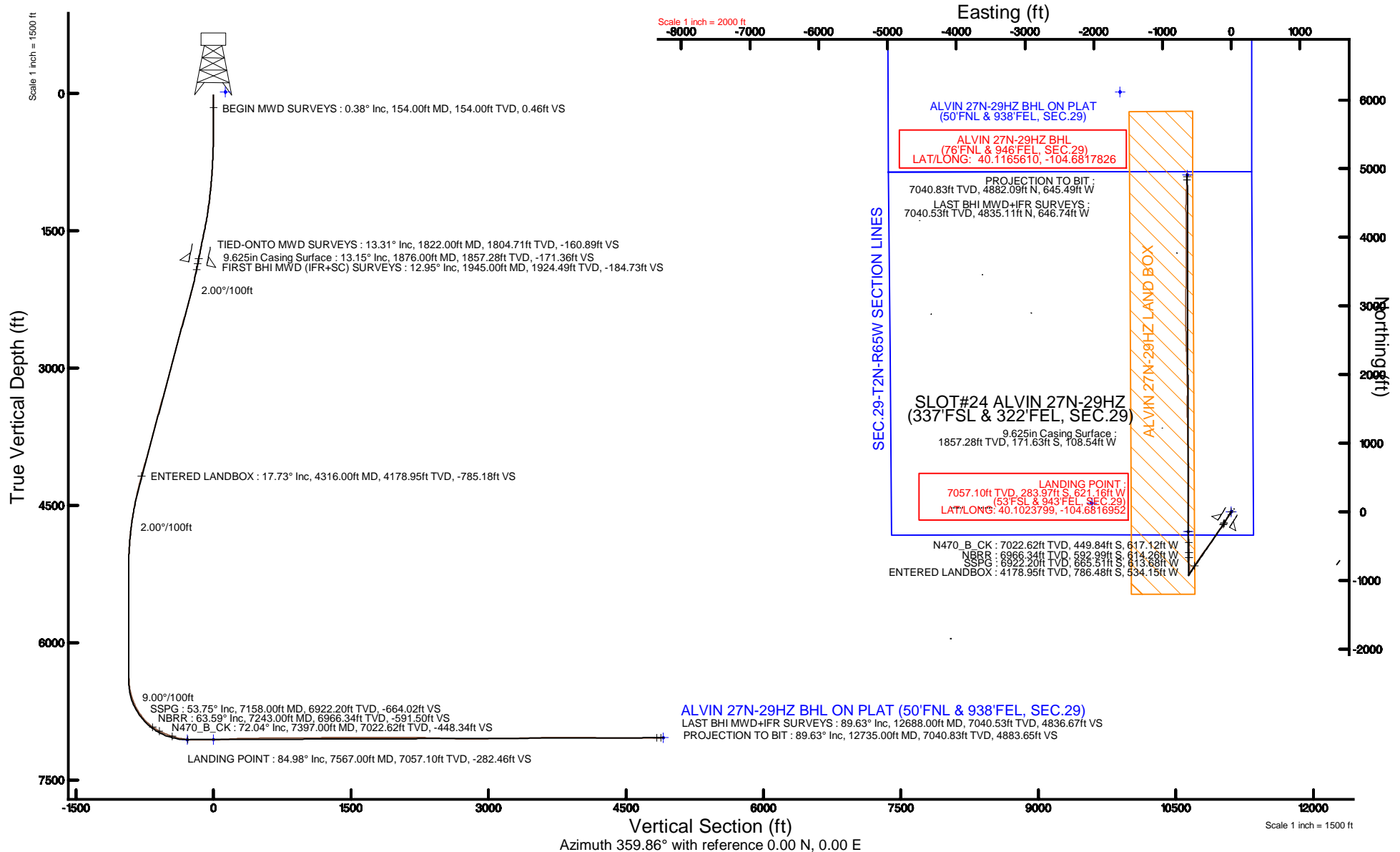


KERR-MCGEE OIL & GAS ONSHORE LP (WA)

Location: COLORADO Slot: SLOT#24 ALVIN 27N-29HZ (337'FSL & 322'FEL, SEC.29)
 Field: WELD COUNTY (UTM/TRUE NORTH) Well: ALVIN 27N-29HZ
 Facility: SEC.29-T2N-R65W Wellbore: ALVIN 27N-29HZ PWB

Plot reference wellpath is ALVIN 27N-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#24 ALVIN 27N-29HZ (337'FSL & 322'FEL, SEC.29)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: amarcar on 04/Jan/2016





Actual Wellpath Report

ALVIN 27N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#24 ALVIN 27N-29HZ (337'FSL & 322'FEL, SEC.29)
Area	COLORADO	Well	ALVIN 27N-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 27N-29HZ AWP <12735>
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	04/Jan/2016 at 14:40
Convergence at slot	0.21° East	Database/Source file	WA_DEN_Anadarko_Defn/ALVIN_27N-29HZ_AWP__12735_.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-58.43	3603.69	1730044.93	14564459.83	40°06'11.374"N	104°40'46.109"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#24 ALVIN 27N-29HZ (337'FSL & 322'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	359.86°

Actual Wellpath Report

ALVIN 27N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#24 ALVIN 27N-29HZ (337'FSL & 322'FEL, SEC.29)
Area	COLORADO	Well	ALVIN 27N-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 27N-29HZ AWP <12735>
Facility	SEC.29-T2N-R65W		

WELLPATH DATA (137 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	1.830	0.00	0.00	0.00	0.00	40°06'11.374°N	104°40'46.109°W	0.00	
16.00	0.000	1.830	16.00	0.00	0.00	0.00	40°06'11.374°N	104°40'46.109°W	0.00	
154.00	0.380	1.830	154.00	0.46	0.46	0.01	40°06'11.379°N	104°40'46.109°W	0.28	BEGIN MWD SURVEYS
245.00	0.310	339.730	245.00	0.99	0.99	-0.06	40°06'11.384°N	104°40'46.110°W	0.16	
336.00	0.560	243.950	336.00	1.03	1.03	-0.55	40°06'11.384°N	104°40'46.116°W	0.73	
426.00	1.120	224.820	425.99	0.21	0.21	-1.56	40°06'11.376°N	104°40'46.129°W	0.69	
516.00	1.660	211.350	515.96	-1.52	-1.53	-2.86	40°06'11.359°N	104°40'46.146°W	0.70	
606.00	1.930	216.270	605.91	-3.85	-3.86	-4.43	40°06'11.336°N	104°40'46.166°W	0.35	
696.00	3.090	207.520	695.83	-7.22	-7.24	-6.45	40°06'11.302°N	104°40'46.192°W	1.35	
786.00	3.330	206.990	785.69	-11.70	-11.72	-8.76	40°06'11.258°N	104°40'46.222°W	0.27	
876.00	4.550	213.410	875.47	-17.00	-17.03	-11.91	40°06'11.206°N	104°40'46.262°W	1.44	
966.00	5.350	211.420	965.14	-23.55	-23.59	-16.06	40°06'11.141°N	104°40'46.316°W	0.91	
1058.00	7.170	211.240	1056.58	-32.11	-32.16	-21.28	40°06'11.056°N	104°40'46.383°W	1.98	
1146.00	8.040	212.050	1143.81	-42.00	-42.07	-27.39	40°06'10.958°N	104°40'46.462°W	1.00	
1236.00	9.370	211.540	1232.77	-53.56	-53.65	-34.56	40°06'10.844°N	104°40'46.554°W	1.48	
1326.00	10.780	213.960	1321.38	-66.77	-66.87	-43.10	40°06'10.713°N	104°40'46.664°W	1.64	
1416.00	12.070	212.700	1409.60	-81.65	-81.77	-52.88	40°06'10.566°N	104°40'46.790°W	1.46	
1507.00	13.680	209.240	1498.31	-99.02	-99.17	-63.28	40°06'10.394°N	104°40'46.923°W	1.96	
1597.00	13.610	211.870	1585.77	-117.27	-117.45	-74.07	40°06'10.213°N	104°40'47.062°W	0.69	
1687.00	13.090	212.800	1673.33	-134.80	-135.01	-85.18	40°06'10.040°N	104°40'47.205°W	0.63	
1777.00	13.450	212.800	1760.93	-152.14	-152.38	-96.37	40°06'09.868°N	104°40'47.349°W	0.40	
1822.00	13.310	212.510	1804.71	-160.89	-161.14	-101.99	40°06'09.782°N	104°40'47.422°W	0.35	TIED-ONTO MWD SURVEYS
1945.00	12.950	210.010	1924.49	-184.73	-185.02	-116.50	40°06'09.546°N	104°40'47.608°W	0.55	FIRST BHI MWD (IFR+SC) SURVEYS
2039.00	14.770	212.890	2015.75	-203.89	-204.20	-128.27	40°06'09.356°N	104°40'47.760°W	2.07	
2134.00	16.680	216.260	2107.20	-225.02	-225.37	-142.91	40°06'09.147°N	104°40'47.948°W	2.23	
2229.00	18.290	216.950	2197.80	-247.89	-248.27	-159.94	40°06'08.921°N	104°40'48.167°W	1.71	
2324.00	19.370	215.490	2287.72	-272.58	-273.02	-178.05	40°06'08.676°N	104°40'48.400°W	1.24	
2418.00	18.740	214.750	2376.57	-297.64	-298.11	-195.70	40°06'08.428°N	104°40'48.627°W	0.72	
2513.00	18.510	214.570	2466.59	-322.55	-323.07	-212.96	40°06'08.181°N	104°40'48.850°W	0.25	
2608.00	17.500	213.230	2556.94	-346.88	-347.44	-229.34	40°06'07.941°N	104°40'49.060°W	1.15	
2702.00	17.390	209.650	2646.62	-370.87	-371.47	-244.04	40°06'07.703°N	104°40'49.249°W	1.15	
2797.00	17.210	211.780	2737.32	-395.12	-395.75	-258.46	40°06'07.463°N	104°40'49.435°W	0.69	
2892.00	17.730	213.920	2827.94	-419.04	-419.70	-273.94	40°06'07.226°N	104°40'49.634°W	0.87	
2987.00	19.120	217.020	2918.07	-443.42	-444.13	-291.38	40°06'06.985°N	104°40'49.859°W	1.79	
3081.00	18.330	216.330	3007.10	-467.58	-468.33	-309.40	40°06'06.746°N	104°40'50.091°W	0.87	
3176.00	18.530	217.010	3097.22	-491.62	-492.42	-327.34	40°06'06.508°N	104°40'50.321°W	0.31	
3270.00	18.530	217.570	3186.35	-515.35	-516.19	-345.44	40°06'06.273°N	104°40'50.554°W	0.19	
3365.00	19.010	217.580	3276.30	-539.53	-540.41	-364.08	40°06'06.034°N	104°40'50.794°W	0.51	
3459.00	18.960	216.830	3365.18	-563.84	-564.77	-382.57	40°06'05.793°N	104°40'51.032°W	0.26	
3554.00	18.630	213.860	3455.12	-588.75	-589.72	-400.28	40°06'05.546°N	104°40'51.260°W	1.07	
3649.00	17.740	213.260	3545.37	-613.41	-614.43	-416.67	40°06'05.302°N	104°40'51.471°W	0.96	
3743.00	17.490	214.310	3634.97	-637.02	-638.07	-432.48	40°06'05.068°N	104°40'51.675°W	0.43	
3838.00	18.170	216.340	3725.40	-660.70	-661.79	-449.31	40°06'04.834°N	104°40'51.891°W	0.97	
3932.00	17.840	214.250	3814.80	-684.37	-685.50	-466.10	40°06'04.600°N	104°40'52.107°W	0.77	
4027.00	18.130	216.660	3905.16	-708.21	-709.39	-483.11	40°06'04.364°N	104°40'52.326°W	0.84	

Actual Wellpath Report

ALVIN 27N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#24 ALVIN 27N-29HZ (337'FSL & 322'FEL, SEC.29)
Area	COLORADO	Well	ALVIN 27N-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 27N-29HZ AWP <12735>
Facility	SEC.29-T2N-R65W		

WELLPATH DATA (137 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4122.00	19.490	214.450	3995.09	-733.10	-734.31	-500.90	40°06'04.117"N	104°40'52.555"W	1.62	
4217.00	18.580	212.110	4084.89	-758.94	-760.20	-517.91	40°06'03.862"N	104°40'52.774"W	1.25	
4311.00	17.820	211.330	4174.19	-783.88	-785.17	-533.35	40°06'03.615"N	104°40'52.973"W	0.85	
4316.00†	17.728	211.317	4178.95	-785.18	-786.48	-534.15	40°06'03.602"N	104°40'52.983"W	1.83	ENTERED LANDBOX
4406.00	16.080	211.050	4265.06	-807.53	-808.86	-547.70	40°06'03.381"N	104°40'53.157"W	1.83	
4501.00	14.600	210.070	4356.67	-829.14	-830.50	-560.49	40°06'03.167"N	104°40'53.322"W	1.58	
4596.00	13.940	210.380	4448.74	-849.34	-850.73	-572.27	40°06'02.967"N	104°40'53.473"W	0.70	
4690.00	12.290	211.890	4540.29	-867.58	-869.00	-583.28	40°06'02.786"N	104°40'53.615"W	1.79	
4785.00	10.400	212.740	4633.43	-883.35	-884.79	-593.26	40°06'02.630"N	104°40'53.743"W	2.00	
4880.00	8.650	213.390	4727.11	-896.51	-897.97	-601.83	40°06'02.500"N	104°40'53.854"W	1.85	
4974.00	6.640	211.980	4820.27	-907.01	-908.49	-608.60	40°06'02.396"N	104°40'53.941"W	2.15	
5069.00	4.770	210.660	4914.80	-915.05	-916.54	-613.53	40°06'02.317"N	104°40'54.004"W	1.97	
5164.00	3.520	214.950	5009.55	-920.83	-922.33	-617.21	40°06'02.259"N	104°40'54.052"W	1.35	
5258.00	1.300	195.520	5103.46	-924.22	-925.72	-619.15	40°06'02.226"N	104°40'54.077"W	2.48	
5353.00	0.280	341.230	5198.45	-925.04	-926.54	-619.51	40°06'02.218"N	104°40'54.081"W	1.62	
5448.00	0.750	317.850	5293.45	-924.36	-925.86	-620.01	40°06'02.224"N	104°40'54.088"W	0.53	
5637.00	0.800	253.850	5482.43	-923.80	-925.31	-622.10	40°06'02.230"N	104°40'54.115"W	0.44	
5826.00	0.190	213.870	5671.43	-924.42	-925.94	-623.54	40°06'02.224"N	104°40'54.133"W	0.35	
6015.00	0.650	141.470	5860.42	-925.52	-927.04	-623.05	40°06'02.213"N	104°40'54.127"W	0.33	
6204.00	0.680	89.710	6049.41	-926.36	-927.87	-621.26	40°06'02.205"N	104°40'54.104"W	0.31	
6394.00	0.830	46.190	6239.40	-925.41	-926.91	-619.14	40°06'02.214"N	104°40'54.076"W	0.30	
6583.00	2.390	29.690	6428.32	-921.04	-922.54	-616.20	40°06'02.257"N	104°40'54.039"W	0.85	
6678.00	11.350	7.790	6522.55	-910.04	-911.54	-613.95	40°06'02.366"N	104°40'54.010"W	9.66	
6772.00	19.290	5.850	6613.13	-885.40	-886.89	-611.11	40°06'02.610"N	104°40'53.973"W	8.46	
6867.00	26.800	1.280	6700.50	-848.33	-849.81	-609.03	40°06'02.976"N	104°40'53.946"W	8.12	
6962.00	34.940	358.520	6781.98	-799.64	-801.12	-609.25	40°06'03.457"N	104°40'53.949"W	8.70	
7056.00	43.450	357.120	6854.76	-740.33	-741.82	-611.58	40°06'04.043"N	104°40'53.979"W	9.10	
7151.00	52.940	359.390	6918.02	-669.63	-671.12	-613.63	40°06'04.742"N	104°40'54.006"W	10.15	
7158.00†	53.751	359.413	6922.20	-664.02	-665.51	-613.68	40°06'04.797"N	104°40'54.006"W	11.58	SSPG
7243.00†	63.593	359.662	6966.34	-591.50	-592.99	-614.26	40°06'05.514"N	104°40'54.014"W	11.58	NBRR
7246.00	63.940	359.670	6967.66	-588.81	-590.30	-614.28	40°06'05.540"N	104°40'54.014"W	11.58	
7340.00	70.280	358.800	7004.21	-502.26	-503.75	-615.45	40°06'06.396"N	104°40'54.029"W	6.80	
7397.00†	72.036	357.658	7022.62	-448.34	-449.84	-617.12	40°06'06.929"N	104°40'54.051"W	3.62	N470_B_CK
7435.00	73.210	356.910	7033.97	-412.11	-413.61	-618.84	40°06'07.287"N	104°40'54.073"W	3.62	
7530.00	83.270	0.060	7053.31	-319.26	-320.77	-621.24	40°06'08.204"N	104°40'54.104"W	11.07	
7567.00†	84.980	0.201	7057.10	-282.46	-283.97	-621.16	40°06'08.568"N	104°40'54.103"W	4.64	LANDING POINT
7625.00	87.660	0.420	7060.82	-224.59	-226.09	-620.85	40°06'09.140"N	104°40'54.099"W	4.64	
7719.00	89.630	0.310	7063.04	-130.62	-132.13	-620.25	40°06'10.068"N	104°40'54.091"W	2.10	
7814.00	91.290	0.520	7062.28	-35.63	-37.14	-619.56	40°06'11.007"N	104°40'54.082"W	1.76	
7908.00	92.250	0.110	7059.38	58.32	56.82	-619.04	40°06'11.935"N	104°40'54.076"W	1.11	
8003.00	93.420	359.910	7054.68	153.20	151.70	-619.03	40°06'12.873"N	104°40'54.075"W	1.25	
8098.00	92.900	0.420	7049.44	248.05	246.55	-618.75	40°06'13.810"N	104°40'54.072"W	0.77	
8192.00	91.260	359.730	7046.03	341.99	340.49	-618.63	40°06'14.739"N	104°40'54.070"W	1.89	
8287.00	90.340	359.820	7044.70	436.98	435.48	-619.00	40°06'15.677"N	104°40'54.075"W	0.97	
8382.00	91.600	359.500	7043.09	531.96	530.46	-619.57	40°06'16.616"N	104°40'54.082"W	1.37	

Actual Wellpath Report

ALVIN 27N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#24 ALVIN 27N-29HZ (337'FSL & 322'FEL, SEC.29)
Area	COLORADO	Well	ALVIN 27N-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 27N-29HZ AWP <12735>
Facility	SEC.29-T2N-R65W		

WELLPATH DATA (137 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8476.00	89.380	358.390	7042.29	625.94	624.43	-621.30	40°06'17.545"N	104°40'54.105"W	2.64	
8571.00	89.910	358.270	7042.88	720.90	719.39	-624.07	40°06'18.483"N	104°40'54.140"W	0.57	
8666.00	91.700	358.450	7041.54	815.86	814.34	-626.79	40°06'19.421"N	104°40'54.175"W	1.89	
8760.00	90.430	358.630	7039.80	909.81	908.29	-629.18	40°06'20.350"N	104°40'54.206"W	1.36	
8855.00	88.950	358.960	7040.31	1004.79	1003.26	-631.18	40°06'21.288"N	104°40'54.232"W	1.60	
8949.00	90.620	359.290	7040.66	1098.78	1097.25	-632.61	40°06'22.217"N	104°40'54.250"W	1.81	
9045.00	91.970	359.540	7038.49	1194.75	1193.22	-633.59	40°06'23.165"N	104°40'54.263"W	1.43	
9139.00	91.170	358.520	7035.92	1288.70	1287.17	-635.18	40°06'24.094"N	104°40'54.284"W	1.38	
9234.00	89.690	358.580	7035.21	1383.67	1382.13	-637.59	40°06'25.032"N	104°40'54.315"W	1.56	
9329.00	89.910	359.880	7035.54	1478.67	1477.12	-638.86	40°06'25.971"N	104°40'54.331"W	1.39	
9423.00	89.140	0.330	7036.32	1572.66	1571.12	-638.69	40°06'26.900"N	104°40'54.329"W	0.95	
9518.00	90.650	0.940	7036.49	1667.65	1666.11	-637.64	40°06'27.839"N	104°40'54.315"W	1.71	
9613.00	89.540	359.830	7036.33	1762.64	1761.10	-637.00	40°06'28.777"N	104°40'54.307"W	1.65	
9708.00	89.350	359.370	7037.25	1857.64	1856.09	-637.66	40°06'29.716"N	104°40'54.316"W	0.52	
9802.00	90.520	359.460	7037.36	1951.63	1950.09	-638.62	40°06'30.645"N	104°40'54.328"W	1.25	
9896.00	88.920	358.130	7037.82	2045.61	2044.06	-640.60	40°06'31.574"N	104°40'54.354"W	2.21	
9991.00	90.400	358.500	7038.38	2140.57	2139.01	-643.39	40°06'32.512"N	104°40'54.390"W	1.61	
10085.00	90.030	358.170	7038.03	2234.53	2232.97	-646.13	40°06'33.440"N	104°40'54.425"W	0.53	
10180.00	88.370	356.860	7039.36	2329.44	2327.87	-650.24	40°06'34.378"N	104°40'54.478"W	2.23	
10275.00	88.210	358.360	7042.19	2424.32	2422.74	-654.20	40°06'35.316"N	104°40'54.529"W	1.59	
10370.00	87.970	359.490	7045.36	2519.26	2517.67	-655.98	40°06'36.254"N	104°40'54.552"W	1.22	
10464.00	88.550	359.260	7048.21	2613.21	2611.62	-657.01	40°06'37.182"N	104°40'54.565"W	0.66	
10559.00	88.950	0.000	7050.28	2708.18	2706.60	-657.62	40°06'38.121"N	104°40'54.573"W	0.89	
10654.00	90.710	359.670	7050.57	2803.18	2801.59	-657.90	40°06'39.060"N	104°40'54.576"W	1.88	
10748.00	90.120	0.010	7049.89	2897.18	2895.59	-658.16	40°06'39.989"N	104°40'54.580"W	0.72	
10843.00	90.920	359.660	7049.02	2992.17	2990.58	-658.43	40°06'40.927"N	104°40'54.583"W	0.92	
10938.00	90.650	0.580	7047.72	3087.16	3085.57	-658.23	40°06'41.866"N	104°40'54.581"W	1.01	
11032.00	91.600	0.100	7045.88	3181.14	3179.55	-657.68	40°06'42.795"N	104°40'54.574"W	1.13	
11127.00	90.180	0.670	7044.40	3276.12	3274.54	-657.04	40°06'43.733"N	104°40'54.566"W	1.61	
11221.00	91.290	0.490	7043.19	3370.10	3368.52	-656.09	40°06'44.662"N	104°40'54.553"W	1.20	
11316.00	90.710	1.020	7041.54	3465.08	3463.50	-654.83	40°06'45.601"N	104°40'54.537"W	0.83	
11411.00	91.880	0.840	7039.39	3560.03	3558.46	-653.29	40°06'46.539"N	104°40'54.517"W	1.25	
11505.00	90.740	0.330	7037.24	3654.00	3652.43	-652.33	40°06'47.468"N	104°40'54.505"W	1.33	
11600.00	89.040	0.230	7037.42	3748.99	3747.42	-651.87	40°06'48.406"N	104°40'54.499"W	1.79	
11694.00	90.150	359.880	7038.09	3842.99	3841.42	-651.78	40°06'49.335"N	104°40'54.498"W	1.24	
11789.00	90.280	0.260	7037.73	3937.99	3936.42	-651.66	40°06'50.274"N	104°40'54.497"W	0.42	
11883.00	89.720	359.270	7037.73	4031.99	4030.42	-652.05	40°06'51.203"N	104°40'54.502"W	1.21	
11977.00	89.600	358.630	7038.29	4125.97	4124.40	-653.77	40°06'52.132"N	104°40'54.524"W	0.69	
12072.00	88.490	359.540	7039.87	4220.95	4219.37	-655.29	40°06'53.070"N	104°40'54.543"W	1.51	
12167.00	89.170	358.980	7041.81	4315.92	4314.34	-656.51	40°06'54.009"N	104°40'54.559"W	0.93	
12261.00	89.110	359.530	7043.22	4409.91	4408.32	-657.74	40°06'54.938"N	104°40'54.575"W	0.59	
12356.00	90.280	1.860	7043.73	4504.89	4503.31	-656.58	40°06'55.876"N	104°40'54.560"W	2.74	
12451.00	91.600	1.960	7042.17	4599.81	4598.24	-653.42	40°06'56.814"N	104°40'54.519"W	1.39	
12546.00	90.990	1.390	7040.02	4694.74	4693.17	-650.64	40°06'57.752"N	104°40'54.484"W	0.88	
12641.00	89.050	1.720	7039.99	4789.69	4788.13	-648.06	40°06'58.691"N	104°40'54.451"W	2.07	

Actual Wellpath Report

ALVIN 27N-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#24 ALVIN 27N-29HZ (337'FSL & 322'FEL, SEC.29)
Area	COLORADO	Well	ALVIN 27N-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 27N-29HZ AWB <12735>
Facility	SEC.29-T2N-R65W		

WELLPATH DATA (137 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12688.00	89.630	1.520	7040.53	4836.67	4835.11	-646.74	40°06'59.155"N	104°40'54.433"W	1.31	LAST BHI MWD (IFR+SC) SURVEYS
12735.00	89.630	1.520	7040.83	4883.65	4882.09	-645.49	40°06'59.619"N	104°40'54.417"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: ALVIN 27N-29HZ AWB <12735> Ref Wellpath: ALVIN 27N-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	1886.00	1870.00	16.00	1867.01	0.00	0.00	-173.57	-109.72
9.625in Casing Surface	16.00	1876.00	1860.00	16.00	1857.28	0.00	0.00	-171.63	-108.54
8.5in Open Hole	1886.00	12735.00	10849.00	1867.01	7040.83	-173.57	-109.72	4882.09	-645.49

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	9886.14	-2102.63	1727907.53	14574334.44	40°07'49.069"N	104°41'13.178"W	polygon
SEC.29-T2N-R65W SECTION LINES	-18.00	125.06	-2027.63	1728017.66	14564577.53	40°06'12.609"N	104°41'12.203"W	polygon
ALVIN 27N-29HZ BHL ON PLAT (50'FNL & 938'FEL, SEC.29)	7038.00	4907.65	-637.69	1729389.82	14569363.22	40°06'59.872"N	104°40'54.317"W	point
ALVIN 27N-29HZ HEEL (50'FSL & 948'FEL, SEC.29)	7059.00	-287.18	-625.07	1729421.14	14564170.51	40°06'08.536"N	104°40'54.153"W	point
ALVIN 27N-29HZ LAND BOX	7059.00	0.00	0.00	1730044.93	14564459.83	40°06'11.374"N	104°40'46.109"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: ALVIN 27N-29HZ AWB <12735> Ref Wellpath: ALVIN 27N-29HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	1822.00	Custom APC_ISCWSA REV 2 MWD	SDI MWD SURVEYS 13.5" HOLE <154-1822>	ALVIN 27N-29HZ AWB <12735>
1822.00	12688.00	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)	BHI MWD (IFR+SC) SURVEYS 8.5" HOLE <1945-12688>	ALVIN 27N-29HZ AWB <12735>
12688.00	12735.00	Blind Drilling (std)	Projection to bit	ALVIN 27N-29HZ AWB <12735>



Actual Wellpath Report

ALVIN 27N-29HZ AWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#24 ALVIN 27N-29HZ (337'FSL & 322'FEL, SEC.29)
Area	COLORADO	Well	ALVIN 27N-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 27N-29HZ AWB <12735>
Facility	SEC.29-T2N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
154.00	0.380	1.830	154.00	BEGIN MWD SURVEYS
1822.00	13.310	212.510	1804.71	TIED-ONTO MWD SURVEYS
1945.00	12.950	210.010	1924.49	FIRST BHI MWD (IFR+SC) SURVEYS
4316.00	17.728	211.317	4178.95	ENTERED LANDBOX
7158.00	53.751	359.413	6922.20	SSPG
7243.00	63.593	359.662	6966.34	NBRR
7397.00	72.036	357.658	7022.62	N470_B_CK
7567.00	84.980	0.201	7057.10	LANDING POINT
12688.00	89.630	1.520	7040.53	LAST BHI MWD (IFR+SC) SURVEYS
12735.00	89.630	1.520	7040.83	PROJECTION TO BIT