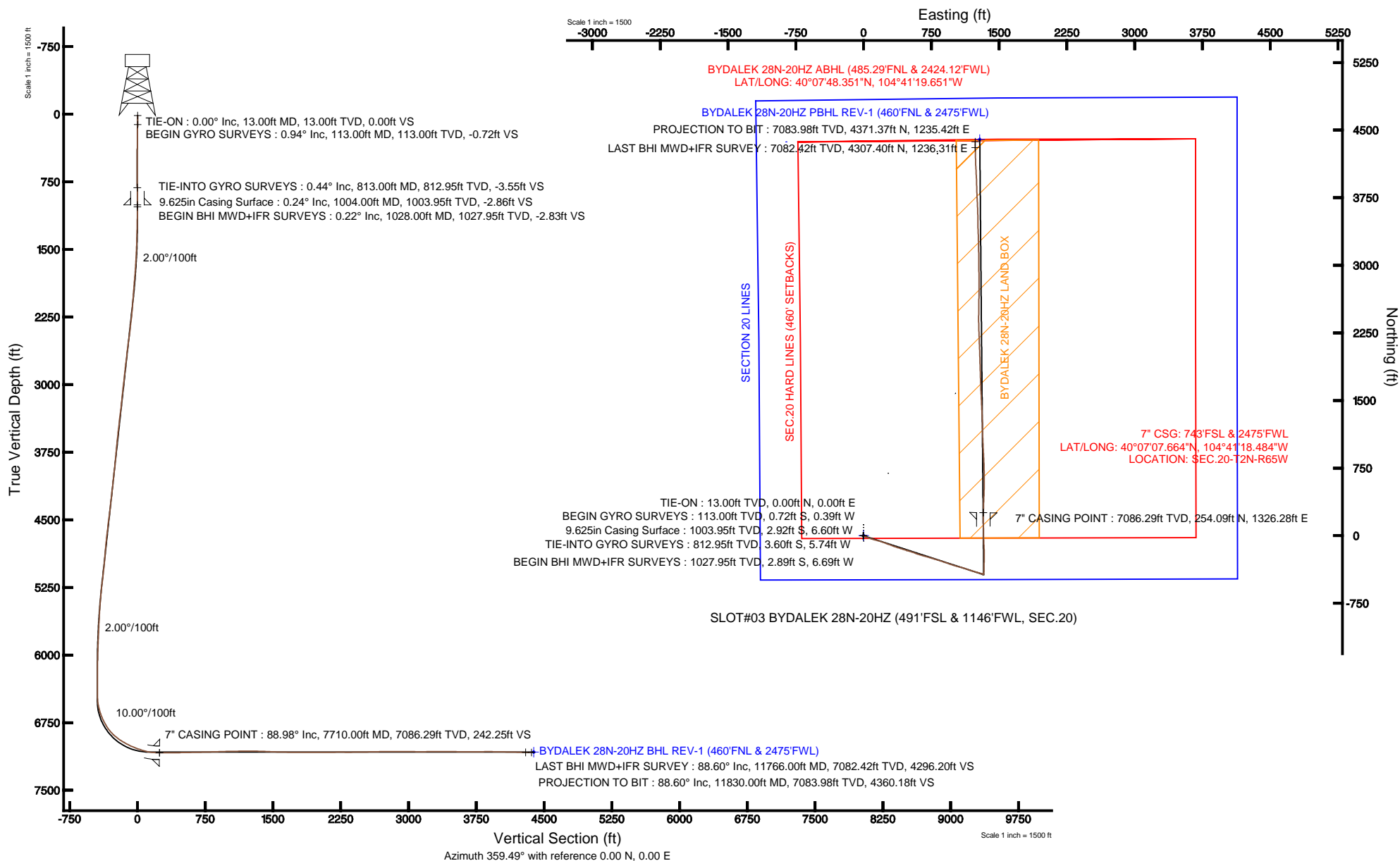


# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#03 BYDALEK 28N-20HZ (491'FSL & 1146'FWL, SEC.20)  
Field: WELD COUNTY (KERR MCGEE) Well: BYDALEK 28N-20HZ  
Facility: SEC.20-T2N-R65W Wellbore: BYDALEK 28N-20HZ PWB

Plot reference wellpath is BYDALEK 28N-20HZ (REV-A.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
ENSIGN 138 (RKB) to Mean Sea Level: 4944 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#03 BYDALEK 28N-20HZ (491'FSL & 1146'FWL, SEC.20)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wilajet02 on 4/10/2013





# Actual Wellpath Report

BYDALEK 28N-20HZ AWP

Page 1 of 6



## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 BYDALEK 28N-20HZ (491'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 28N-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 28N-20HZ AWB
Facility	SEC.20-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	0.99996	Report Generated	4/10/2013 at 11:22:38
Convergence at slot	0.52° East	Database/Source file	WellArchitectDB/BYDALEK_28N-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	0.10	0.08	3225630.59	1286893.58	40°07'05.153"N	104°41'35.556"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#03 BYDALEK 28N-20HZ (491'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	359.45°

### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 BYDALEK 28N-20HZ (491'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 28N-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 28N-20HZ AWB
Facility	SEC.20-T2N-R65W		

### WELLPATH DATA (131 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	208.750	0.00	0.00	0.00	0.00	40°07'05.153"N	104°41'35.556"W	0.00	
13.00	0.000	208.750	13.00	0.00	0.00	0.00	40°07'05.153"N	104°41'35.556"W	0.00	TIE-ON
113.00	0.940	208.750	113.00	-0.72	-0.72	-0.39	40°07'05.146"N	104°41'35.561"W	0.94	BEGIN GYRO SURVEYS
213.00	1.080	222.390	212.98	-2.12	-2.13	-1.42	40°07'05.132"N	104°41'35.574"W	0.28	
313.00	0.540	221.240	312.97	-3.16	-3.18	-2.37	40°07'05.122"N	104°41'35.587"W	0.54	
413.00	0.630	258.310	412.96	-3.62	-3.65	-3.22	40°07'05.117"N	104°41'35.597"W	0.38	
513.00	0.640	270.010	512.96	-3.72	-3.76	-4.32	40°07'05.116"N	104°41'35.612"W	0.13	
613.00	0.390	254.770	612.95	-3.80	-3.85	-5.20	40°07'05.115"N	104°41'35.623"W	0.28	
713.00	0.040	40.250	712.95	-3.86	-3.91	-5.51	40°07'05.114"N	104°41'35.627"W	0.42	
813.00	0.440	318.270	812.95	-3.55	-3.60	-5.74	40°07'05.117"N	104°41'35.630"W	0.44	TIE-INTO GYRO SURVEYS
1028.00	0.220	283.700	1027.95	-2.82	-2.89	-6.69	40°07'05.124"N	104°41'35.642"W	0.13	BEGIN BHI MWD+IFR SURVEYS
1059.00	0.300	290.500	1058.95	-2.78	-2.84	-6.83	40°07'05.125"N	104°41'35.644"W	0.28	
1150.00	1.600	116.300	1149.94	-3.27	-3.32	-5.91	40°07'05.120"N	104°41'35.632"W	2.09	
1241.00	2.900	120.800	1240.87	-5.04	-5.07	-2.79	40°07'05.103"N	104°41'35.592"W	1.44	
1333.00	4.300	111.300	1332.68	-7.53	-7.51	2.42	40°07'05.079"N	104°41'35.525"W	1.65	
1425.00	5.500	105.500	1424.35	-10.04	-9.94	9.88	40°07'05.055"N	104°41'35.429"W	1.41	
1516.00	7.200	108.900	1514.79	-13.14	-12.95	19.48	40°07'05.025"N	104°41'35.305"W	1.91	
1608.00	9.400	112.200	1605.82	-17.97	-17.66	31.89	40°07'04.978"N	104°41'35.146"W	2.45	
1699.00	11.000	106.900	1695.38	-23.44	-22.99	47.08	40°07'04.926"N	104°41'34.950"W	2.04	
1790.00	12.400	110.800	1784.49	-29.60	-28.99	64.52	40°07'04.867"N	104°41'34.725"W	1.77	
1886.00	14.000	109.300	1877.95	-37.30	-36.49	85.12	40°07'04.792"N	104°41'34.460"W	1.70	
1982.00	15.400	105.200	1970.80	-44.70	-43.67	108.38	40°07'04.721"N	104°41'34.161"W	1.82	
2077.00	16.400	104.700	2062.17	-51.66	-50.38	133.53	40°07'04.655"N	104°41'33.837"W	1.06	
2172.00	17.300	104.700	2153.09	-58.90	-57.36	160.16	40°07'04.586"N	104°41'33.494"W	0.95	
2268.00	18.400	108.100	2244.47	-67.50	-65.69	188.37	40°07'04.504"N	104°41'33.131"W	1.58	
2364.00	18.900	110.400	2335.43	-77.90	-75.82	217.35	40°07'04.404"N	104°41'32.758"W	0.93	
2458.00	18.500	109.700	2424.47	-88.51	-86.16	245.66	40°07'04.302"N	104°41'32.394"W	0.49	
2553.00	19.400	111.200	2514.32	-99.57	-96.94	274.56	40°07'04.195"N	104°41'32.022"W	1.08	
2648.00	19.200	110.900	2603.98	-111.13	-108.22	303.86	40°07'04.084"N	104°41'31.645"W	0.23	
2743.00	19.200	108.900	2693.70	-122.05	-118.85	333.23	40°07'03.978"N	104°41'31.267"W	0.69	
2838.00	19.400	109.400	2783.36	-132.63	-129.15	362.89	40°07'03.877"N	104°41'30.885"W	0.27	
2933.00	19.100	106.700	2873.05	-142.62	-138.86	392.66	40°07'03.781"N	104°41'30.502"W	0.99	
3029.00	19.900	107.800	2963.54	-152.43	-148.37	423.26	40°07'03.687"N	104°41'30.108"W	0.92	
3124.00	20.100	107.100	3052.81	-162.46	-158.11	454.26	40°07'03.590"N	104°41'29.709"W	0.33	
3218.00	19.700	106.600	3141.20	-172.03	-167.39	484.88	40°07'03.499"N	104°41'29.315"W	0.46	
3313.00	19.500	106.900	3230.69	-181.51	-176.57	515.40	40°07'03.408"N	104°41'28.922"W	0.24	
3409.00	19.200	109.300	3321.27	-191.68	-186.45	545.63	40°07'03.310"N	104°41'28.533"W	0.89	
3504.00	18.900	111.200	3411.07	-202.68	-197.17	574.72	40°07'03.204"N	104°41'28.158"W	0.73	
3600.00	18.600	108.000	3501.98	-213.31	-207.53	603.77	40°07'03.102"N	104°41'27.784"W	1.12	
3696.00	19.300	107.500	3592.77	-223.10	-217.03	633.46	40°07'03.008"N	104°41'27.402"W	0.75	
3790.00	18.500	105.800	3681.71	-232.11	-225.76	662.63	40°07'02.922"N	104°41'27.027"W	1.03	
3884.00	18.500	105.100	3770.85	-240.33	-233.71	691.38	40°07'02.843"N	104°41'26.657"W	0.24	
3979.00	18.900	105.200	3860.83	-248.57	-241.67	720.78	40°07'02.765"N	104°41'26.278"W	0.42	
4074.00	19.800	107.600	3950.47	-257.76	-250.57	750.96	40°07'02.677"N	104°41'25.890"W	1.26	
4169.00	19.700	107.400	4039.88	-267.71	-260.22	781.58	40°07'02.581"N	104°41'25.496"W	0.13	



# Actual Wellpath Report

BYDALEK 28N-20HZ AWP

Page 3 of 6



## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 BYDALEK 28N-20HZ (491'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 28N-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 28N-20HZ AWB
Facility	SEC.20-T2N-R65W		

## WELLPATH DATA (131 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4264.00	19.900	106.100	4129.26	-277.28	-269.49	812.39	40°07'02.490"N	104°41'25.099"W	0.51	
4359.00	19.400	108.300	4218.73	-287.01	-278.93	842.91	40°07'02.396"N	104°41'24.706"W	0.94	
4455.00	19.300	108.800	4309.31	-297.42	-289.05	873.06	40°07'02.296"N	104°41'24.318"W	0.20	
4550.00	20.400	107.700	4398.66	-307.80	-299.14	903.70	40°07'02.197"N	104°41'23.924"W	1.22	
4644.00	19.900	109.800	4486.91	-318.50	-309.54	934.36	40°07'02.094"N	104°41'23.529"W	0.94	
4739.00	20.300	108.900	4576.13	-329.61	-320.36	965.16	40°07'01.987"N	104°41'23.133"W	0.53	
4832.00	20.100	107.800	4663.41	-340.01	-330.47	995.64	40°07'01.887"N	104°41'22.740"W	0.46	
4926.00	20.100	105.700	4751.68	-349.62	-339.78	1026.57	40°07'01.795"N	104°41'22.342"W	0.77	
5021.00	17.700	103.600	4841.55	-357.71	-347.59	1056.33	40°07'01.718"N	104°41'21.959"W	2.63	
5116.00	17.900	104.200	4932.01	-364.96	-354.57	1084.52	40°07'01.649"N	104°41'21.596"W	0.29	
5211.00	18.000	108.300	5022.39	-373.42	-362.76	1112.61	40°07'01.568"N	104°41'21.235"W	1.33	
5307.00	18.800	109.200	5113.48	-383.44	-372.50	1141.30	40°07'01.472"N	104°41'20.866"W	0.88	
5400.00	19.400	108.600	5201.36	-393.57	-382.36	1170.09	40°07'01.374"N	104°41'20.495"W	0.68	
5495.00	17.900	107.100	5291.37	-403.18	-391.68	1199.00	40°07'01.282"N	104°41'20.123"W	1.66	
5590.00	16.300	107.400	5382.16	-411.71	-399.96	1225.68	40°07'01.200"N	104°41'19.780"W	1.69	
5685.00	14.400	105.900	5473.77	-419.17	-407.19	1249.76	40°07'01.129"N	104°41'19.470"W	2.04	
5780.00	11.000	104.300	5566.43	-424.84	-412.66	1269.91	40°07'01.075"N	104°41'19.210"W	3.60	
5876.00	9.900	107.000	5660.84	-429.67	-417.34	1286.68	40°07'01.028"N	104°41'18.994"W	1.25	
5970.00	8.400	104.800	5753.64	-433.93	-421.46	1301.04	40°07'00.988"N	104°41'18.809"W	1.64	
6065.00	6.100	110.700	5847.88	-437.59	-425.01	1312.48	40°07'00.953"N	104°41'18.662"W	2.54	
6160.00	4.300	114.100	5942.48	-440.91	-428.25	1320.45	40°07'00.921"N	104°41'18.560"W	1.92	
6255.00	2.600	116.900	6037.31	-443.39	-430.68	1325.62	40°07'00.897"N	104°41'18.493"W	1.80	
6349.00	1.100	113.800	6131.26	-444.74	-432.01	1328.35	40°07'00.883"N	104°41'18.458"W	1.60	
6444.00	0.400	306.800	6226.25	-444.92	-432.18	1328.92	40°07'00.882"N	104°41'18.451"W	1.57	
6538.00	0.200	288.300	6320.25	-444.66	-431.93	1328.50	40°07'00.884"N	104°41'18.456"W	0.23	
6632.00	0.010	289.700	6414.25	-444.61	-431.88	1328.34	40°07'00.885"N	104°41'18.458"W	0.20	
6679.00	0.200	59.100	6461.25	-444.57	-431.83	1328.40	40°07'00.885"N	104°41'18.457"W	0.44	
6726.00	4.600	12.500	6508.20	-442.69	-429.95	1328.88	40°07'00.904"N	104°41'18.451"W	9.50	
6775.00	10.700	8.200	6556.74	-436.27	-423.52	1329.96	40°07'00.967"N	104°41'18.437"W	12.50	
6822.00	15.000	5.900	6602.55	-425.91	-413.15	1331.20	40°07'01.070"N	104°41'18.421"W	9.21	
6869.00	18.100	4.300	6647.60	-412.59	-399.82	1332.38	40°07'01.202"N	104°41'18.406"W	6.67	
6916.00	22.700	0.400	6691.64	-396.24	-383.46	1332.99	40°07'01.363"N	104°41'18.398"W	10.20	
6964.00	27.100	0.200	6735.17	-376.03	-363.25	1333.09	40°07'01.563"N	104°41'18.397"W	9.17	
7011.00	30.100	0.700	6776.43	-353.54	-340.76	1333.27	40°07'01.785"N	104°41'18.395"W	6.40	
7059.00	34.600	2.300	6816.97	-327.88	-315.09	1333.97	40°07'02.039"N	104°41'18.386"W	9.54	
7106.00	40.700	2.300	6854.16	-299.22	-286.42	1335.12	40°07'02.322"N	104°41'18.371"W	12.98	
7154.00	46.600	1.500	6888.88	-266.14	-253.32	1336.20	40°07'02.649"N	104°41'18.357"W	12.35	
7201.00	52.600	359.700	6919.33	-230.37	-217.55	1336.55	40°07'03.003"N	104°41'18.352"W	13.09	
7249.00	56.600	357.900	6947.13	-191.26	-178.44	1335.72	40°07'03.389"N	104°41'18.363"W	8.88	
7296.00	60.000	357.000	6971.83	-151.30	-138.50	1333.94	40°07'03.784"N	104°41'18.386"W	7.42	
7343.00	62.800	356.800	6994.32	-110.08	-97.30	1331.70	40°07'04.191"N	104°41'18.415"W	5.97	
7390.00	65.700	358.000	7014.74	-67.78	-55.02	1329.79	40°07'04.609"N	104°41'18.439"W	6.58	
7438.00	68.000	358.600	7033.61	-23.66	-10.90	1328.48	40°07'05.045"N	104°41'18.456"W	4.93	
7485.00	72.100	359.100	7049.64	20.51	33.26	1327.60	40°07'05.481"N	104°41'18.467"W	8.78	
7532.00	74.500	359.300	7063.15	65.53	78.27	1326.97	40°07'05.926"N	104°41'18.475"W	5.12	

### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 BYDALEK 28N-20HZ (491'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 28N-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 28N-20HZ AWB
Facility	SEC.20-T2N-R65W		

### WELLPATH DATA (131 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7581.00	78.000	358.900	7074.79	113.11	125.85	1326.22	40°07'06.396"N	104°41'18.485"W	7.19	
7628.00	83.600	359.400	7082.30	159.49	172.22	1325.53	40°07'06.855"N	104°41'18.494"W	11.96	
7667.00	88.000	0.800	7085.16	198.37	211.11	1325.60	40°07'07.239"N	104°41'18.493"W	11.84	
7710.00†	88.979	1.013	7086.29	241.34	254.09	1326.28	40°07'07.664"N	104°41'18.484"W	2.33	7" CASING POINT
7768.00	90.300	1.300	7086.66	299.31	312.07	1327.45	40°07'08.237"N	104°41'18.469"W	2.33	
7895.00	90.700	2.700	7085.55	426.18	438.99	1331.89	40°07'09.491"N	104°41'18.412"W	1.15	
7991.00	91.300	1.200	7083.87	522.07	534.91	1335.15	40°07'10.439"N	104°41'18.370"W	1.68	
8086.00	91.400	359.600	7081.63	617.03	629.88	1335.81	40°07'11.377"N	104°41'18.361"W	1.69	
8181.00	90.900	358.600	7079.73	712.01	724.85	1334.32	40°07'12.316"N	104°41'18.380"W	1.18	
8370.00	92.200	356.900	7074.62	900.84	913.62	1326.91	40°07'14.181"N	104°41'18.476"W	1.13	
8466.00	91.800	357.500	7071.27	996.71	1009.45	1322.22	40°07'15.128"N	104°41'18.536"W	0.75	
8562.00	90.000	358.700	7069.76	1092.67	1105.38	1319.04	40°07'16.076"N	104°41'18.577"W	2.25	
8658.00	91.000	358.500	7068.92	1188.65	1201.34	1316.69	40°07'17.024"N	104°41'18.607"W	1.06	
8753.00	89.400	358.100	7068.59	1283.63	1296.30	1313.87	40°07'17.963"N	104°41'18.643"W	1.74	
8847.00	87.700	356.500	7070.97	1377.52	1390.16	1309.45	40°07'18.890"N	104°41'18.700"W	2.48	
8943.00	87.800	357.900	7074.74	1473.37	1485.97	1304.76	40°07'19.837"N	104°41'18.760"W	1.46	
9038.00	88.200	357.300	7078.05	1568.27	1580.83	1300.79	40°07'20.775"N	104°41'18.811"W	0.76	
9132.00	89.500	358.100	7079.94	1662.20	1674.73	1297.02	40°07'21.703"N	104°41'18.860"W	1.62	
9226.00	89.900	357.900	7080.43	1756.17	1768.67	1293.74	40°07'22.631"N	104°41'18.902"W	0.48	
9320.00	90.500	358.300	7080.10	1850.14	1862.62	1290.62	40°07'23.559"N	104°41'18.942"W	0.77	
9415.00	89.600	358.200	7080.02	1945.12	1957.57	1287.72	40°07'24.498"N	104°41'18.979"W	0.95	
9605.00	90.400	358.000	7080.02	2135.07	2147.46	1281.42	40°07'26.374"N	104°41'19.060"W	0.43	
9700.00	90.000	357.500	7079.69	2230.02	2242.39	1277.69	40°07'27.312"N	104°41'19.108"W	0.67	
9794.00	89.800	358.900	7079.85	2324.00	2336.34	1274.74	40°07'28.241"N	104°41'19.146"W	1.50	
9890.00	90.800	0.600	7079.35	2419.99	2432.33	1274.32	40°07'29.189"N	104°41'19.152"W	2.05	
10082.00	91.300	0.900	7075.83	2611.91	2624.28	1276.83	40°07'31.086"N	104°41'19.119"W	0.30	
10177.00	90.800	0.600	7074.09	2706.87	2719.26	1278.07	40°07'32.025"N	104°41'19.103"W	0.61	
10272.00	90.000	359.500	7073.43	2801.86	2814.26	1278.16	40°07'32.963"N	104°41'19.102"W	1.43	
10368.00	90.200	359.200	7073.26	2897.86	2910.25	1277.07	40°07'33.912"N	104°41'19.116"W	0.38	
10463.00	89.100	359.600	7073.84	2992.85	3005.24	1276.07	40°07'34.851"N	104°41'19.129"W	1.23	
10653.00	90.300	358.900	7074.83	3182.84	3195.22	1273.59	40°07'36.728"N	104°41'19.161"W	0.73	
10843.00	90.500	357.600	7073.51	3372.79	3385.12	1267.78	40°07'38.605"N	104°41'19.235"W	0.69	
10939.00	89.000	359.700	7073.93	3468.78	3481.08	1265.52	40°07'39.553"N	104°41'19.264"W	2.69	
11128.00	90.000	357.500	7075.58	3657.73	3670.01	1260.90	40°07'41.420"N	104°41'19.323"W	1.28	
11222.00	90.400	356.700	7075.25	3751.65	3763.88	1256.15	40°07'42.348"N	104°41'19.385"W	0.95	
11317.00	90.300	358.900	7074.67	3846.61	3858.81	1252.50	40°07'43.286"N	104°41'19.431"W	2.32	
11506.00	88.700	356.500	7076.32	4035.49	4047.63	1244.92	40°07'45.152"N	104°41'19.529"W	1.53	
11601.00	88.700	358.500	7078.47	4130.41	4142.51	1240.78	40°07'46.089"N	104°41'19.582"W	2.10	
11696.00	88.600	358.100	7080.71	4225.36	4237.44	1237.96	40°07'47.028"N	104°41'19.618"W	0.43	
11766.00	88.600	359.200	7082.42	4295.33	4307.40	1236.31	40°07'47.719"N	104°41'19.640"W	1.57	LAST BHI MWD+IFR SURVEY
11830.00	88.600	359.200	7083.98	4359.31	4371.37	1235.42	40°07'48.351"N	104°41'19.651"W	0.00	PROJECTION TO BIT



# Actual Wellpath Report

BYDALEK 28N-20HZ AWP

Page 5 of 6



## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 BYDALEK 28N-20HZ (491'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 28N-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 28N-20HZ AWB
Facility	SEC.20-T2N-R65W		

## HOLE & CASING SECTIONS - Ref Wellbore: BYDALEK 28N-20HZ AWB Ref Wellpath: BYDALEK 28N-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	1004.00	991.00	13.00	1003.95	0.00	0.00	-2.92	-6.60
9.625in Casing Surface	13.00	1004.00	991.00	13.00	1003.95	0.00	0.00	-2.92	-6.60
8.75in Open Hole	1004.00	7720.00	6716.00	1003.95	7086.45	-2.92	-6.60	264.08	1326.46
7in Casing Intermediate	13.00	7710.00	7697.00	13.00	7086.29	0.00	0.00	254.09	1326.28
6.125in Open Hole	7710.00	11830.00	4120.00	7086.29	7083.98	254.09	1326.28	4371.37	1235.42

## 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	4369.32	-858.47	3224732.44	1291254.72	40°07'48.331"N	104°41'46.608"W	polygon
BYDALEK 7 PAD SECTION LINES		-4.00	4369.32	-858.47	3224732.44	1291254.72	40°07'48.331"N	104°41'46.608"W	polygon
BYDALEK 28N-20HZ BHL REV-1 (460'FNL & 2475'FWL)		7079.00	4396.66	1286.30	3226876.78	1291301.58	40°07'48.601"N	104°41'18.996"W	point
BYDALEK 28N-20HZ LAND BOX		7079.00	0.00	0.00	3225630.59	1286893.58	40°07'05.153"N	104°41'35.556"W	polygon
PALMER X 20-20 150' RADIUS		7080.00	2368.04	247.38	3225856.41	1289263.67	40°07'28.554"N	104°41'32.371"W	circle

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

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	813.00	Generic gyro - continuous (Standard)	GYRODATA SURVEYS <113-813>	BYDALEK 28N-20HZ AWB
813.00	7667.00	NaviTrak (IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1028-7667>	BYDALEK 28N-20HZ AWB
7667.00	11766.00	OnTrak (IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7768-11766>	BYDALEK 28N-20HZ AWB
11766.00	11830.00	Blind Drilling (std)	Projection to bit	BYDALEK 28N-20HZ AWB



# Actual Wellpath Report

BYDALEK 28N-20HZ AWP

Page 6 of 6



## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 BYDALEK 28N-20HZ (491'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 28N-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 28N-20HZ AWB
Facility	SEC.20-T2N-R65W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
13.00	0.000	208.750	13.00	TIE-ON
113.00	0.940	208.750	113.00	BEGIN GYRO SURVEYS
813.00	0.440	318.270	812.95	TIE-INTO GYRO SURVEYS
1028.00	0.220	283.700	1027.95	BEGIN BHI MWD+IFR SURVEYS
7710.00	88.979	1.013	7086.29	7" CASING POINT
11766.00	88.600	359.200	7082.42	LAST BHI MWD+IFR SURVEY
11830.00	88.600	359.200	7083.98	PROJECTION TO BIT