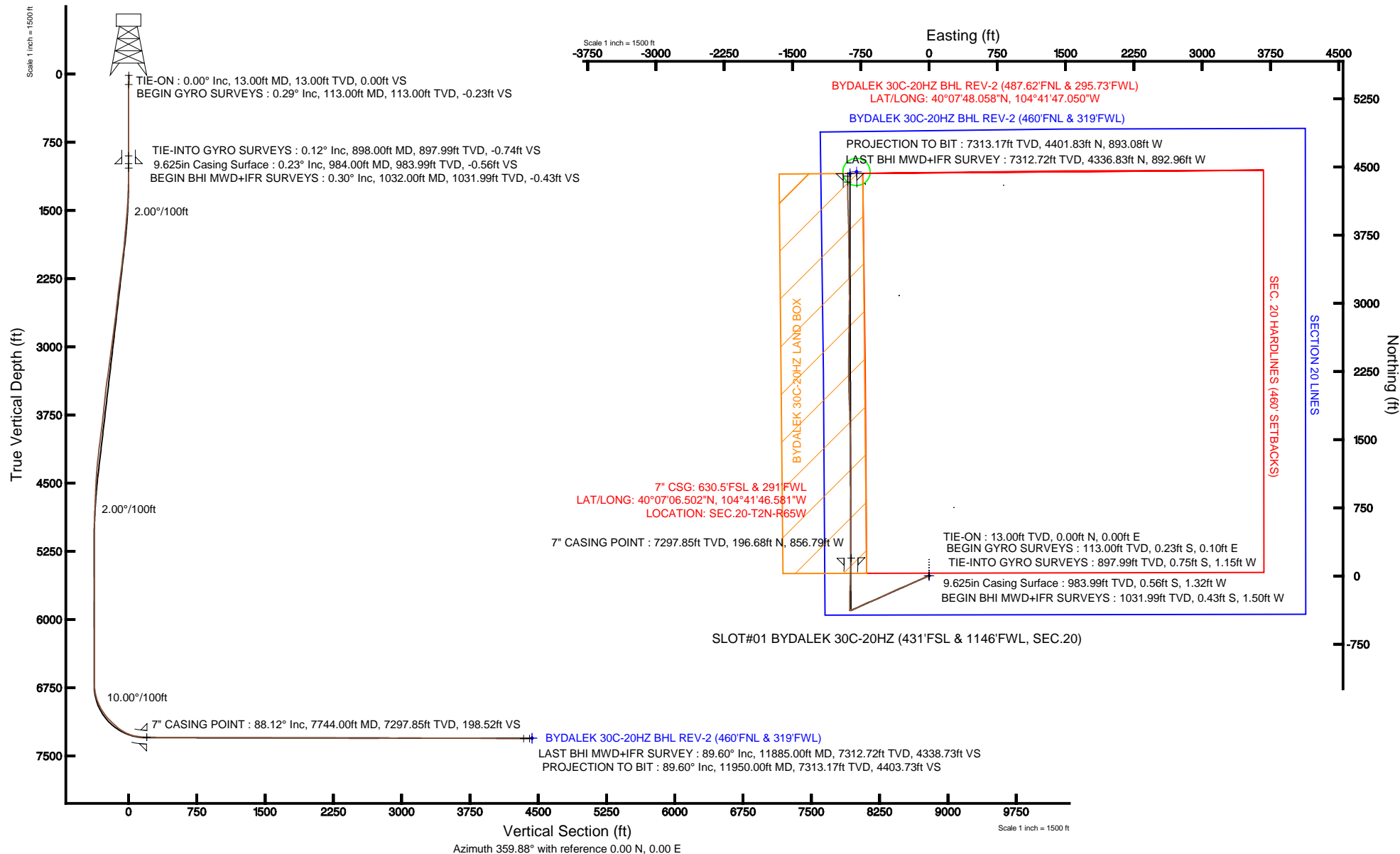


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#01 BYDALEK 30C-20HZ (431'FSL & 1146'FWL, SEC.20)
Field: WELD COUNTY (KERR MCGEE) Well: BYDALEK 30C-20HZ
Facility: SEC.20-T2N-R65W Wellbore: BYDALEK 30C-20HZ PWB

Plot reference wellpath is BYDALEK 30C-20HZ (REV-B.0) PWB

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#01 BYDALEK 30C-20HZ (431'FSL & 1146'FWL, SEC.20)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wilsjef02 on 3/19/2013





Actual Wellpath Report

BYDALEK 30C-20HZ AWP

Page 1 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BYDALEK 30C-20HZ (431'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 30C-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 30C-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	3/19/2013 at 09:57:15
Convergence at slot	0.52° East	Database/Source file	WellArchitectDB/BYDALEK_30C-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	-60.01	0.39	3225631.45	1286833.48	40°07'04.559"N	104°41'35.552"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#01 BYDALEK 30C-20HZ (431'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	359.88°

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BYDALEK 30C-20HZ (431'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 30C-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 30C-20HZ AWB
Facility	SEC.20-T2N-R65W		

WELLPATH DATA (129 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	156.140	0.00	0.00	0.00	0.00	40°07'04.559"N	104°41'35.552"W	0.00	
13.00	0.000	156.140	13.00	0.00	0.00	0.00	40°07'04.559"N	104°41'35.552"W	0.00	TIE-ON
113.00	0.290	156.140	113.00	-0.23	-0.23	0.10	40°07'04.557"N	104°41'35.551"W	0.29	BEGIN GYRO SURVEYS
213.00	0.440	219.020	213.00	-0.76	-0.76	-0.04	40°07'04.551"N	104°41'35.552"W	0.40	
313.00	0.200	152.260	313.00	-1.21	-1.21	-0.20	40°07'04.547"N	104°41'35.555"W	0.41	
413.00	0.260	300.440	413.00	-1.25	-1.25	-0.31	40°07'04.547"N	104°41'35.556"W	0.44	
513.00	0.180	222.340	513.00	-1.25	-1.25	-0.61	40°07'04.547"N	104°41'35.560"W	0.28	
613.00	0.140	250.680	613.00	-1.41	-1.41	-0.83	40°07'04.545"N	104°41'35.563"W	0.09	
713.00	0.250	344.030	712.99	-1.24	-1.24	-1.01	40°07'04.547"N	104°41'35.565"W	0.29	
813.00	0.130	348.070	812.99	-0.92	-0.92	-1.09	40°07'04.550"N	104°41'35.566"W	0.12	
898.00	0.120	336.150	897.99	-0.74	-0.75	-1.15	40°07'04.552"N	104°41'35.567"W	0.03	TIE-INTO GYRO SURVEYS
1032.00	0.300	301.500	1031.99	-0.43	-0.43	-1.50	40°07'04.555"N	104°41'35.571"W	0.16	BEGIN BHI MWD+IFR SURVEYS
1124.00	2.500	245.800	1123.96	-1.12	-1.13	-3.54	40°07'04.548"N	104°41'35.598"W	2.55	
1215.00	4.300	249.900	1214.80	-3.10	-3.12	-8.56	40°07'04.528"N	104°41'35.662"W	1.99	
1307.00	6.100	253.500	1306.42	-5.66	-5.69	-16.48	40°07'04.503"N	104°41'35.764"W	1.99	
1398.00	7.800	243.700	1396.75	-9.74	-9.80	-26.65	40°07'04.462"N	104°41'35.895"W	2.27	
1489.00	9.200	243.300	1486.75	-15.72	-15.81	-38.69	40°07'04.403"N	104°41'36.050"W	1.54	
1580.00	11.600	246.200	1576.24	-22.65	-22.77	-53.56	40°07'04.334"N	104°41'36.241"W	2.70	
1701.00	11.900	243.700	1694.71	-33.04	-33.20	-75.88	40°07'04.231"N	104°41'36.529"W	0.49	
1793.00	13.700	249.700	1784.42	-40.98	-41.19	-94.60	40°07'04.152"N	104°41'36.770"W	2.43	
1887.00	15.000	247.800	1875.49	-49.40	-49.65	-116.30	40°07'04.068"N	104°41'37.049"W	1.47	
1982.00	16.100	245.800	1967.01	-59.39	-59.69	-139.70	40°07'03.969"N	104°41'37.350"W	1.29	
2077.00	17.200	245.500	2058.03	-70.56	-70.92	-164.50	40°07'03.858"N	104°41'37.669"W	1.16	
2173.00	17.400	246.100	2149.68	-82.21	-82.62	-190.54	40°07'03.743"N	104°41'38.005"W	0.28	
2268.00	17.400	245.700	2240.34	-93.75	-94.22	-216.47	40°07'03.628"N	104°41'38.338"W	0.13	
2363.00	17.400	246.400	2330.99	-105.23	-105.75	-242.43	40°07'03.514"N	104°41'38.673"W	0.22	
2458.00	17.300	247.800	2421.67	-116.20	-116.77	-268.53	40°07'03.405"N	104°41'39.008"W	0.45	
2553.00	17.400	249.900	2512.35	-126.36	-126.99	-294.95	40°07'03.304"N	104°41'39.348"W	0.67	
2649.00	17.100	245.700	2604.03	-137.04	-137.73	-321.29	40°07'03.198"N	104°41'39.688"W	1.33	
2743.00	17.100	246.300	2693.88	-148.23	-148.98	-346.54	40°07'03.087"N	104°41'40.013"W	0.19	
2836.00	17.100	245.800	2782.76	-159.28	-160.08	-371.53	40°07'02.977"N	104°41'40.334"W	0.16	
2932.00	16.800	242.600	2874.60	-171.39	-172.25	-396.72	40°07'02.857"N	104°41'40.659"W	1.02	
3027.00	17.000	244.400	2965.49	-183.66	-184.57	-421.44	40°07'02.735"N	104°41'40.977"W	0.59	
3120.00	18.000	245.900	3054.19	-195.35	-196.31	-446.81	40°07'02.619"N	104°41'41.303"W	1.18	
3217.00	17.400	245.000	3146.60	-207.54	-208.56	-473.64	40°07'02.498"N	104°41'41.649"W	0.68	
3312.00	17.200	244.900	3237.30	-219.45	-220.52	-499.23	40°07'02.380"N	104°41'41.978"W	0.21	
3406.00	16.800	242.800	3327.19	-231.50	-232.62	-523.90	40°07'02.260"N	104°41'42.296"W	0.78	
3501.00	16.900	244.100	3418.11	-243.75	-244.93	-548.53	40°07'02.139"N	104°41'42.613"W	0.41	
3596.00	16.700	247.100	3509.06	-255.04	-256.27	-573.53	40°07'02.026"N	104°41'42.934"W	0.94	
3691.00	16.000	250.300	3600.22	-264.71	-266.00	-598.43	40°07'01.930"N	104°41'43.255"W	1.20	
3785.00	16.700	249.000	3690.42	-273.87	-275.21	-623.24	40°07'01.839"N	104°41'43.574"W	0.84	
3880.00	17.600	249.700	3781.19	-283.69	-285.08	-649.45	40°07'01.742"N	104°41'43.912"W	0.97	
3975.00	16.700	246.600	3871.97	-294.03	-295.49	-675.45	40°07'01.639"N	104°41'44.246"W	1.35	
4070.00	17.700	246.700	3962.72	-305.11	-306.62	-701.24	40°07'01.529"N	104°41'44.578"W	1.05	
4165.00	16.200	243.100	4053.59	-316.77	-318.33	-726.33	40°07'01.413"N	104°41'44.901"W	1.93	



Actual Wellpath Report

BYDALEK 30C-20HZ AWP

Page 3 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BYDALEK 30C-20HZ (431'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 30C-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 30C-20HZ AWB
Facility	SEC.20-T2N-R65W		

WELLPATH DATA (129 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4259.00	15.300	243.700	4144.06	-328.15	-329.76	-749.14	40°07'01.300"N	104°41'45.195"W	0.97	
4355.00	13.100	241.100	4237.13	-338.97	-340.63	-770.02	40°07'01.193"N	104°41'45.463"W	2.39	
4449.00	10.700	244.700	4329.10	-347.81	-349.51	-787.24	40°07'01.105"N	104°41'45.685"W	2.67	
4544.00	8.200	243.100	4422.80	-354.62	-356.34	-801.26	40°07'01.037"N	104°41'45.865"W	2.65	
4639.00	8.100	248.900	4516.85	-360.07	-361.82	-813.54	40°07'00.983"N	104°41'46.024"W	0.87	
4734.00	8.100	251.800	4610.90	-364.54	-366.32	-826.14	40°07'00.939"N	104°41'46.186"W	0.43	
4828.00	7.400	252.000	4704.04	-368.45	-370.25	-838.19	40°07'00.900"N	104°41'46.341"W	0.75	
4923.00	5.800	247.300	4798.41	-372.18	-374.00	-848.44	40°07'00.863"N	104°41'46.473"W	1.78	
5019.00	4.500	239.200	4894.02	-375.96	-377.80	-856.15	40°07'00.825"N	104°41'46.572"W	1.55	
5113.00	3.000	229.800	4987.82	-379.42	-381.27	-861.20	40°07'00.791"N	104°41'46.637"W	1.72	
5208.00	1.000	231.700	5082.75	-381.54	-383.39	-863.75	40°07'00.770"N	104°41'46.670"W	2.11	
5302.00	0.300	19.200	5176.75	-381.81	-383.67	-864.31	40°07'00.767"N	104°41'46.677"W	1.34	
5682.00	1.400	284.500	5556.71	-379.70	-381.57	-868.48	40°07'00.788"N	104°41'46.731"W	0.38	
5870.00	0.300	164.800	5744.69	-379.60	-381.47	-870.57	40°07'00.789"N	104°41'46.758"W	0.84	
6249.00	0.300	330.400	6123.69	-379.69	-381.56	-870.80	40°07'00.788"N	104°41'46.761"W	0.16	
6631.00	0.100	337.300	6505.69	-378.51	-380.38	-871.42	40°07'00.800"N	104°41'46.769"W	0.05	
6779.00	0.200	45.200	6653.69	-378.21	-380.08	-871.29	40°07'00.803"N	104°41'46.767"W	0.13	
6816.00	0.200	22.400	6690.69	-378.11	-379.98	-871.22	40°07'00.804"N	104°41'46.766"W	0.21	
6847.00	2.600	355.800	6721.68	-377.36	-379.23	-871.25	40°07'00.811"N	104°41'46.766"W	7.82	
6879.00	6.300	359.000	6753.58	-374.87	-376.75	-871.33	40°07'00.836"N	104°41'46.767"W	11.58	
6911.00	8.000	0.100	6785.33	-370.89	-372.76	-871.36	40°07'00.875"N	104°41'46.768"W	5.33	
6958.00	12.000	359.400	6831.60	-362.73	-364.60	-871.41	40°07'00.956"N	104°41'46.768"W	8.51	
7005.00	17.700	1.600	6877.01	-350.70	-352.57	-871.26	40°07'01.075"N	104°41'46.767"W	12.18	
7052.00	22.600	1.300	6921.12	-334.52	-336.39	-870.85	40°07'01.235"N	104°41'46.761"W	10.43	
7100.00	27.900	359.900	6964.52	-314.05	-315.92	-870.66	40°07'01.437"N	104°41'46.759"W	11.11	
7147.00	31.200	359.800	7005.40	-290.87	-292.74	-870.73	40°07'01.666"N	104°41'46.760"W	7.02	
7194.00	36.200	358.700	7044.49	-264.81	-266.68	-871.08	40°07'01.924"N	104°41'46.764"W	10.72	
7241.00	40.600	358.300	7081.32	-235.63	-237.50	-871.85	40°07'02.212"N	104°41'46.774"W	9.38	
7291.00	45.900	1.900	7117.73	-201.39	-203.27	-871.74	40°07'02.550"N	104°41'46.773"W	11.69	
7338.00	47.900	3.400	7149.84	-167.12	-168.99	-870.15	40°07'02.889"N	104°41'46.752"W	4.85	
7386.00	48.700	2.200	7181.77	-131.33	-133.19	-868.40	40°07'03.243"N	104°41'46.730"W	2.50	
7433.00	54.200	2.600	7211.05	-94.62	-96.48	-866.85	40°07'03.605"N	104°41'46.710"W	11.72	
7481.00	60.600	2.500	7236.90	-54.25	-56.11	-865.06	40°07'04.004"N	104°41'46.687"W	13.33	
7527.00	66.300	2.100	7257.45	-13.16	-15.01	-863.41	40°07'04.411"N	104°41'46.666"W	12.42	
7576.00	72.900	2.900	7274.52	32.70	30.85	-861.40	40°07'04.864"N	104°41'46.640"W	13.56	
7622.00	79.900	2.700	7285.33	77.32	75.48	-859.22	40°07'05.305"N	104°41'46.612"W	15.22	
7671.00	83.400	1.900	7292.45	125.75	123.91	-857.28	40°07'05.783"N	104°41'46.587"W	7.32	
7702.00	85.400	0.600	7295.47	156.59	154.75	-856.60	40°07'06.088"N	104°41'46.578"W	7.68	
7744.00†	88.124	358.895	7297.85	198.52	196.68	-856.79	40°07'06.502"N	104°41'46.581"W	7.65	7" CASING POINT
7776.00	90.200	357.600	7298.31	230.50	228.66	-857.77	40°07'06.818"N	104°41'46.593"W	7.65	
7807.00	89.600	357.900	7298.37	261.48	259.64	-858.98	40°07'07.125"N	104°41'46.609"W	2.16	
7902.00	89.700	358.900	7298.95	356.44	354.60	-861.64	40°07'08.063"N	104°41'46.643"W	1.06	
7997.00	90.100	0.400	7299.11	451.44	449.59	-862.22	40°07'09.002"N	104°41'46.650"W	1.63	
8092.00	89.500	359.900	7299.45	546.44	544.59	-861.97	40°07'09.941"N	104°41'46.647"W	0.82	
8186.00	89.600	0.400	7300.18	640.43	638.59	-861.72	40°07'10.869"N	104°41'46.644"W	0.54	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BYDALEK 30C-20HZ (431'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 30C-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 30C-20HZ AWB
Facility	SEC.20-T2N-R65W		

WELLPATH DATA (129 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8281.00	89.600	0.400	7300.85	735.43	733.58	-861.06	40°07'11.808"N	104°41'46.636"W	0.00	
8470.00	89.700	0.800	7302.00	924.41	922.57	-859.08	40°07'13.676"N	104°41'46.610"W	0.22	
8565.00	90.000	359.700	7302.25	1019.40	1017.56	-858.66	40°07'14.615"N	104°41'46.605"W	1.20	
8660.00	90.100	359.900	7302.17	1114.40	1112.56	-859.00	40°07'15.553"N	104°41'46.609"W	0.24	
8756.00	90.400	359.300	7301.75	1210.40	1208.56	-859.67	40°07'16.502"N	104°41'46.618"W	0.70	
8850.00	90.100	359.400	7301.34	1304.40	1302.55	-860.73	40°07'17.431"N	104°41'46.632"W	0.34	
8945.00	89.900	359.400	7301.34	1399.39	1397.55	-861.73	40°07'18.370"N	104°41'46.645"W	0.21	
9039.00	89.200	359.000	7302.08	1493.38	1491.53	-863.04	40°07'19.298"N	104°41'46.662"W	0.86	
9135.00	88.300	357.900	7304.17	1589.33	1587.47	-865.64	40°07'20.246"N	104°41'46.695"W	1.48	
9229.00	89.600	358.200	7305.89	1683.26	1681.40	-868.83	40°07'21.175"N	104°41'46.736"W	1.42	
9325.00	90.500	358.700	7305.81	1779.23	1777.36	-871.43	40°07'22.123"N	104°41'46.770"W	1.07	
9419.00	89.700	357.600	7305.65	1873.19	1871.31	-874.47	40°07'23.051"N	104°41'46.809"W	1.45	
9513.00	90.700	357.800	7305.32	1967.12	1965.24	-878.24	40°07'23.980"N	104°41'46.857"W	1.08	
9609.00	90.300	359.100	7304.48	2063.08	2061.19	-880.83	40°07'24.928"N	104°41'46.891"W	1.42	
9703.00	89.700	359.300	7304.48	2157.07	2155.19	-882.15	40°07'25.857"N	104°41'46.908"W	0.67	
9799.00	89.000	359.500	7305.57	2253.06	2251.17	-883.15	40°07'26.805"N	104°41'46.921"W	0.76	
9894.00	88.700	0.500	7307.48	2348.04	2346.15	-883.15	40°07'27.744"N	104°41'46.921"W	1.10	
9989.00	89.500	1.000	7308.97	2443.02	2441.13	-881.91	40°07'28.682"N	104°41'46.905"W	0.99	
10084.00	89.500	359.800	7309.80	2538.01	2536.12	-881.25	40°07'29.621"N	104°41'46.896"W	1.26	
10178.00	90.200	1.100	7310.04	2632.00	2630.12	-880.51	40°07'30.550"N	104°41'46.887"W	1.57	
10272.00	90.800	0.700	7309.22	2725.98	2724.10	-879.03	40°07'31.479"N	104°41'46.868"W	0.77	
10368.00	90.900	0.600	7307.80	2821.96	2820.09	-877.94	40°07'32.427"N	104°41'46.854"W	0.15	
10462.00	90.600	0.900	7306.57	2915.94	2914.07	-876.71	40°07'33.356"N	104°41'46.838"W	0.45	
10557.00	90.600	1.000	7305.57	3010.92	3009.05	-875.14	40°07'34.295"N	104°41'46.818"W	0.11	
10652.00	89.700	359.200	7305.32	3105.92	3104.05	-874.97	40°07'35.233"N	104°41'46.816"W	2.12	
10747.00	89.400	359.100	7306.07	3200.91	3199.03	-876.38	40°07'36.172"N	104°41'46.834"W	0.33	
10841.00	89.500	359.600	7306.97	3294.90	3293.02	-877.45	40°07'37.101"N	104°41'46.848"W	0.54	
10936.00	90.000	359.100	7307.39	3389.89	3388.01	-878.52	40°07'38.040"N	104°41'46.862"W	0.74	
11030.00	90.300	359.500	7307.14	3483.89	3482.01	-879.67	40°07'38.968"N	104°41'46.877"W	0.53	
11124.00	89.800	359.400	7307.06	3577.88	3576.00	-880.57	40°07'39.897"N	104°41'46.888"W	0.54	
11219.00	89.500	359.100	7307.64	3672.88	3670.99	-881.82	40°07'40.836"N	104°41'46.904"W	0.45	
11314.00	89.900	359.300	7308.14	3767.87	3765.98	-883.14	40°07'41.775"N	104°41'46.921"W	0.47	
11408.00	89.500	359.000	7308.63	3861.86	3859.97	-884.54	40°07'42.703"N	104°41'46.939"W	0.53	
11505.00	89.000	357.900	7309.90	3958.82	3956.92	-887.16	40°07'43.662"N	104°41'46.973"W	1.25	
11600.00	89.200	358.300	7311.39	4053.76	4051.86	-890.31	40°07'44.600"N	104°41'47.014"W	0.47	
11695.00	89.800	359.200	7312.22	4148.74	4146.83	-892.38	40°07'45.538"N	104°41'47.041"W	1.14	
11790.00	90.000	0.100	7312.39	4243.74	4241.83	-892.96	40°07'46.477"N	104°41'47.048"W	0.97	
11885.00	89.600	359.900	7312.72	4338.73	4336.83	-892.96	40°07'47.416"N	104°41'47.048"W	0.47	LAST BHI MWD+IFR SURVEY
11950.00	89.600	359.900	7313.17	4403.73	4401.83	-893.08	40°07'48.058"N	104°41'47.050"W	0.00	PROJECTION TO BIT



Actual Wellpath Report

BYDALEK 30C-20HZ AWP

Page 5 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BYDALEK 30C-20HZ (431'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 30C-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 30C-20HZ AWB
Facility	SEC.20-T2N-R65W		

HOLE & CASING SECTIONS - Ref Wellbore: BYDALEK 30C-20HZ AWB Ref Wellpath: BYDALEK 30C-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	984.00	971.00	13.00	983.99	0.00	0.00	-0.56	-1.32
9.625in Casing Surface	13.00	984.00	971.00	13.00	983.99	0.00	0.00	-0.56	-1.32
8.75in Open Hole	984.00	7755.00	6771.00	983.99	7298.14	-0.56	-1.32	207.67	-857.04
7in Casing Intermediate	13.00	7744.00	7731.00	13.00	7297.85	0.00	0.00	196.68	-856.79
6.125in Open Hole	7744.00	11950.00	4206.00	7297.85	7313.17	196.68	-856.79	4401.83	-893.08

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
BYDALEK 29N-20HZ LAND BOX		-4.00	4429.43	-858.78	3224732.44	1291254.72	40°07'48.331"N	104°41'46.608"W	polygon
BYDALEK 7 PAD HARD LINES (460' SETBACKS)		-4.00	4429.43	-858.78	3224732.44	1291254.72	40°07'48.331"N	104°41'46.608"W	polygon
BYDALEK 7 PAD SECTION LINES		-4.00	4429.43	-858.78	3224732.44	1291254.72	40°07'48.331"N	104°41'46.608"W	polygon
BYDALEK 30C-20HZ LAND BOX		7166.00	0.00	0.00	3225631.45	1286833.48	40°07'04.559"N	104°41'35.552"W	polygon
LUCERO X-20-04 150' RADIUS		7300.00	4447.24	-797.18	3224793.87	1291273.09	40°07'48.507"N	104°41'45.815"W	circle
BYDALEK 30C-20HZ BHL REV-1 (460'FNL & 330'FWL, SEC.20)		7308.00	4429.43	-858.78	3224732.44	1291254.72	40°07'48.331"N	104°41'46.608"W	point
BYDALEK 30C-20HZ BHL REV-2 (460'FNL & 319'FWL)		7308.00	4429.45	-869.81	3224721.42	1291254.64	40°07'48.331"N	104°41'46.750"W	point

WELLPATH COMPOSITION - Ref Wellbore: BYDALEK 30C-20HZ AWB Ref Wellpath: BYDALEK 30C-20HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	898.00	Generic gyro - continuous (Standard)	GYRODATA SURVEYS <113-898>	BYDALEK 30C-20HZ AWB
898.00	7702.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1032-7702>	BYDALEK 30C-20HZ AWB
7702.00	11885.00	OnTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7776-11885>	BYDALEK 30C-20HZ AWB
11885.00	11950.00	Blind Drilling (std)	Projection to bit	BYDALEK 30C-20HZ AWB



Actual Wellpath Report

BYDALEK 30C-20HZ AWP

Page 6 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BYDALEK 30C-20HZ (431'FSL & 1146'FWL, SEC.20)
Area	COLORADO	Well	BYDALEK 30C-20HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BYDALEK 30C-20HZ AWB
Facility	SEC.20-T2N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
13.00	0.000	156.140	13.00	TIE-ON
113.00	0.290	156.140	113.00	BEGIN GYRO SURVEYS
898.00	0.120	336.150	897.99	TIE-INTO GYRO SURVEYS
1032.00	0.300	301.500	1031.99	BEGIN BHI MWD+IFR SURVEYS
7744.00	88.124	358.895	7297.85	7" CASING POINT
11885.00	89.600	359.900	7312.72	LAST BHI MWD+IFR SURVEY
11950.00	89.600	359.900	7313.17	PROJECTION TO BIT