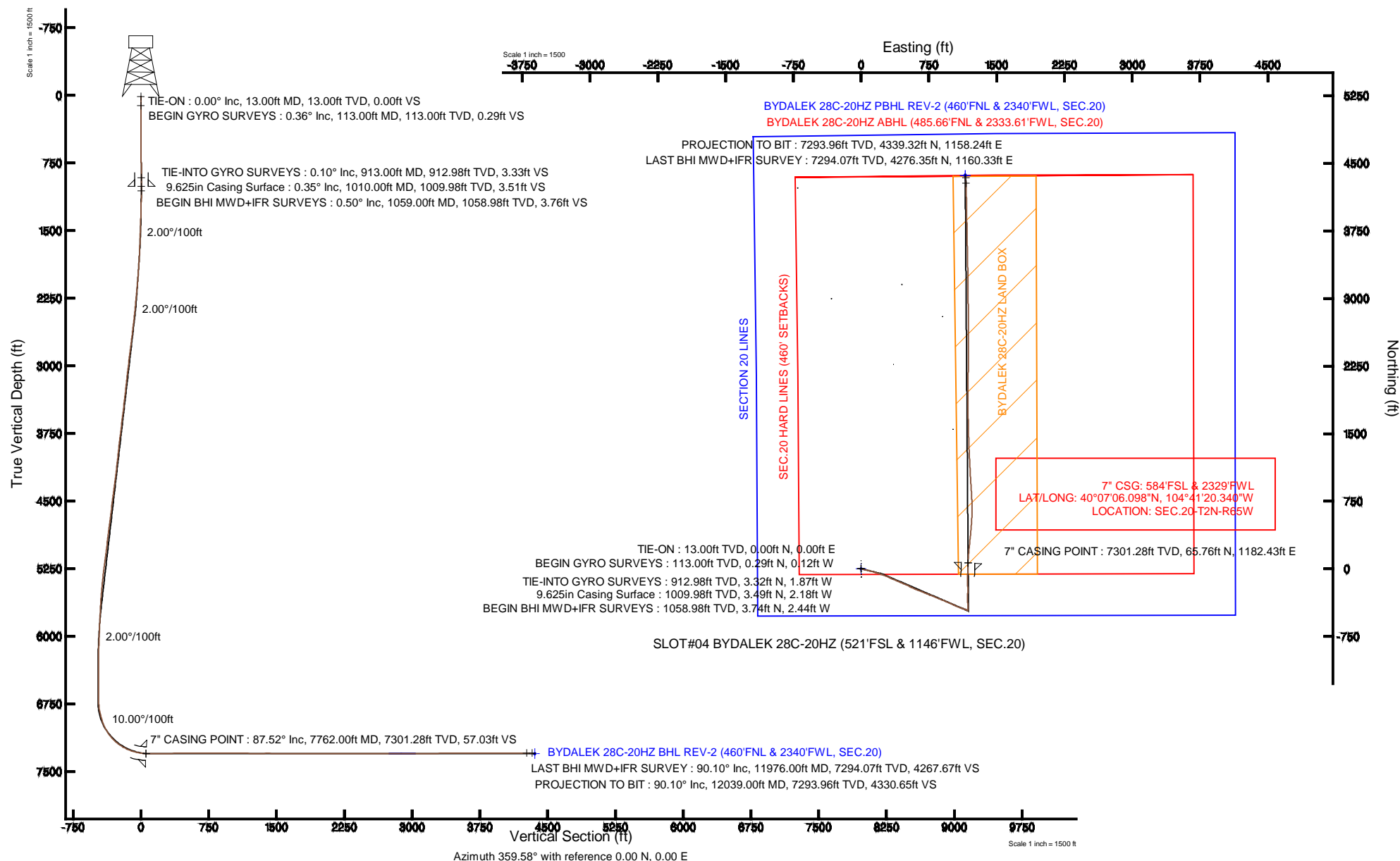


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#04 BYDALEK 28C-20HZ (521'FSL & 1146'FWL, SEC.20)
 Field: WELD COUNTY (KERR MCGEE) Well: BYDALEK 28C-20HZ
 Facility: SEC.20-T2N-R65W Wellbore: BYDALEK 28C-20HZ PWB

Plot reference wellpath is BYDALEK 28C-20HZ (REV-B.0) PWP

True vertical depths are referenced to ENSIGN 138 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to ENSIGN 138 (RKB)	North Reference: True north
ENSGN 138 (RKB) to Mean Sea Level: 4944 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#04 BYDALEK 28C-20HZ (521'FSL & 1146'FWL, SEC.20)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wilsje02 on 6/5/2013





Actual Wellpath Report

BYDALEK 28C-20HZ AWP

Page 1 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 BYDALEK 28C-20HZ (521'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 28C-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 28C-20HZ AWB
Facility	SEC.20-T2N-R65W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Wilsjef02
Scale	0.99996	Report Generated	6/5/2013 at 13:19:32
Convergence at slot	n/a	Database/Source file	WellArchitectDB/BYDALEK_28C-20HZ_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	29.95	-0.23	3225630.01	1286923.42	40°07'05.448"N	104°41'35.560"W
Facility Reference Pt			3225630.51	1286893.48	40°07'05.152"N	104°41'35.557"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 138 (RKB) to Facility Vertical Datum	4944.00ft
Horizontal Reference Pt	Slot	ENSIGN 138 (RKB) to Mean Sea Level	4944.00ft
Vertical Reference Pt	ENSIGN 138 (RKB)	ENSIGN 138 (RKB) to Mud Line at Slot (SLOT#04 BYDALEK 28C-20HZ (521'FSL & 1146'FWL, SEC.20))	4944.00ft
MD Reference Pt	ENSIGN 138 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.58°



Actual Wellpath Report

BYDALEK 28C-20HZ AWP

Page 2 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 BYDALEK 28C-20HZ (521'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 28C-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 28C-20HZ AWB
Facility	SEC.20-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	337.760	0.00	0.00	0.00	0.00	40°07'05.448"N	104°41'35.560"W	0.00	
13.00	0.000	337.760	13.00	0.00	0.00	0.00	40°07'05.448"N	104°41'35.560"W	0.00	TIE-ON
113.00	0.360	337.760	113.00	0.29	0.29	-0.12	40°07'05.451"N	104°41'35.562"W	0.36	BEGIN GYRO SURVEYS
213.00	0.120	296.340	213.00	0.63	0.63	-0.33	40°07'05.454"N	104°41'35.564"W	0.28	
313.00	0.120	300.440	313.00	0.73	0.73	-0.52	40°07'05.455"N	104°41'35.567"W	0.01	
413.00	0.520	275.680	413.00	0.83	0.83	-1.06	40°07'05.456"N	104°41'35.574"W	0.41	
513.00	0.710	324.730	512.99	1.39	1.38	-1.87	40°07'05.462"N	104°41'35.584"W	0.54	
613.00	0.400	21.870	612.99	2.22	2.21	-2.09	40°07'05.470"N	104°41'35.587"W	0.60	
713.00	0.450	2.760	712.98	2.94	2.92	-1.95	40°07'05.477"N	104°41'35.585"W	0.15	
813.00	0.080	78.800	812.98	3.34	3.33	-1.86	40°07'05.481"N	104°41'35.584"W	0.44	
913.00	0.100	254.280	912.98	3.33	3.32	-1.87	40°07'05.481"N	104°41'35.584"W	0.18	TIE-INTO GYRO SURVEYS
1059.00	0.500	315.900	1058.98	3.76	3.74	-2.44	40°07'05.485"N	104°41'35.591"W	0.32	BEGIN BHI MWD+IFR SURVEYS
1150.00	1.600	112.800	1149.97	3.55	3.53	-1.54	40°07'05.483"N	104°41'35.580"W	2.27	
1241.00	3.800	110.100	1240.87	1.99	2.00	2.46	40°07'05.468"N	104°41'35.528"W	2.42	
1333.00	5.600	109.400	1332.55	-0.60	-0.53	9.56	40°07'05.443"N	104°41'35.437"W	1.96	
1425.00	5.200	107.800	1424.14	-3.43	-3.30	17.76	40°07'05.415"N	104°41'35.331"W	0.46	
1516.00	7.100	106.300	1514.62	-6.34	-6.14	27.08	40°07'05.387"N	104°41'35.211"W	2.10	
1608.00	8.800	105.400	1605.73	-9.89	-9.60	39.33	40°07'05.353"N	104°41'35.054"W	1.85	
1699.00	10.900	100.100	1695.38	-13.36	-12.96	54.51	40°07'05.320"N	104°41'34.858"W	2.51	
1790.00	12.800	103.400	1784.44	-17.34	-16.81	72.79	40°07'05.282"N	104°41'34.623"W	2.22	
1886.00	13.900	104.200	1877.85	-22.80	-22.10	94.31	40°07'05.230"N	104°41'34.346"W	1.16	
1982.00	15.600	104.700	1970.68	-29.07	-28.20	117.98	40°07'05.169"N	104°41'34.041"W	1.78	
2077.00	16.400	105.900	2062.00	-36.18	-35.12	143.23	40°07'05.101"N	104°41'33.716"W	0.91	
2172.00	16.800	107.200	2153.04	-44.10	-42.85	169.25	40°07'05.025"N	104°41'33.381"W	0.57	
2267.00	17.100	108.200	2243.91	-52.72	-51.28	195.63	40°07'04.941"N	104°41'33.042"W	0.44	
2363.00	16.000	108.200	2335.93	-61.45	-59.82	221.61	40°07'04.857"N	104°41'32.708"W	1.15	
2459.00	16.100	111.700	2428.19	-70.69	-68.87	246.54	40°07'04.767"N	104°41'32.387"W	1.01	
2554.00	17.000	112.000	2519.26	-80.95	-78.94	271.66	40°07'04.668"N	104°41'32.063"W	0.95	
2648.00	16.600	111.500	2609.25	-91.20	-89.01	296.89	40°07'04.568"N	104°41'31.738"W	0.45	
2743.00	16.900	116.300	2700.22	-102.48	-100.11	321.90	40°07'04.459"N	104°41'31.417"W	1.49	
2839.00	16.700	113.700	2792.12	-114.39	-111.83	347.04	40°07'04.343"N	104°41'31.093"W	0.81	
2934.00	16.100	114.000	2883.26	-125.42	-122.68	371.57	40°07'04.236"N	104°41'30.777"W	0.64	
3030.00	16.300	112.500	2975.45	-136.17	-133.25	396.18	40°07'04.131"N	104°41'30.460"W	0.48	
3126.00	16.000	113.100	3067.66	-146.70	-143.59	420.80	40°07'04.029"N	104°41'30.144"W	0.36	
3220.00	16.000	112.100	3158.02	-156.83	-153.55	444.72	40°07'03.931"N	104°41'29.836"W	0.29	
3314.00	15.800	114.100	3248.42	-167.10	-163.65	468.40	40°07'03.831"N	104°41'29.531"W	0.62	
3410.00	15.300	113.000	3340.91	-177.56	-173.93	491.99	40°07'03.729"N	104°41'29.227"W	0.60	
3506.00	15.300	115.300	3433.50	-188.09	-184.30	515.10	40°07'03.627"N	104°41'28.930"W	0.63	
3601.00	14.900	116.500	3525.22	-199.07	-195.10	537.36	40°07'03.520"N	104°41'28.643"W	0.53	
3696.00	15.300	114.100	3616.95	-209.80	-205.67	559.73	40°07'03.415"N	104°41'28.355"W	0.78	
3790.00	16.300	115.200	3707.39	-220.65	-216.35	582.99	40°07'03.310"N	104°41'28.056"W	1.11	
3886.00	16.400	113.400	3799.51	-231.95	-227.47	607.62	40°07'03.200"N	104°41'27.739"W	0.54	
3982.00	16.300	111.500	3891.63	-242.45	-237.79	632.59	40°07'03.098"N	104°41'27.417"W	0.57	
4079.00	16.200	111.100	3984.75	-252.50	-247.65	657.88	40°07'03.001"N	104°41'27.092"W	0.15	
4174.00	16.100	112.100	4076.01	-262.41	-257.38	682.45	40°07'02.904"N	104°41'26.776"W	0.31	



Actual Wellpath Report

BYDALEK 28C-20HZ AWP

Page 3 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 BYDALEK 28C-20HZ (521'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 28C-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 28C-20HZ AWP
Facility	SEC.20-T2N-R65W		

WELLPATH DATA (136 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4269.00	16.200	112.400	4167.26	-272.59	-267.38	706.91	40°07'02.806"N	104°41'26.461"W	0.14	
4363.00	18.700	112.100	4256.92	-283.45	-278.05	733.00	40°07'02.700"N	104°41'26.125"W	2.66	
4458.00	17.800	111.800	4347.14	-294.78	-289.17	760.59	40°07'02.590"N	104°41'25.770"W	0.95	
4551.00	18.900	112.900	4435.41	-306.12	-300.31	787.66	40°07'02.480"N	104°41'25.421"W	1.24	
4647.00	18.300	112.800	4526.40	-318.22	-312.20	815.88	40°07'02.363"N	104°41'25.058"W	0.63	
4741.00	18.000	111.800	4615.72	-329.53	-323.32	842.97	40°07'02.253"N	104°41'24.710"W	0.46	
4837.00	18.800	112.000	4706.81	-341.04	-334.62	871.08	40°07'02.141"N	104°41'24.348"W	0.84	
4932.00	18.200	111.400	4796.90	-352.40	-345.77	899.09	40°07'02.031"N	104°41'23.987"W	0.66	
5027.00	17.100	113.100	4887.43	-363.49	-356.66	925.75	40°07'01.923"N	104°41'23.644"W	1.28	
5121.00	17.300	113.800	4977.23	-374.74	-367.72	951.25	40°07'01.814"N	104°41'23.316"W	0.31	
5217.00	16.500	112.300	5069.08	-385.86	-378.66	976.93	40°07'01.706"N	104°41'22.985"W	0.95	
5311.00	16.800	113.600	5159.14	-396.55	-389.16	1001.72	40°07'01.602"N	104°41'22.666"W	0.51	
5406.00	17.300	114.800	5249.97	-408.15	-400.58	1027.13	40°07'01.489"N	104°41'22.339"W	0.64	
5501.00	15.400	114.600	5341.12	-419.51	-411.76	1051.42	40°07'01.379"N	104°41'22.026"W	2.00	
5596.00	13.900	112.300	5433.03	-429.25	-421.34	1073.45	40°07'01.284"N	104°41'21.743"W	1.69	
5690.00	12.200	110.900	5524.60	-437.23	-429.17	1093.18	40°07'01.207"N	104°41'21.489"W	1.84	
5783.00	10.000	109.500	5615.85	-443.55	-435.37	1109.97	40°07'01.145"N	104°41'21.273"W	2.38	
5876.00	9.300	110.600	5707.54	-449.00	-440.71	1124.62	40°07'01.093"N	104°41'21.084"W	0.78	
5971.00	7.500	108.800	5801.51	-453.80	-445.41	1137.67	40°07'01.046"N	104°41'20.916"W	1.91	
6066.00	6.300	110.700	5895.82	-457.72	-449.25	1148.42	40°07'01.008"N	104°41'20.778"W	1.29	
6163.00	6.300	112.800	5992.24	-461.73	-453.19	1158.30	40°07'00.969"N	104°41'20.651"W	0.24	
6257.00	5.100	110.600	6085.77	-465.26	-456.66	1166.97	40°07'00.935"N	104°41'20.539"W	1.30	
6352.00	4.500	114.400	6180.44	-468.34	-459.69	1174.31	40°07'00.905"N	104°41'20.445"W	0.71	
6446.00	2.300	98.200	6274.27	-470.18	-461.48	1179.54	40°07'00.887"N	104°41'20.377"W	2.53	
6542.00	0.300	354.400	6370.24	-470.21	-461.50	1181.42	40°07'00.887"N	104°41'20.353"W	2.49	
6733.00	0.300	23.600	6561.24	-469.26	-460.55	1181.57	40°07'00.897"N	104°41'20.351"W	0.08	
6815.00	0.200	75.800	6643.24	-469.03	-460.32	1181.80	40°07'00.899"N	104°41'20.348"W	0.29	
6876.00	0.500	13.600	6704.24	-468.75	-460.03	1181.96	40°07'00.902"N	104°41'20.346"W	0.73	
6924.00	4.600	0.600	6752.18	-466.62	-457.90	1182.03	40°07'00.923"N	104°41'20.345"W	8.57	
6971.00	8.100	359.200	6798.89	-461.42	-452.71	1182.01	40°07'00.974"N	104°41'20.346"W	7.45	
7018.00	11.400	359.000	6845.20	-453.46	-444.75	1181.88	40°07'01.053"N	104°41'20.347"W	7.02	
7065.00	14.800	357.500	6890.97	-442.81	-434.10	1181.54	40°07'01.158"N	104°41'20.352"W	7.27	
7114.00	19.100	356.800	6937.83	-428.55	-419.84	1180.82	40°07'01.299"N	104°41'20.361"W	8.79	
7161.00	22.300	358.000	6981.79	-411.95	-403.25	1180.08	40°07'01.463"N	104°41'20.370"W	6.87	
7208.00	27.400	359.100	7024.43	-392.21	-383.51	1179.59	40°07'01.658"N	104°41'20.377"W	10.90	
7255.00	32.200	359.600	7065.20	-368.86	-360.16	1179.34	40°07'01.889"N	104°41'20.380"W	10.23	
7304.00	38.100	0.200	7105.25	-340.66	-331.96	1179.30	40°07'02.167"N	104°41'20.380"W	12.06	
7351.00	43.500	0.100	7140.81	-309.96	-301.26	1179.38	40°07'02.471"N	104°41'20.379"W	11.49	
7399.00	48.900	0.500	7174.02	-275.33	-266.63	1179.56	40°07'02.813"N	104°41'20.377"W	11.27	
7446.00	54.400	0.000	7203.17	-238.49	-229.79	1179.72	40°07'03.177"N	104°41'20.375"W	11.73	
7493.00	60.200	358.800	7228.55	-198.96	-190.26	1179.29	40°07'03.568"N	104°41'20.380"W	12.53	
7540.00	64.800	359.400	7250.25	-157.28	-148.58	1178.64	40°07'03.979"N	104°41'20.389"W	9.85	
7587.00	69.600	0.800	7268.46	-113.97	-105.27	1178.73	40°07'04.407"N	104°41'20.388"W	10.58	
7634.00	74.500	1.000	7282.94	-69.28	-60.58	1179.43	40°07'04.849"N	104°41'20.379"W	10.43	
7681.00	80.100	1.200	7293.27	-23.47	-14.75	1180.31	40°07'05.302"N	104°41'20.367"W	11.92	



Actual Wellpath Report

BYDALEK 28C-20HZ AWP

Page 4 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 BYDALEK 28C-20HZ (521'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 28C-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 28C-20HZ AWB
Facility	SEC.20-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
7719.00	84.600	1.100	7298.33	14.17	22.89	1181.07	40°07'05.674"N	104°41'20.357"W	11.84	
7762.00†	87.521	2.536	7301.28	57.03	65.76	1182.43	40°07'06.098"N	104°41'20.340"W	7.57	7" CASING POINT
7797.00	89.900	3.700	7302.07	91.95	100.70	1184.33	40°07'06.443"N	104°41'20.315"W	7.57	
7892.00	91.200	5.400	7301.16	186.59	195.39	1191.87	40°07'07.379"N	104°41'20.218"W	2.25	
7986.00	90.900	6.200	7299.43	280.01	288.89	1201.36	40°07'08.303"N	104°41'20.096"W	0.91	
8081.00	90.300	4.800	7298.44	374.50	383.45	1210.47	40°07'09.237"N	104°41'19.979"W	1.60	
8177.00	91.100	4.700	7297.27	470.10	479.11	1218.42	40°07'10.182"N	104°41'19.876"W	0.84	
8272.00	90.600	3.100	7295.86	564.82	573.88	1224.88	40°07'11.119"N	104°41'19.793"W	1.76	
8367.00	89.700	0.300	7295.61	659.74	668.82	1227.70	40°07'12.057"N	104°41'19.757"W	3.10	
8464.00	89.900	356.400	7295.95	756.70	765.76	1224.90	40°07'13.015"N	104°41'19.793"W	4.03	
8558.00	89.700	357.200	7296.27	850.59	859.61	1219.66	40°07'13.943"N	104°41'19.860"W	0.88	
8653.00	89.900	356.400	7296.61	945.47	954.47	1214.35	40°07'14.880"N	104°41'19.928"W	0.87	
8748.00	89.700	356.600	7296.94	1040.34	1049.29	1208.55	40°07'15.817"N	104°41'20.003"W	0.30	
8843.00	89.200	356.900	7297.85	1135.22	1144.13	1203.17	40°07'16.754"N	104°41'20.072"W	0.61	
9033.00	90.300	357.800	7298.68	1325.07	1333.92	1194.38	40°07'18.630"N	104°41'20.185"W	0.75	
9222.00	89.500	357.900	7299.01	1513.98	1522.79	1187.29	40°07'20.496"N	104°41'20.276"W	0.43	
9316.00	90.100	359.400	7299.34	1607.96	1616.76	1185.08	40°07'21.425"N	104°41'20.305"W	1.72	
9410.00	88.900	358.700	7300.16	1701.95	1710.74	1183.52	40°07'22.353"N	104°41'20.325"W	1.48	
9506.00	89.400	0.100	7301.58	1797.94	1806.72	1182.51	40°07'23.302"N	104°41'20.338"W	1.55	
9601.00	90.500	359.900	7301.66	1892.93	1901.72	1182.51	40°07'24.241"N	104°41'20.338"W	1.18	
9696.00	90.500	0.400	7300.84	1987.93	1996.71	1182.76	40°07'25.179"N	104°41'20.334"W	0.53	
9791.00	90.800	0.600	7299.76	2082.91	2091.70	1183.59	40°07'26.118"N	104°41'20.324"W	0.38	
9887.00	89.700	0.700	7299.34	2178.89	2187.69	1184.68	40°07'27.067"N	104°41'20.310"W	1.15	
9981.00	90.500	0.500	7299.17	2272.87	2281.69	1185.67	40°07'27.996"N	104°41'20.297"W	0.88	
10077.00	89.900	359.900	7298.84	2368.87	2377.69	1186.00	40°07'28.944"N	104°41'20.293"W	0.88	
10172.00	89.400	0.200	7299.42	2463.86	2472.68	1186.08	40°07'29.883"N	104°41'20.291"W	0.61	
10266.00	90.200	0.100	7299.75	2557.85	2566.68	1186.33	40°07'30.812"N	104°41'20.288"W	0.86	
10363.00	89.800	0.300	7299.75	2654.85	2663.68	1186.67	40°07'31.771"N	104°41'20.284"W	0.46	
10457.00	89.800	359.600	7300.08	2748.84	2757.68	1186.59	40°07'32.699"N	104°41'20.285"W	0.74	
10554.00	88.900	359.200	7301.18	2845.84	2854.67	1185.57	40°07'33.658"N	104°41'20.298"W	1.02	
10648.00	90.500	359.300	7301.67	2939.83	2948.65	1184.34	40°07'34.587"N	104°41'20.314"W	1.71	
10743.00	90.000	359.400	7301.25	3034.83	3043.65	1183.26	40°07'35.525"N	104°41'20.327"W	0.54	
10838.00	90.300	359.600	7301.01	3129.83	3138.64	1182.43	40°07'36.464"N	104°41'20.338"W	0.38	
10934.00	90.900	358.900	7300.00	3225.82	3234.63	1181.18	40°07'37.413"N	104°41'20.354"W	0.96	
11028.00	91.600	359.200	7297.95	3319.79	3328.59	1179.62	40°07'38.341"N	104°41'20.374"W	0.81	
11123.00	89.900	358.500	7296.71	3414.77	3423.56	1177.71	40°07'39.280"N	104°41'20.399"W	1.94	
11217.00	90.900	359.200	7296.05	3508.76	3517.54	1175.83	40°07'40.208"N	104°41'20.423"W	1.30	
11312.00	90.600	358.500	7294.81	3603.75	3612.51	1173.92	40°07'41.147"N	104°41'20.447"W	0.80	
11406.00	90.000	359.000	7294.31	3697.73	3706.49	1171.87	40°07'42.076"N	104°41'20.474"W	0.83	
11501.00	89.300	359.000	7294.89	3792.73	3801.47	1170.21	40°07'43.014"N	104°41'20.495"W	0.74	
11596.00	90.100	358.700	7295.39	3887.72	3896.45	1168.30	40°07'43.953"N	104°41'20.519"W	0.90	
11691.00	90.200	359.300	7295.14	3982.71	3991.43	1166.65	40°07'44.892"N	104°41'20.541"W	0.64	
11785.00	90.300	359.000	7294.73	4076.71	4085.42	1165.25	40°07'45.820"N	104°41'20.559"W	0.34	
11880.00	90.200	358.500	7294.32	4171.70	4180.40	1163.18	40°07'46.759"N	104°41'20.585"W	0.54	
11976.00	90.100	358.100	7294.07	4267.67	4276.35	1160.33	40°07'47.707"N	104°41'20.622"W	0.43	LAST BHI MWD+IFR SURVEY



Actual Wellpath Report

BYDALEK 28C-20HZ AWP

Page 5 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 BYDALEK 28C-20HZ (521'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 28C-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 28C-20HZ AWB
Facility	SEC.20-T2N-R65W		

WELLPATH DATA (136 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12039.00	90.100	358.100	7293.96	4330.65	4339.32	1158.24	40°07'48.329"N	104°41'20.649"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: BYDALEK 28C-20HZ AWB Ref Wellpath: BYDALEK 28C-20HZ 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	1010.00	997.00	13.00	1009.98	0.00	0.00	3.49	-2.18
9.625in Casing Surface	13.00	1010.00	997.00	13.00	1009.98	0.00	0.00	3.49	-2.18
8.75in Open Hole	1010.00	7771.00	6761.00	1009.98	7301.62	3.49	-2.18	74.75	1182.85
7in Casing Intermediate	13.00	7762.00	7749.00	13.00	7301.28	0.00	0.00	65.76	1182.43
6.125in Open Hole	7762.00	12039.00	4277.00	7301.28	7293.96	65.76	1182.43	4339.32	1158.24

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
BYDALEK 7 PAD HARD LINES (460' SETBACKS)		-4.00	4339.47	-858.16	3224732.44	1291254.72	40°07'48.331"N	104°41'46.608"W	polygon
BYDALEK 7 PAD SECTION LINES		-4.00	4339.47	-858.16	3224732.44	1291254.72	40°07'48.331"N	104°41'46.608"W	polygon
DOM RED X 20-3 100' RADIUS		7158.33	4210.45	818.00	3226409.64	1291140.96	40°07'47.056"N	104°41'25.029"W	circle
BYDALEK 28C-20HZ BHL ON PLAT REV-1 (460'FNL & 2340'FWL, SEC.20)		7300.00	4364.98	1151.85	3226742.05	1291298.52	40°07'48.583"N	104°41'20.731"W	point
BYDALEK 28C-20HZ LAND BOX		7300.00	0.00	0.00	3225630.01	1286923.42	40°07'05.448"N	104°41'35.560"W	polygon
BYDALEK 28C-20HZ BHL REV-2 (460'FNL & 2340'FWL, SEC.20)		7302.00	4364.98	1151.85	3226742.05	1291298.52	40°07'48.583"N	104°41'20.731"W	point
PALMER X 20-6 150' RADIUS		7303.00	2898.01	811.91	3226415.49	1289828.58	40°07'34.086"N	104°41'25.108"W	circle

WELLPATH COMPOSITION - Ref Wellbore: BYDALEK 28C-20HZ AWB Ref Wellpath: BYDALEK 28C-20HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	913.00	Generic gyro - continuous (Standard)	BYDALEK 28C-20HZ <113-913>	BYDALEK 28C-20HZ AWB
913.00	7719.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1059-7719>	BYDALEK 28C-20HZ AWB
7719.00	11976.00	OnTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7797-11976>	BYDALEK 28C-20HZ AWB
11976.00	12039.00	Blind Drilling (std)	Projection to bit	BYDALEK 28C-20HZ AWB



Actual Wellpath Report

BYDALEK 28C-20HZ AWP

Page 6 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 BYDALEK 28C-20HZ (521'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 28C-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 28C-20HZ AWB
Facility	SEC.20-T2N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
13.00	0.000	337.760	13.00	TIE-ON
113.00	0.360	337.760	113.00	BEGIN GYRO SURVEYS
913.00	0.100	254.280	912.98	TIE-INTO GYRO SURVEYS
1059.00	0.500	315.900	1058.98	BEGIN BHI MWD+IFR SURVEYS
7762.00	87.521	2.536	7301.28	7" CASING POINT
11976.00	90.100	358.100	7294.07	LAST BHI MWD+IFR SURVEY
12039.00	90.100	358.100	7293.96	PROJECTION TO BIT