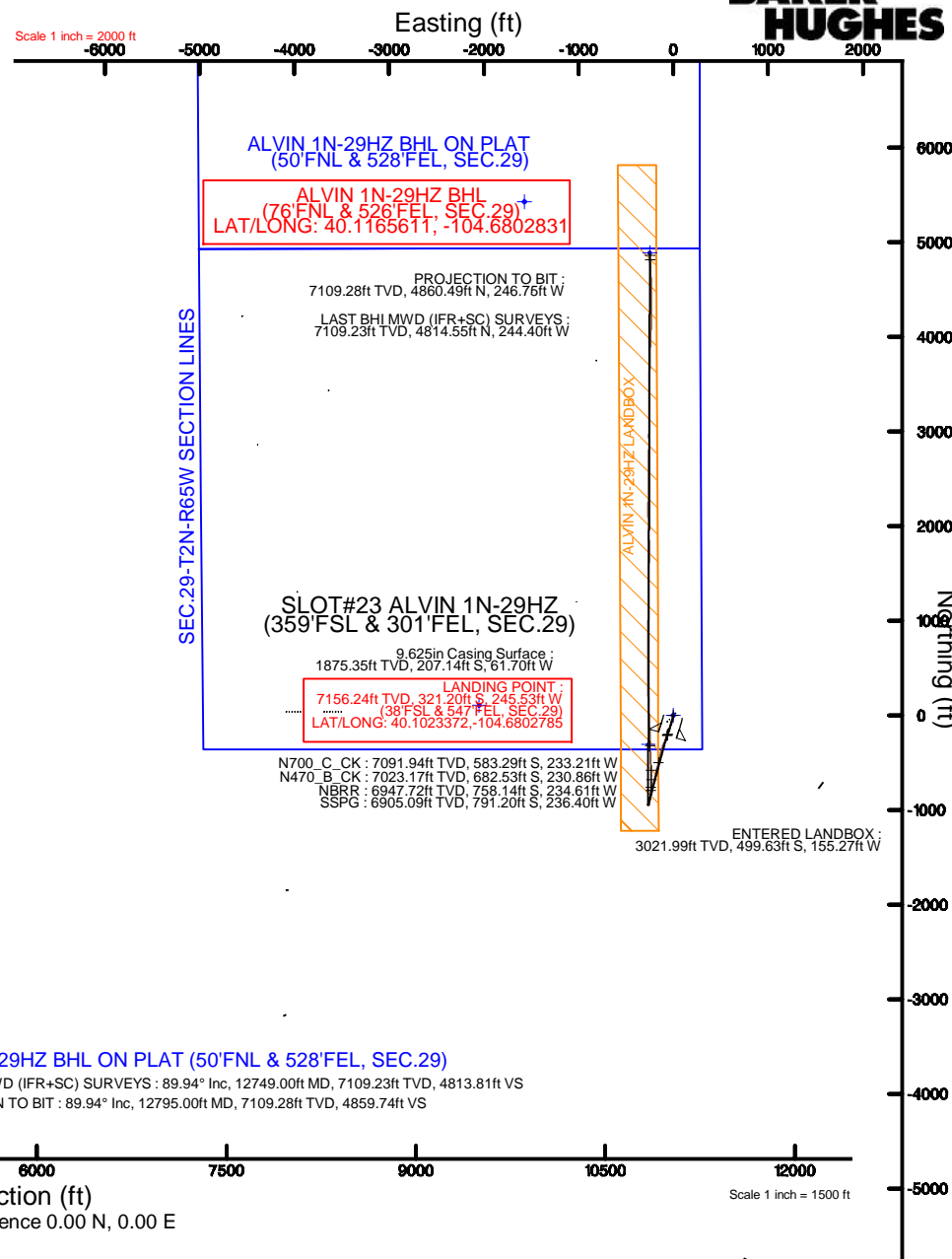
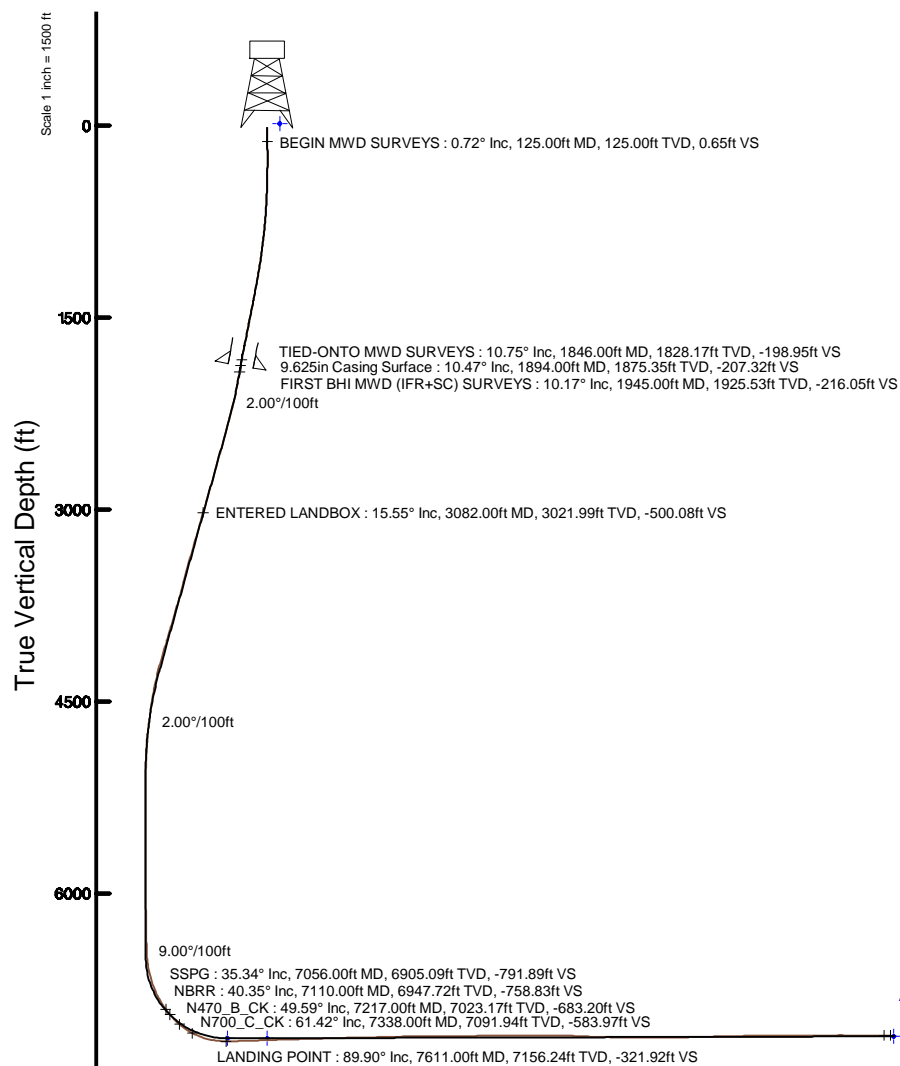


Location:	COLORADO	Slot:	SLOT#23 ALVIN 1N-29HZ (359'FSL & 301'FEL, SEC.29)
Field:	WELD COUNTY (UTM/TRUE NORTH)	Well:	ALVIN 1N-29HZ
Facility:	SEC.29-T2N-R65W	Wellbore:	ALVIN 1N-29HZ PWB

Plot reference wellpath is ALVIN 1N-29HZ PWP (REV-B.1)	
True vertical depths are referenced to XTREME 24 (16'KB) (RKB)	Grid System: NAD83 / UTM Zone 13 North, US feet
Measured depths are referenced to XTREME 24 (16'KB) (RKB)	North Reference: True north
XTREME 24 (16'KB) (RKB) to Mean Sea Level: 4925 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#23 ALVIN 1N-29HZ (359'FSL & 301'FEL, SEC.29)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: amarcar on 07/Jan/2016





# Actual Wellpath Report

ALVIN 1N-29HZ AWP  
Page 1 of 6



## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#23 ALVIN 1N-29HZ (359'FSL & 301'FEL, SEC.29)
Area	COLORADO	Well	ALVIN 1N-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 1N-29HZ AWB <12795>
Facility	SEC.29-T2N-R65W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Amarcar
Scale	0.999609	Report Generated	07/Jan/2016 at 15:40
Convergence at slot	0.21° East	Database/Source file	WA_DEN_Anadarko_Defn\ALVIN_1N-29HZ_AWB__12795_.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-36.77	3624.36	1730065.51	14564481.55	40°06'11.588"N	104°40'45.843"W
Facility Reference Pt			1726442.48	14564505.77	40°06'11.954"N	104°41'32.485"W
Field Reference Pt			1698235.31	14552047.82	40°04'09.600"N	104°47'36.000"W

## WELLPATH DATUM

Calculation method	Minimum curvature	XTREME 24 (16'KB) (RKB) to Facility Vertical Datum	4925.00ft
Horizontal Reference Pt	Slot	XTREME 24 (16'KB) (RKB) to Mean Sea Level	4925.00ft
Vertical Reference Pt	XTREME 24 (16'KB) (RKB)	XTREME 24 (16'KB) (RKB) to Mud Line at Slot (SLOT#23 ALVIN 1N-29HZ (359'FSL & 301'FEL, SEC.29))	4925.00ft
MD Reference Pt	XTREME 24 (16'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.17°

# Actual Wellpath Report

ALVIN 1N-29HZ AWP  
Page 2 of 6

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#23 ALVIN 1N-29HZ (359'FSL & 301'FEL, SEC.29)
Area	COLORADO	Well	ALVIN 1N-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 1N-29HZ AWP <12795>
Facility	SEC.29-T2N-R65W		

## WELLPATH DATA (139 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	342.340	0.00	0.00	0.00	0.00	40°06'11.588"N	104°40'45.843"W	0.00	
16.00	0.000	342.340	16.00	0.00	0.00	0.00	40°06'11.588"N	104°40'45.843"W	0.00	
125.00	0.720	342.340	125.00	0.65	0.65	-0.21	40°06'11.594"N	104°40'45.846"W	0.66	BEGIN MWD SURVEYS
215.00	0.610	322.480	214.99	1.57	1.57	-0.67	40°06'11.604"N	104°40'45.852"W	0.28	
305.00	0.520	156.950	304.99	1.57	1.58	-0.80	40°06'11.604"N	104°40'45.853"W	1.25	
381.00	1.120	181.790	380.98	0.51	0.52	-0.69	40°06'11.593"N	104°40'45.852"W	0.90	
471.00	2.030	196.490	470.95	-1.90	-1.89	-1.17	40°06'11.569"N	104°40'45.858"W	1.10	
561.00	2.480	190.670	560.88	-5.34	-5.33	-1.98	40°06'11.535"N	104°40'45.869"W	0.56	
651.00	3.500	193.360	650.75	-9.93	-9.92	-2.98	40°06'11.490"N	104°40'45.881"W	1.14	
741.00	4.620	189.880	740.53	-16.18	-16.16	-4.24	40°06'11.428"N	104°40'45.898"W	1.27	
831.00	6.020	191.780	830.14	-24.37	-24.36	-5.82	40°06'11.347"N	104°40'45.918"W	1.57	
921.00	7.530	191.930	919.51	-34.77	-34.75	-8.00	40°06'11.245"N	104°40'45.946"W	1.68	
1011.00	8.360	195.740	1008.64	-46.85	-46.81	-11.00	40°06'11.125"N	104°40'45.985"W	1.09	
1101.00	9.300	196.690	1097.57	-60.12	-60.08	-14.86	40°06'10.994"N	104°40'46.034"W	1.06	
1191.00	10.330	194.270	1186.26	-74.92	-74.86	-18.94	40°06'10.848"N	104°40'46.087"W	1.23	
1281.00	11.790	197.090	1274.58	-91.54	-91.47	-23.63	40°06'10.684"N	104°40'46.147"W	1.73	
1371.00	11.020	199.010	1362.81	-108.48	-108.39	-29.13	40°06'10.517"N	104°40'46.218"W	0.95	
1461.00	11.820	197.460	1451.02	-125.42	-125.32	-34.70	40°06'10.350"N	104°40'46.290"W	0.95	
1552.00	11.780	197.290	1540.10	-143.20	-143.08	-40.26	40°06'10.174"N	104°40'46.361"W	0.06	
1642.00	11.570	199.560	1628.24	-160.49	-160.36	-46.01	40°06'10.003"N	104°40'46.435"W	0.56	
1732.00	11.800	197.850	1716.37	-177.77	-177.62	-51.85	40°06'09.833"N	104°40'46.510"W	0.46	
1822.00	10.970	198.480	1804.60	-194.67	-194.50	-57.39	40°06'09.666"N	104°40'46.582"W	0.93	
1846.00	10.750	199.420	1828.17	-198.95	-198.78	-58.86	40°06'09.624"N	104°40'46.600"W	1.18	TIED-ONTO MWD SURVEYS
1945.00	10.170	196.700	1925.53	-216.05	-215.86	-64.44	40°06'09.455"N	104°40'46.672"W	0.77	FIRST BHI MWD (IFR+SC) SURVEYS
2040.00	11.470	199.520	2018.84	-233.00	-232.80	-70.01	40°06'09.287"N	104°40'46.744"W	1.48	
2134.00	13.360	203.350	2110.64	-251.80	-251.58	-77.43	40°06'09.102"N	104°40'46.839"W	2.19	
2229.00	15.110	204.170	2202.72	-273.21	-272.95	-86.85	40°06'08.891"N	104°40'46.961"W	1.85	
2324.00	16.430	203.210	2294.14	-296.88	-296.60	-97.22	40°06'08.657"N	104°40'47.094"W	1.42	
2419.00	15.700	203.140	2385.43	-321.08	-320.77	-107.57	40°06'08.418"N	104°40'47.227"W	0.77	
2514.00	16.330	198.150	2476.74	-345.62	-345.28	-116.78	40°06'08.176"N	104°40'47.346"W	1.59	
2608.00	16.630	194.040	2566.89	-371.25	-370.88	-124.16	40°06'07.923"N	104°40'47.441"W	1.28	
2703.00	15.530	193.750	2658.17	-396.81	-396.43	-130.48	40°06'07.670"N	104°40'47.522"W	1.16	
2798.00	16.160	194.590	2749.56	-421.97	-421.57	-136.83	40°06'07.422"N	104°40'47.604"W	0.71	
2892.00	16.890	193.320	2839.67	-447.94	-447.52	-143.27	40°06'07.166"N	104°40'47.687"W	0.87	
2987.00	16.470	192.850	2930.68	-474.52	-474.08	-149.45	40°06'06.903"N	104°40'47.766"W	0.46	
3082.00	15.550	192.820	3021.99	-500.08	-499.63	-155.27	40°06'06.651"N	104°40'47.841"W	0.97	ENTERED LANDBOX
3176.00	16.200	192.930	3112.41	-525.16	-524.69	-161.00	40°06'06.403"N	104°40'47.915"W	0.69	
3271.00	16.560	194.410	3203.55	-551.21	-550.72	-167.33	40°06'06.146"N	104°40'47.996"W	0.58	
3365.00	16.770	195.820	3293.60	-577.25	-576.74	-174.36	40°06'05.889"N	104°40'48.087"W	0.48	
3460.00	17.170	193.070	3384.47	-604.12	-603.59	-181.27	40°06'05.623"N	104°40'48.176"W	0.94	
3554.00	14.650	192.020	3474.86	-629.28	-628.74	-186.88	40°06'05.375"N	104°40'48.248"W	2.70	
3649.00	14.830	193.320	3566.73	-652.88	-652.32	-192.19	40°06'05.142"N	104°40'48.316"W	0.40	
3744.00	15.930	193.850	3658.33	-677.38	-676.81	-198.11	40°06'04.900"N	104°40'48.392"W	1.17	
3838.00	16.590	193.130	3748.57	-702.99	-702.40	-204.25	40°06'04.647"N	104°40'48.471"W	0.73	
3933.00	16.410	190.330	3839.66	-729.42	-728.81	-209.73	40°06'04.386"N	104°40'48.542"W	0.86	

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#23 ALVIN 1N-29HZ (359'FSL & 301'FEL, SEC.29)
Area	COLORADO	Well	ALVIN 1N-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 1N-29HZ AWP <12795>
Facility	SEC.29-T2N-R65W		

## WELLPATH DATA (139 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4027.00	17.310	191.440	3929.62	-756.21	-755.58	-214.89	40°06'04.121"N	104°40'48.608"W	1.02	
4122.00	15.730	190.000	4020.69	-782.76	-782.11	-219.93	40°06'03.859"N	104°40'48.673"W	1.72	
4217.00	17.450	196.080	4111.74	-809.15	-808.49	-226.11	40°06'03.598"N	104°40'48.753"W	2.57	
4312.00	16.790	195.830	4202.53	-836.06	-835.38	-233.80	40°06'03.333"N	104°40'48.852"W	0.70	
4407.00	13.620	196.060	4294.19	-860.03	-859.33	-240.64	40°06'03.096"N	104°40'48.940"W	3.34	
4501.00	11.360	192.910	4385.97	-879.71	-878.99	-245.77	40°06'02.902"N	104°40'49.006"W	2.51	
4596.00	9.520	194.050	4479.39	-896.46	-895.74	-249.77	40°06'02.736"N	104°40'49.057"W	1.95	
4691.00	8.360	192.330	4573.23	-910.84	-910.10	-253.15	40°06'02.594"N	104°40'49.101"W	1.25	
4785.00	6.770	193.720	4666.41	-922.91	-922.16	-255.92	40°06'02.475"N	104°40'49.136"W	1.70	
4880.00	5.440	197.540	4760.87	-932.65	-931.90	-258.61	40°06'02.379"N	104°40'49.171"W	1.46	
4975.00	3.900	205.440	4855.55	-939.87	-939.11	-261.35	40°06'02.308"N	104°40'49.206"W	1.75	
5069.00	2.320	178.070	4949.42	-944.66	-943.90	-262.66	40°06'02.260"N	104°40'49.223"W	2.26	
5164.00	1.470	186.970	5044.37	-947.79	-947.03	-262.74	40°06'02.229"N	104°40'49.224"W	0.94	
5258.00	0.620	232.280	5138.35	-949.30	-948.54	-263.29	40°06'02.214"N	104°40'49.231"W	1.20	
5353.00	0.820	291.840	5233.34	-949.37	-948.60	-264.33	40°06'02.214"N	104°40'49.245"W	0.77	
5543.00	0.220	179.570	5423.34	-949.23	-948.46	-265.59	40°06'02.215"N	104°40'49.261"W	0.49	
5731.00	0.650	119.710	5611.33	-950.12	-949.35	-264.66	40°06'02.206"N	104°40'49.249"W	0.30	
5921.00	1.070	84.050	5801.31	-950.46	-949.70	-261.96	40°06'02.203"N	104°40'49.214"W	0.35	
6110.00	1.330	63.610	5990.27	-949.29	-948.54	-258.24	40°06'02.214"N	104°40'49.166"W	0.26	
6205.00	1.130	22.040	6085.25	-947.93	-947.18	-256.90	40°06'02.228"N	104°40'49.149"W	0.94	
6394.00	1.300	24.800	6274.21	-944.25	-943.51	-255.30	40°06'02.264"N	104°40'49.128"W	0.10	
6489.00	1.240	32.860	6369.18	-942.41	-941.67	-254.29	40°06'02.282"N	104°40'49.115"W	0.20	
6584.00	2.760	16.440	6464.12	-939.35	-938.61	-253.09	40°06'02.313"N	104°40'49.100"W	1.69	
6678.00	8.230	359.720	6557.66	-930.44	-929.70	-252.48	40°06'02.401"N	104°40'49.092"W	6.00	
6773.00	15.420	5.760	6650.59	-911.04	-910.31	-251.24	40°06'02.592"N	104°40'49.076"W	7.67	
6868.00	21.720	14.890	6740.62	-881.44	-880.72	-245.45	40°06'02.885"N	104°40'49.002"W	7.28	
6962.00	28.980	4.140	6825.55	-841.82	-841.12	-239.33	40°06'03.276"N	104°40'48.923"W	9.12	
7056.00†	35.342	2.693	6905.09	-791.89	-791.20	-236.40	40°06'03.769"N	104°40'48.885"W	6.82	SSPG
7057.00	35.410	2.680	6905.90	-791.31	-790.62	-236.38	40°06'03.775"N	104°40'48.885"W	6.82	
7110.00†	40.347	3.483	6947.72	-758.83	-758.14	-234.61	40°06'04.096"N	104°40'48.862"W	9.36	NBRR
7151.00	44.170	4.000	6978.06	-731.31	-730.63	-232.81	40°06'04.368"N	104°40'48.839"W	9.36	
7217.00†	49.592	0.782	7023.17	-683.20	-682.53	-230.86	40°06'04.843"N	104°40'48.814"W	8.95	N470_B_CK
7246.00	52.000	359.530	7041.49	-660.73	-660.06	-230.81	40°06'05.065"N	104°40'48.813"W	8.95	
7338.00†	61.422	357.023	7091.94	-583.97	-583.29	-233.21	40°06'05.824"N	104°40'48.844"W	10.49	N700_C_CK
7341.00	61.730	356.950	7093.37	-581.34	-580.65	-233.34	40°06'05.850"N	104°40'48.846"W	10.49	
7435.00	72.350	356.380	7129.98	-495.07	-494.37	-238.39	40°06'06.703"N	104°40'48.911"W	11.31	
7530.00	82.350	357.770	7150.76	-402.63	-401.92	-243.09	40°06'07.616"N	104°40'48.971"W	10.62	
7611.00†	89.896	358.760	7156.24	-321.92	-321.20	-245.53	40°06'08.414"N	104°40'49.003"W	9.40	LANDING POINT
7625.00	91.200	358.930	7156.10	-307.92	-307.20	-245.82	40°06'08.552"N	104°40'49.006"W	9.40	
7720.00	91.720	358.680	7153.68	-212.98	-212.26	-247.80	40°06'09.490"N	104°40'49.032"W	0.61	
7814.00	91.940	357.790	7150.68	-119.08	-118.35	-250.69	40°06'10.418"N	104°40'49.069"W	0.97	
7909.00	92.160	357.040	7147.28	-24.25	-23.51	-254.97	40°06'11.356"N	104°40'49.124"W	0.82	
8004.00	91.540	358.390	7144.21	70.61	71.37	-258.76	40°06'12.293"N	104°40'49.173"W	1.56	
8098.00	92.100	357.110	7141.23	164.47	165.24	-262.45	40°06'13.221"N	104°40'49.220"W	1.49	
8193.00	90.980	357.780	7138.68	259.33	260.11	-266.68	40°06'14.158"N	104°40'49.275"W	1.37	

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#23 ALVIN 1N-29HZ (359'FSL & 301'FEL, SEC.29)
Area	COLORADO	Well	ALVIN 1N-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 1N-29HZ AWB <12795>
Facility	SEC.29-T2N-R65W		

## WELLPATH DATA (139 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8287.00	91.450	0.120	7136.68	353.28	354.07	-268.40	40°06'15.087"N	104°40'49.297"W	2.54	
8382.00	92.250	359.460	7133.61	448.23	449.02	-268.75	40°06'16.025"N	104°40'49.302"W	1.09	
8476.00	90.950	1.150	7130.99	542.18	542.97	-268.25	40°06'16.954"N	104°40'49.295"W	2.27	
8571.00	92.280	1.090	7128.31	637.13	637.92	-266.39	40°06'17.892"N	104°40'49.271"W	1.40	
8666.00	90.460	0.470	7126.04	732.09	732.88	-265.10	40°06'18.830"N	104°40'49.255"W	2.02	
8761.00	91.200	0.560	7124.67	827.08	827.86	-264.25	40°06'19.769"N	104°40'49.244"W	0.78	
8855.00	92.090	359.690	7121.97	921.04	921.82	-264.04	40°06'20.698"N	104°40'49.241"W	1.32	
8950.00	91.020	1.040	7119.39	1016.00	1016.78	-263.43	40°06'21.636"N	104°40'49.233"W	1.81	
9045.00	89.850	0.830	7118.67	1110.99	1111.76	-261.88	40°06'22.575"N	104°40'49.213"W	1.25	
9140.00	91.080	0.670	7117.90	1205.98	1206.75	-260.64	40°06'23.513"N	104°40'49.197"W	1.31	
9234.00	90.310	0.570	7116.76	1299.97	1300.74	-259.62	40°06'24.442"N	104°40'49.184"W	0.83	
9329.00	91.360	0.110	7115.37	1394.96	1395.72	-259.06	40°06'25.381"N	104°40'49.177"W	1.21	
9424.00	89.690	0.740	7114.50	1489.95	1490.71	-258.36	40°06'26.319"N	104°40'49.168"W	1.88	
9518.00	90.460	0.660	7114.38	1583.94	1584.70	-257.21	40°06'27.248"N	104°40'49.153"W	0.82	
9613.00	91.510	0.940	7112.75	1678.92	1679.68	-255.88	40°06'28.187"N	104°40'49.136"W	1.14	
9708.00	89.290	359.190	7112.08	1773.91	1774.67	-255.77	40°06'29.126"N	104°40'49.135"W	2.98	
9803.00	90.030	359.170	7112.65	1868.89	1869.66	-257.13	40°06'30.064"N	104°40'49.152"W	0.78	
9897.00	90.310	358.380	7112.37	1962.86	1963.63	-259.14	40°06'30.993"N	104°40'49.178"W	0.89	
9991.00	89.850	357.770	7112.24	2056.80	2057.58	-262.30	40°06'31.921"N	104°40'49.219"W	0.81	
10086.00	89.630	359.770	7112.67	2151.77	2152.55	-264.34	40°06'32.860"N	104°40'49.245"W	2.12	
10181.00	90.890	1.090	7112.24	2246.76	2247.54	-263.63	40°06'33.799"N	104°40'49.236"W	1.92	
10275.00	88.920	359.950	7112.39	2340.75	2341.53	-262.77	40°06'34.727"N	104°40'49.225"W	2.42	
10370.00	87.440	1.060	7115.41	2435.70	2436.48	-261.94	40°06'35.666"N	104°40'49.214"W	1.95	
10465.00	87.790	1.290	7119.36	2530.60	2531.38	-259.99	40°06'36.603"N	104°40'49.189"W	0.44	
10560.00	88.370	0.720	7122.54	2625.54	2626.31	-258.33	40°06'37.542"N	104°40'49.168"W	0.86	
10654.00	88.830	0.210	7124.84	2719.51	2720.28	-257.56	40°06'38.470"N	104°40'49.158"W	0.73	
10749.00	89.320	0.560	7126.38	2814.49	2815.26	-256.92	40°06'39.409"N	104°40'49.150"W	0.63	
10844.00	89.140	359.540	7127.65	2909.48	2910.25	-256.84	40°06'40.347"N	104°40'49.149"W	1.09	
10938.00	90.150	0.690	7128.23	3003.48	3004.25	-256.65	40°06'41.276"N	104°40'49.146"W	1.63	
11032.00	90.610	0.250	7127.61	3097.48	3098.24	-255.88	40°06'42.205"N	104°40'49.136"W	0.68	
11127.00	91.110	0.060	7126.18	3192.47	3193.23	-255.62	40°06'43.144"N	104°40'49.133"W	0.56	
11222.00	91.730	359.970	7123.83	3287.44	3288.20	-255.60	40°06'44.082"N	104°40'49.133"W	0.66	
11316.00	91.170	0.710	7121.45	3381.40	3382.17	-255.04	40°06'45.011"N	104°40'49.126"W	0.99	
11411.00	91.750	0.510	7119.03	3476.37	3477.13	-254.03	40°06'45.949"N	104°40'49.113"W	0.65	
11505.00	90.990	1.700	7116.78	3570.33	3571.08	-252.22	40°06'46.878"N	104°40'49.089"W	1.50	
11600.00	91.420	0.980	7114.79	3665.29	3666.03	-250.00	40°06'47.816"N	104°40'49.061"W	0.88	
11695.00	91.050	1.690	7112.74	3760.24	3760.99	-247.78	40°06'48.755"N	104°40'49.032"W	0.84	
11789.00	89.540	1.930	7112.25	3854.20	3854.94	-244.82	40°06'49.683"N	104°40'48.994"W	1.63	
11883.00	90.400	2.240	7112.30	3948.15	3948.87	-241.40	40°06'50.611"N	104°40'48.950"W	0.97	
11978.00	90.920	2.120	7111.21	4043.08	4043.80	-237.78	40°06'51.549"N	104°40'48.904"W	0.56	
12072.00	89.780	0.970	7110.64	4137.05	4137.76	-235.25	40°06'52.478"N	104°40'48.871"W	1.72	
12167.00	90.120	0.410	7110.72	4232.05	4232.75	-234.10	40°06'53.417"N	104°40'48.856"W	0.69	
12262.00	90.370	0.060	7110.31	4327.04	4327.75	-233.71	40°06'54.355"N	104°40'48.851"W	0.45	
12357.00	90.920	0.140	7109.24	4422.04	4422.74	-233.55	40°06'55.294"N	104°40'48.849"W	0.59	
12452.00	89.170	358.720	7109.17	4517.02	4517.73	-234.49	40°06'56.233"N	104°40'48.861"W	2.37	

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#23 ALVIN 1N-29HZ (359'FSL & 301'FEL, SEC.29)
Area	COLORADO	Well	ALVIN 1N-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 1N-29HZ AWB <12795>
Facility	SEC.29-T2N-R65W		

## WELLPATH DATA (139 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12546.00	90.250	358.720	7109.64	4610.99	4611.70	-236.59	40°06'57.161"N	104°40'48.888"W	1.15	
12641.00	90.150	357.750	7109.31	4705.94	4706.66	-239.52	40°06'58.100"N	104°40'48.926"W	1.03	
12749.00	89.940	357.070	7109.23	4813.81	4814.55	-244.40	40°06'59.166"N	104°40'48.989"W	0.66	LAST BHI MWD (IFR+SC) SURVEYS
12795.00	89.940	357.070	7109.28	4859.74	4860.49	-246.75	40°06'59.620"N	104°40'49.019"W	0.00	PROJECTION TO BIT

## HOLE & CASING SECTIONS - Ref Wellbore: ALVIN 1N-29HZ AWB <12795> Ref Wellpath: ALVIN 1N-29HZ 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	16.00	1904.00	1888.00	16.00	1885.19	0.00	0.00	-208.87	-62.26
9.625in Casing Surface	16.00	1894.00	1878.00	16.00	1875.35	0.00	0.00	-207.14	-61.70
8.5in Open Hole	1904.00	12795.00	10891.00	1885.19	7109.28	-208.87	-62.26	4860.49	-246.75

## TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.20-T2N-R65W SECTION LINES	-18.00	9864.49	-2123.29	1727907.53	14574334.44	40°07'49.069"N	104°41'13.178"W	polygon
SEC.29-T2N-R65W SECTION LINES	-18.00	103.40	-2048.30	1728017.66	14564577.53	40°06'12.609"N	104°41'12.203"W	polygon
ALVIN 1N-29HZ BHL ON PLAT (50'FNL & 528'FEL, SEC.29)	7117.00	4886.90	-248.38	1729799.63	14569365.60	40°06'59.881"N	104°40'49.040"W	point
ALVIN 1N-29HZ HEEL (50'FSL & 566'FEL, SEC.29)	7133.00	-308.94	-263.58	1729803.15	14564171.78	40°06'08.535"N	104°40'49.235"W	point
ALVIN 1N-29HZ LANDBOX	7133.00	0.00	0.00	1730065.51	14564481.55	40°06'11.588"N	104°40'45.843"W	polygon

## WELLPATH COMPOSITION - Ref Wellbore: ALVIN 1N-29HZ AWB <12795> Ref Wellpath: ALVIN 1N-29HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	1846.00	Custom_APC_ISCWSA REV 2 MWD	SDI MWD SURVEYS 13.5" HOLE <125-1846>	ALVIN 1N-29HZ AWB <12795>
1846.00	12749.00	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)	BHI MWD (IFR+SC) 8.5" HOLE <1945-12749>	ALVIN 1N-29HZ AWB <12795>
12749.00	12795.00	Blind Drilling (std)	Projection to bit	ALVIN 1N-29HZ AWB <12795>



# Actual Wellpath Report

ALVIN 1N-29HZ AWP  
Page 6 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#23 ALVIN 1N-29HZ (359'FSL & 301'FEL, SEC.29)
Area	COLORADO	Well	ALVIN 1N-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 1N-29HZ AWB <12795>
Facility	SEC.29-T2N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
125.00	0.720	342.340	125.00	BEGIN MWD SURVEYS
1846.00	10.750	199.420	1828.17	TIED-ONTO MWD SURVEYS
1945.00	10.170	196.700	1925.53	FIRST BHI MWD (IFR+SC) SURVEYS
3082.00	15.550	192.820	3021.99	ENTERED LANDBOX
7056.00	35.342	2.693	6905.09	SSPG
7110.00	40.347	3.483	6947.72	NBRR
7217.00	49.592	0.782	7023.17	N470_B_CK
7338.00	61.422	357.023	7091.94	N700_C_CK
7611.00	89.896	358.760	7156.24	LANDING POINT
12749.00	89.940	357.070	7109.23	LAST BHI MWD (IFR+SC) SURVEYS
12795.00	89.940	357.070	7109.28	PROJECTION TO BIT