          |   |
|-----------------------------------|---------------------------------|----------|---|
| Operator                          | KERR MCGEE OIL & GAS ONSHORE LP | Slot     | SLOT#22 BADDING 13-35SX (1017'FSL & 1547'FWL) |
| Area                              | COLORADO                        | Well     | BADDING 13-35SX                               |
| Field                             | WELD COUNTY (KERR MCGEE)        | Wellbore | BADDING 13-35SX PWB                           |
| Facility                          | SEC.35-T2N-R66W                 |          |   |

| TARGETS  |            |             |               |              |                      |                       |                |                 |        |
|--|------------|-------------|---------------|--------------|----------------------|-----------------------|----------------|-----------------|--------|
| Name   | MD<br>[ft] | TVD<br>[ft] | North<br>[ft] | East<br>[ft] | Grid East<br>[US ft] | Grid North<br>[US ft] | Latitude       | Longitude       | Shape  |
| BADDING 13-35SX BHL ON PLAT<br>(810'FSL & 510'FWL, REV-1)              |            | 4616.00     | -215.28       | -1036.93     | 3209302.81           | 1276337.48            | 40°05'22.250"N | 104°45'06.872"W | point  |
| BADDING 13-35SX GEO TARGET<br>50' RADIUS (810'FSL & 511'FWL,<br>REV-2) |            | 4616.00     | -215.28       | -1035.93     | 3209303.81           | 1276337.48            | 40°05'22.250"N | 104°45'06.860"W | circle |
| BADDING 13-35SX LEGAL BOX<br>(60'N,340'S,50'W,350'E OF GEO<br>TARGET)  |            | 4616.00     | -355.28       | -885.93      | 3209454.98           | 1276198.76            | 40°05'20.867"N | 104°45'04.930"W | square |

| WELLPATH COMPOSITION - Ref Wellbore: BADDING 13-35SX PWB |                |                              |  |  | Ref Wellpath: BADDING 13-35SX AWB |  |
|--|----------------|------------------------------|--|--|-----------------------------------|--|
| Start MD<br>[ft]   | End MD<br>[ft] | Positional Uncertainty Model | Log Name/Comment                       |  | Wellbore                          |  |
| 15.00  | 1156.00        | NaviTrak (Standard)          | BHI MWD SURVEYS 12.25 HOLE <152-1156>  |  | BADDING 13-35SX PWB               |  |
| 1156.00  | 5249.00        | NaviTrak (Standard)          | BHI MWD SURVEYS 7.875 HOLE <1236-5249> |  | BADDING 13-35SX PWB               |  |
| 5249.00  | 5299.00        | Blind Drilling (std)         | Projection to bit                      |  | BADDING 13-35SX PWB               |  |



# Actual Wellpath Report

BADDING 13-35SX AWB

Page 5 of 5



| REFERENCE WELLPATH IDENTIFICATION |                                 |          |   |
|-----------------------------------|---------------------------------|----------|---|
| Operator                          | KERR MCGEE OIL & GAS ONSHORE LP | Slot     | SLOT#22 BADDING 13-35SX (1017'FSL & 1547'FWL) |
| Area                              | COLORADO                        | Well     | BADDING 13-35SX                               |
| Field                             | WELD COUNTY (KERR MCGEE)        | Wellbore | BADDING 13-35SX PWB                           |
| Facility                          | SEC.35-T2N-R66W                 |          |   |

| WELLPATH COMMENTS |                    |                |             |                     |
|-------------------|--------------------|----------------|-------------|---------------------|
| MD<br>[ft]        | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[ft] | Comment             |
| 5249.00           | 16.300             | 256.300        | 5084.49     | LAST BHI MWD SURVEY |
| 5299.00           | 16.300             | 256.300        | 5132.48     | PROJECTION TO BIT   |