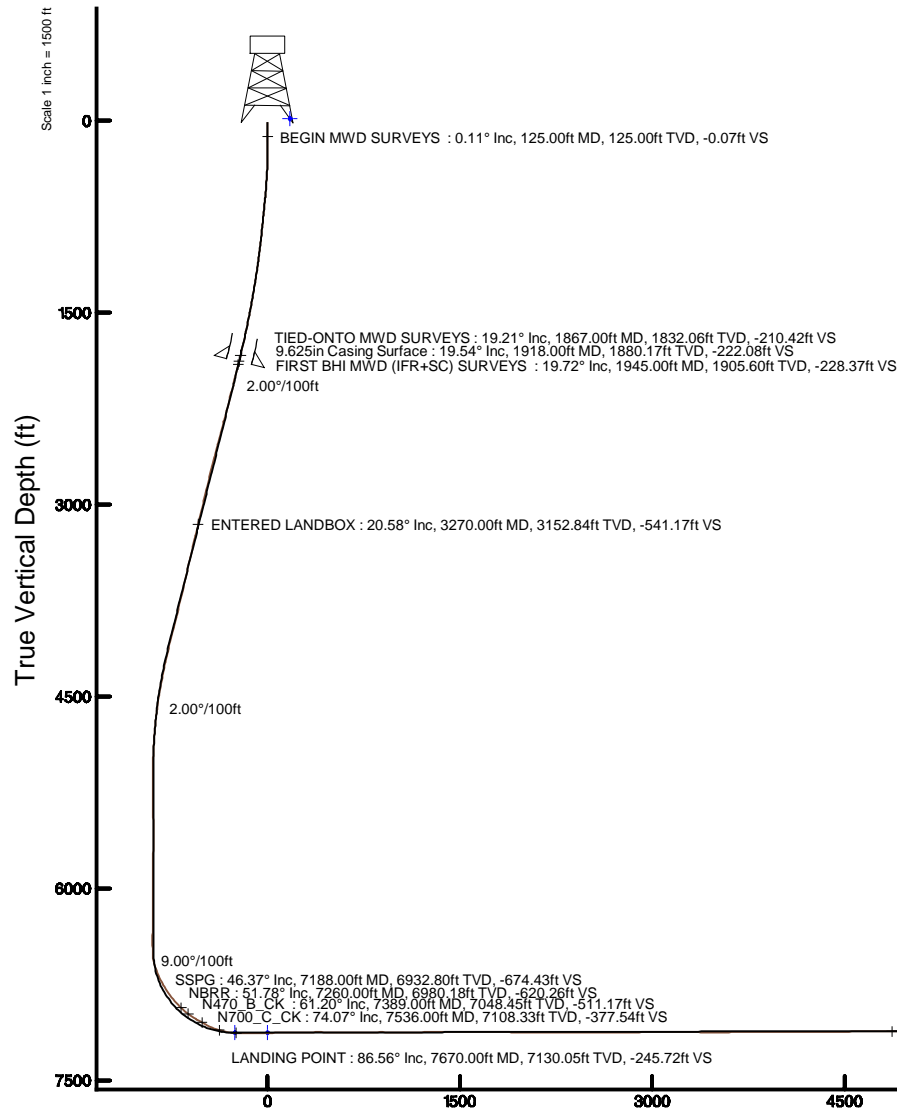


KERR-MCGEE OIL & GAS ONSHORE LP (WA)

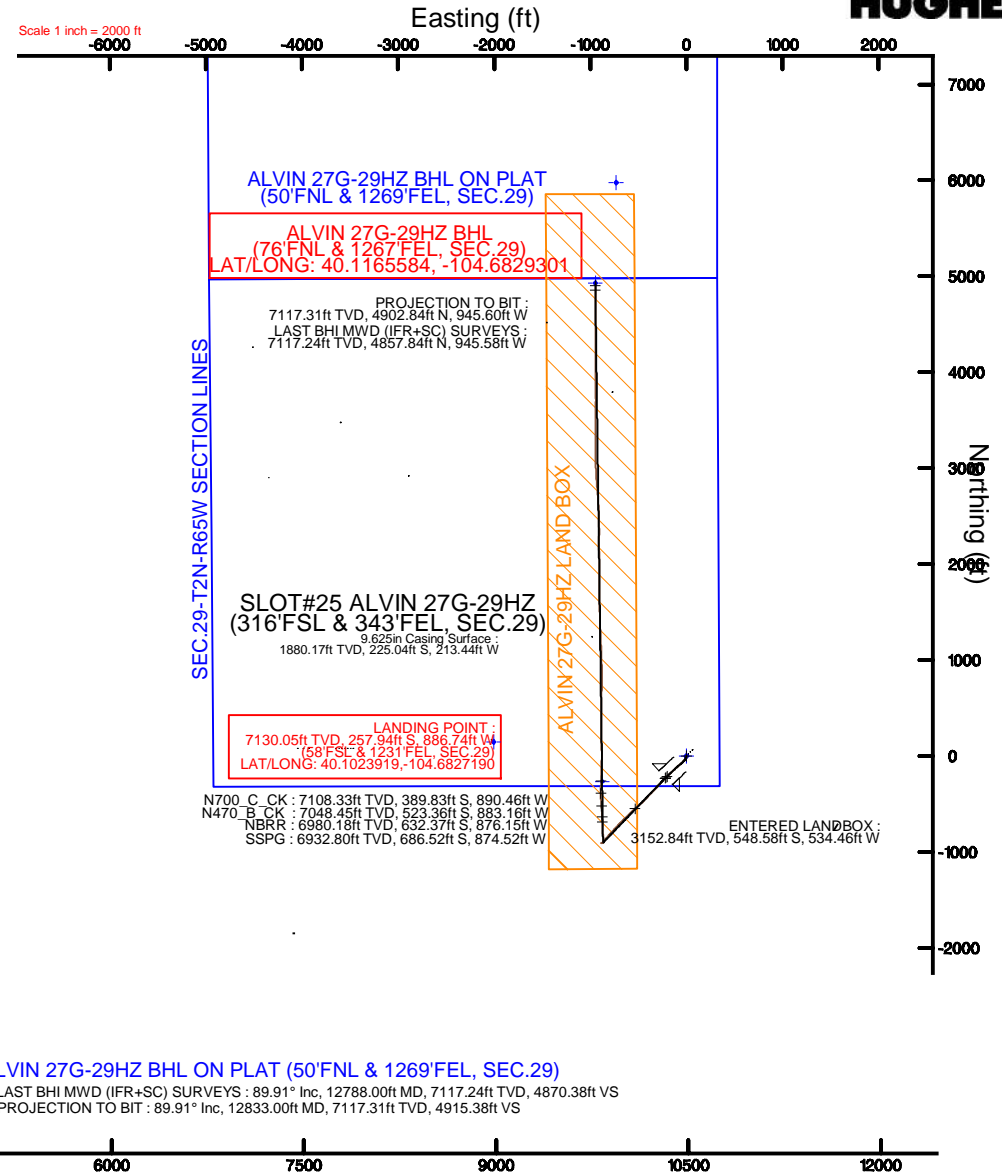
Location: COLORADO Slot: SLOT#25 ALVIN 27G-29HZ (316'FSL & 343'FEL, SEC.29)
 Field: WELD COUNTY (UTM/TRUE NORTH) Well: ALVIN 27G-29HZ
 Facility: SEC.29-T2N-R65W Wellbore: ALVIN 27G-29HZ PWB

Plot reference wellpath is ALVIN 27G-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#25 ALVIN 27G-29HZ (316'FSL & 343'FEL, SEC.29)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: amarcar on 04/Jan/2016



Vertical Section (ft)
 Azimuth 359.21° with reference 0.00 N, 0.00 E



Scale 1 inch = 1500 ft



Actual Wellpath Report

ALVIN 27G-29HZ AWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#25 ALVIN 27G-29HZ (316'FSL & 343'FEL, SEC.29)
Area	COLORADO	Well	ALVIN 27G-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 27G-29HZ AWB <12833>
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 14:18
Convergence at slot	0.21° East	Database/Source file	WA_DEN_Anadarko_Defn/ALVIN_27G-29HZ_AWB__12833_.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-80.09	3582.87	1730024.19	14564438.10	40°06'11.160"N	104°40'46.377"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#25 ALVIN 27G-29HZ (316'FSL & 343'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	359.21°

Actual Wellpath Report

ALVIN 27G-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#25 ALVIN 27G-29HZ (316°FSL & 343°FEL, SEC.29)
Area	COLORADO	Well	ALVIN 27G-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 27G-29HZ AWP <12833>
Facility	SEC.29-T2N-R65W		

WELLPATH DATA (140 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	129.000	0.00	0.00	0.00	0.00	40°06'11.160"N	104°40'46.377"W	0.00	
16.00	0.000	129.000	16.00	0.00	0.00	0.00	40°06'11.160"N	104°40'46.377"W	0.00	
125.00	0.110	129.000	125.00	-0.07	-0.07	0.08	40°06'11.159"N	104°40'46.376"W	0.10	BEGIN MWD SURVEYS
215.00	0.030	322.500	215.00	-0.10	-0.10	0.13	40°06'11.159"N	104°40'46.375"W	0.15	
305.00	1.140	179.980	304.99	-0.98	-0.98	0.12	40°06'11.150"N	104°40'46.375"W	1.29	
426.00	3.130	182.300	425.90	-5.48	-5.48	-0.01	40°06'11.106"N	104°40'46.377"W	1.65	
516.00	4.750	189.130	515.69	-11.61	-11.62	-0.70	40°06'11.045"N	104°40'46.386"W	1.87	
606.00	5.440	200.360	605.33	-19.26	-19.30	-2.78	40°06'10.969"N	104°40'46.413"W	1.34	
741.00	7.370	215.220	739.50	-32.23	-32.37	-10.00	40°06'10.840"N	104°40'46.506"W	1.87	
831.00	7.790	221.840	828.71	-41.39	-41.63	-17.40	40°06'10.749"N	104°40'46.601"W	1.08	
921.00	9.020	222.440	917.74	-51.02	-51.38	-26.23	40°06'10.652"N	104°40'46.715"W	1.37	
1011.00	10.100	226.060	1006.49	-61.56	-62.07	-36.67	40°06'10.547"N	104°40'46.849"W	1.37	
1102.00	11.630	229.720	1095.86	-72.85	-73.53	-49.41	40°06'10.433"N	104°40'47.013"W	1.84	
1237.00	14.080	230.680	1227.47	-91.73	-92.74	-72.50	40°06'10.244"N	104°40'47.310"W	1.82	
1327.00	14.510	230.750	1314.68	-105.57	-106.81	-89.70	40°06'10.104"N	104°40'47.531"W	0.48	
1417.00	15.180	225.460	1401.68	-120.73	-122.21	-106.83	40°06'09.952"N	104°40'47.752"W	1.68	
1507.00	16.350	226.930	1488.29	-137.40	-139.13	-124.49	40°06'09.785"N	104°40'47.979"W	1.37	
1597.00	16.400	226.190	1574.64	-154.59	-156.57	-142.91	40°06'09.613"N	104°40'48.216"W	0.24	
1687.00	17.010	226.910	1660.84	-172.12	-174.36	-161.69	40°06'09.437"N	104°40'48.458"W	0.72	
1777.00	17.820	224.830	1746.72	-190.61	-193.12	-181.02	40°06'09.252"N	104°40'48.706"W	1.13	
1867.00	19.210	225.830	1832.06	-210.42	-213.21	-201.35	40°06'09.053"N	104°40'48.968"W	1.58	TIED-ONTO MWD SURVEYS
1945.00	19.720	225.240	1905.60	-228.37	-231.41	-219.89	40°06'08.873"N	104°40'49.207"W	0.70	FIRST BHI MWD (IFR+SC) SURVEYS
2039.00	18.670	224.580	1994.37	-249.95	-253.30	-241.72	40°06'08.657"N	104°40'49.488"W	1.14	
2134.00	20.590	223.470	2083.85	-272.60	-276.25	-263.88	40°06'08.430"N	104°40'49.773"W	2.06	
2229.00	19.830	222.140	2173.00	-296.36	-300.32	-286.19	40°06'08.192"N	104°40'50.060"W	0.93	
2324.00	19.260	220.330	2262.52	-319.96	-324.22	-307.14	40°06'07.956"N	104°40'50.330"W	0.88	
2418.00	19.780	222.030	2351.12	-343.31	-347.85	-327.82	40°06'07.722"N	104°40'50.596"W	0.82	
2513.00	20.500	226.240	2440.32	-366.44	-371.30	-350.60	40°06'07.491"N	104°40'50.889"W	1.70	
2608.00	19.660	223.930	2529.54	-389.14	-394.31	-373.70	40°06'07.263"N	104°40'51.186"W	1.22	
2703.00	20.230	224.000	2618.84	-412.15	-417.64	-396.20	40°06'07.033"N	104°40'51.476"W	0.60	
2797.00	19.190	222.500	2707.34	-434.93	-440.72	-417.93	40°06'06.805"N	104°40'51.755"W	1.23	
2892.00	19.410	226.870	2797.00	-456.93	-463.02	-440.00	40°06'06.584"N	104°40'52.039"W	1.54	
2987.00	18.680	225.370	2886.80	-478.10	-484.50	-462.34	40°06'06.372"N	104°40'52.327"W	0.93	
3081.00	20.570	229.410	2975.34	-499.10	-505.83	-485.60	40°06'06.161"N	104°40'52.626"W	2.47	
3176.00	19.610	229.240	3064.56	-520.03	-527.09	-510.35	40°06'05.951"N	104°40'52.945"W	1.01	
3270.00	20.580	227.400	3152.84	-541.17	-548.58	-534.46	40°06'05.739"N	104°40'53.255"W	1.23	ENTERED LANDBOX
3365.00	19.410	226.620	3242.11	-562.99	-570.72	-558.22	40°06'05.520"N	104°40'53.561"W	1.26	
3460.00	17.960	225.560	3332.10	-583.78	-591.82	-580.16	40°06'05.311"N	104°40'53.843"W	1.57	
3554.00	18.460	223.960	3421.39	-604.36	-612.68	-600.83	40°06'05.105"N	104°40'54.109"W	0.75	
3649.00	18.680	225.250	3511.45	-625.60	-634.22	-622.08	40°06'04.893"N	104°40'54.382"W	0.49	
3743.00	18.130	226.710	3600.64	-645.93	-654.84	-643.42	40°06'04.689"N	104°40'54.657"W	0.76	
3838.00	19.720	226.980	3690.50	-666.69	-675.91	-665.89	40°06'04.480"N	104°40'54.946"W	1.68	
3933.00	17.710	223.310	3780.48	-687.84	-697.37	-687.53	40°06'04.268"N	104°40'55.225"W	2.45	
4027.00	18.940	222.390	3869.71	-709.24	-719.04	-707.62	40°06'04.054"N	104°40'55.483"W	1.34	
4122.00	18.630	223.320	3959.65	-731.38	-741.46	-728.42	40°06'03.833"N	104°40'55.751"W	0.45	

Actual Wellpath Report

ALVIN 27G-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#25 ALVIN 27G-29HZ (316°FSL & 343°FEL, SEC.29)
Area	COLORADO	Well	ALVIN 27G-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 27G-29HZ AWP <12833>
Facility	SEC.29-T2N-R65W		

WELLPATH DATA (140 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4217.00	19.410	223.730	4049.46	-753.53	-763.91	-749.75	40°06'03.611"N	104°40'56.025"W	0.83	
4312.00	18.810	223.150	4139.23	-775.81	-786.49	-771.13	40°06'03.388"N	104°40'56.300"W	0.66	
4406.00	16.610	220.750	4228.77	-796.78	-807.73	-790.27	40°06'03.178"N	104°40'56.547"W	2.47	
4501.00	14.370	220.840	4320.31	-815.76	-826.94	-806.84	40°06'02.988"N	104°40'56.760"W	2.36	
4596.00	13.920	219.610	4412.43	-833.28	-844.66	-821.84	40°06'02.813"N	104°40'56.953"W	0.57	
4690.00	11.400	219.650	4504.14	-848.96	-860.52	-834.98	40°06'02.656"N	104°40'57.122"W	2.68	
4785.00	9.500	220.290	4597.56	-862.02	-873.73	-846.04	40°06'02.525"N	104°40'57.264"W	2.00	
4880.00	7.740	217.310	4691.48	-872.96	-884.80	-854.99	40°06'02.416"N	104°40'57.379"W	1.91	
4975.00	6.270	226.650	4785.77	-881.50	-893.45	-862.64	40°06'02.331"N	104°40'57.478"W	1.95	
5069.00	5.580	234.150	4879.27	-887.60	-899.65	-870.07	40°06'02.269"N	104°40'57.574"W	1.10	
5164.00	3.770	224.910	4973.95	-892.44	-904.57	-876.02	40°06'02.221"N	104°40'57.650"W	2.06	
5258.00	1.250	226.470	5067.85	-895.29	-907.47	-878.95	40°06'02.192"N	104°40'57.688"W	2.68	
5353.00	0.810	324.930	5162.84	-895.44	-907.63	-880.09	40°06'02.191"N	104°40'57.702"W	1.67	
5448.00	0.970	334.360	5257.83	-894.16	-906.36	-880.82	40°06'02.203"N	104°40'57.712"W	0.23	
5543.00	0.620	324.690	5352.82	-893.00	-905.21	-881.47	40°06'02.214"N	104°40'57.720"W	0.39	
5637.00	0.500	328.640	5446.82	-892.23	-904.45	-881.97	40°06'02.222"N	104°40'57.727"W	0.13	
5731.00	0.150	315.680	5540.82	-891.79	-904.01	-882.27	40°06'02.226"N	104°40'57.731"W	0.38	
5826.00	0.190	175.260	5635.82	-891.86	-904.08	-882.35	40°06'02.226"N	104°40'57.732"W	0.34	
6015.00	0.510	148.390	5824.81	-892.89	-905.10	-881.88	40°06'02.215"N	104°40'57.726"W	0.19	
6110.00	0.790	135.710	5919.81	-893.73	-905.93	-881.20	40°06'02.207"N	104°40'57.717"W	0.33	
6299.00	0.990	120.600	6108.78	-895.52	-907.70	-878.89	40°06'02.190"N	104°40'57.687"W	0.16	
6394.00	1.180	114.080	6203.77	-896.36	-908.51	-877.29	40°06'02.182"N	104°40'57.666"W	0.24	
6583.00	1.170	92.930	6392.73	-897.31	-909.41	-873.58	40°06'02.173"N	104°40'57.619"W	0.23	
6678.00	1.570	70.520	6487.70	-896.95	-909.02	-871.39	40°06'02.177"N	104°40'57.590"W	0.70	
6773.00	13.920	10.560	6581.71	-885.28	-897.30	-868.05	40°06'02.293"N	104°40'57.548"W	13.90	
6867.00	23.300	0.350	6670.71	-855.53	-867.52	-865.86	40°06'02.587"N	104°40'57.519"W	10.53	
6962.00	29.210	354.760	6755.89	-813.59	-825.61	-867.86	40°06'03.001"N	104°40'57.545"W	6.74	
7057.00	37.200	356.900	6835.31	-761.70	-773.76	-871.54	40°06'03.513"N	104°40'57.593"W	8.50	
7151.00	43.900	358.640	6906.70	-700.65	-712.74	-873.85	40°06'04.116"N	104°40'57.622"W	7.23	
7188.00†	46.369	358.462	6932.80	-674.43	-686.52	-874.52	40°06'04.376"N	104°40'57.631"W	6.68	SSPG
7246.00	50.240	358.210	6971.37	-631.13	-643.24	-875.78	40°06'04.803"N	104°40'57.647"W	6.68	
7260.00†	51.780	357.827	6980.18	-620.26	-632.37	-876.15	40°06'04.911"N	104°40'57.652"W	11.20	NBRR
7341.00	60.710	355.880	7025.15	-553.04	-565.20	-879.91	40°06'05.574"N	104°40'57.700"W	11.20	
7389.00†	61.199	355.229	7048.45	-511.17	-523.36	-883.16	40°06'05.988"N	104°40'57.742"W	1.56	N470_B_CK
7435.00	61.670	354.610	7070.45	-470.88	-483.12	-886.74	40°06'06.386"N	104°40'57.788"W	1.56	
7530.00	73.470	0.240	7106.65	-383.30	-395.59	-890.49	40°06'07.251"N	104°40'57.837"W	13.57	
7536.00†	74.074	0.372	7108.33	-377.54	-389.83	-890.46	40°06'07.308"N	104°40'57.836"W	10.28	N700_C_CK
7625.00	83.040	2.250	7125.97	-290.47	-302.71	-888.44	40°06'08.168"N	104°40'57.810"W	10.28	
7670.00†	86.563	2.096	7130.05	-245.72	-257.94	-886.74	40°06'08.611"N	104°40'57.788"W	7.84	LANDING POINT
7719.00	90.400	1.930	7131.35	-196.80	-208.99	-885.02	40°06'09.095"N	104°40'57.766"W	7.84	
7814.00	90.310	0.890	7130.76	-101.88	-114.03	-882.69	40°06'10.033"N	104°40'57.736"W	1.10	
7909.00	90.920	0.330	7129.74	-6.91	-19.04	-881.68	40°06'10.972"N	104°40'57.723"W	0.87	
8004.00	90.980	359.230	7128.16	88.07	75.95	-882.04	40°06'11.910"N	104°40'57.728"W	1.16	
8098.00	91.080	358.550	7126.47	182.05	169.91	-883.86	40°06'12.839"N	104°40'57.751"W	0.73	
8193.00	90.770	359.210	7124.94	277.04	264.88	-885.72	40°06'13.777"N	104°40'57.775"W	0.77	

Actual Wellpath Report

ALVIN 27G-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#25 ALVIN 27G-29HZ (316°FSL & 343°FEL, SEC.29)
Area	COLORADO	Well	ALVIN 27G-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 27G-29HZ AWP <12833>
Facility	SEC.29-T2N-R65W		

WELLPATH DATA (140 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8287.00	90.460	0.730	7123.93	371.02	358.87	-885.77	40°06'14.706"N	104°40'57.776"W	1.65	
8382.00	88.740	0.820	7124.59	465.98	453.86	-884.48	40°06'15.645"N	104°40'57.760"W	1.81	
8476.00	89.630	0.640	7125.93	559.94	547.84	-883.28	40°06'16.574"N	104°40'57.744"W	0.97	
8571.00	91.050	0.670	7125.37	654.90	642.83	-882.20	40°06'17.512"N	104°40'57.730"W	1.50	
8666.00	89.780	0.670	7124.68	749.87	737.82	-881.09	40°06'18.451"N	104°40'57.716"W	1.34	
8761.00	90.800	0.260	7124.20	844.84	832.81	-880.32	40°06'19.390"N	104°40'57.706"W	1.16	
8855.00	89.010	358.670	7124.35	938.83	926.80	-881.19	40°06'20.319"N	104°40'57.718"W	2.55	
8950.00	89.720	358.300	7125.41	1033.82	1021.76	-883.71	40°06'21.257"N	104°40'57.750"W	0.84	
9045.00	90.430	357.760	7125.28	1128.80	1116.71	-886.97	40°06'22.195"N	104°40'57.792"W	0.94	
9140.00	91.720	357.460	7123.50	1223.74	1211.60	-890.93	40°06'23.133"N	104°40'57.843"W	1.39	
9234.00	89.200	357.760	7122.75	1317.70	1305.51	-894.85	40°06'24.061"N	104°40'57.893"W	2.70	
9329.00	90.400	357.560	7123.08	1412.66	1400.43	-898.73	40°06'24.999"N	104°40'57.943"W	1.28	
9424.00	89.450	358.810	7123.20	1507.64	1495.38	-901.74	40°06'25.937"N	104°40'57.982"W	1.65	
9518.00	90.740	358.780	7123.05	1601.64	1589.36	-903.72	40°06'26.866"N	104°40'58.008"W	1.37	
9613.00	89.350	359.720	7122.97	1696.63	1684.35	-904.96	40°06'27.805"N	104°40'58.024"W	1.77	
9708.00	90.520	359.590	7123.08	1791.63	1779.34	-905.53	40°06'28.744"N	104°40'58.031"W	1.24	
9802.00	88.770	359.800	7123.66	1885.62	1873.34	-906.03	40°06'29.672"N	104°40'58.038"W	1.88	
9897.00	88.830	359.340	7125.65	1980.60	1968.31	-906.74	40°06'30.611"N	104°40'58.047"W	0.49	
9991.00	89.480	359.320	7127.04	2074.58	2062.29	-907.84	40°06'31.540"N	104°40'58.061"W	0.69	
10086.00	90.580	359.770	7126.99	2169.58	2157.29	-908.60	40°06'32.478"N	104°40'58.071"W	1.25	
10181.00	89.540	0.210	7126.89	2264.57	2252.29	-908.61	40°06'33.417"N	104°40'58.071"W	1.19	
10275.00	89.970	0.180	7127.29	2358.56	2346.29	-908.29	40°06'34.346"N	104°40'58.067"W	0.46	
10370.00	89.350	358.090	7127.85	2453.55	2441.27	-909.73	40°06'35.285"N	104°40'58.085"W	2.29	
10465.00	90.370	359.080	7128.09	2548.54	2536.24	-912.07	40°06'36.223"N	104°40'58.116"W	1.50	
10559.00	89.570	356.580	7128.13	2642.50	2630.16	-915.63	40°06'37.151"N	104°40'58.162"W	2.79	
10654.00	90.930	355.650	7127.72	2737.36	2724.94	-922.07	40°06'38.088"N	104°40'58.244"W	1.73	
10748.00	91.290	354.850	7125.90	2831.12	2818.60	-929.85	40°06'39.014"N	104°40'58.345"W	0.93	
10843.00	91.810	356.300	7123.33	2925.89	2913.28	-937.18	40°06'39.949"N	104°40'58.439"W	1.62	
10938.00	91.110	357.890	7120.91	3020.79	3008.12	-941.99	40°06'40.886"N	104°40'58.501"W	1.83	
11032.00	90.000	359.560	7120.00	3114.78	3102.09	-944.08	40°06'41.815"N	104°40'58.528"W	2.13	
11127.00	88.580	0.370	7121.18	3209.76	3197.08	-944.14	40°06'42.754"N	104°40'58.529"W	1.72	
11221.00	89.110	359.580	7123.07	3303.73	3291.06	-944.18	40°06'43.683"N	104°40'58.529"W	1.01	
11316.00	89.480	1.110	7124.24	3398.70	3386.04	-943.61	40°06'44.621"N	104°40'58.522"W	1.66	
11411.00	89.820	0.300	7124.82	3493.67	3481.03	-942.44	40°06'45.560"N	104°40'58.507"W	0.92	
11505.00	90.990	0.080	7124.16	3587.65	3575.03	-942.13	40°06'46.489"N	104°40'58.503"W	1.27	
11600.00	90.370	0.280	7123.03	3682.63	3670.02	-941.83	40°06'47.427"N	104°40'58.499"W	0.69	
11695.00	90.800	359.630	7122.06	3777.61	3765.02	-941.91	40°06'48.366"N	104°40'58.500"W	0.82	
11789.00	90.490	359.980	7121.00	3871.60	3859.01	-942.23	40°06'49.295"N	104°40'58.504"W	0.50	
11883.00	89.110	0.310	7121.33	3965.59	3953.01	-941.99	40°06'50.224"N	104°40'58.501"W	1.51	
11978.00	89.290	359.960	7122.65	4060.57	4048.00	-941.76	40°06'51.163"N	104°40'58.499"W	0.41	
12072.00	90.150	359.310	7123.11	4154.56	4141.99	-942.36	40°06'52.092"N	104°40'58.506"W	1.15	
12167.00	89.750	358.540	7123.20	4249.56	4236.98	-944.14	40°06'53.030"N	104°40'58.529"W	0.91	
12262.00	89.690	358.770	7123.66	4344.55	4331.95	-946.37	40°06'53.969"N	104°40'58.558"W	0.25	
12357.00	91.570	0.760	7122.62	4439.53	4426.93	-946.76	40°06'54.907"N	104°40'58.563"W	2.88	
12451.00	92.090	0.270	7119.61	4533.46	4520.88	-945.92	40°06'55.836"N	104°40'58.552"W	0.76	

Actual Wellpath Report

ALVIN 27G-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#25 ALVIN 27G-29HZ (316°FSL & 343°FEL, SEC.29)
Area	COLORADO	Well	ALVIN 27G-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 27G-29HZ AWB <12833>
Facility	SEC.29-T2N-R65W		

WELLPATH DATA (140 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12546.00	90.860	359.480	7117.17	4628.42	4615.85	-946.13	40°06'56.774"N	104°40'58.555"W	1.54	
12641.00	89.480	0.500	7116.89	4723.41	4710.84	-946.14	40°06'57.713"N	104°40'58.555"W	1.81	
12736.00	90.090	0.130	7117.24	4818.39	4805.84	-945.62	40°06'58.652"N	104°40'58.549"W	0.75	
12788.00	89.910	359.970	7117.24	4870.38	4857.84	-945.58	40°06'59.166"N	104°40'58.548"W	0.46	LAST BHI MWD (IFR+SC) SURVEYS
12833.00	89.910	359.970	7117.31	4915.38	4902.84	-945.60	40°06'59.610"N	104°40'58.548"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: ALVIN 27G-29HZ AWB <12833> Ref Wellpath: ALVIN 27G-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	1930.00	1914.00	16.00	1891.47	0.00	0.00	-227.86	-216.30
9.625in Casing Surface	16.00	1918.00	1902.00	16.00	1880.17	0.00	0.00	-225.04	-213.44
8.5in Open Hole	1930.00	12833.00	10903.00	1891.47	7117.31	-227.86	-216.30	4902.84	-945.60

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	9907.79	-2081.81	1727907.53	14574334.44	40°07'49.069"N	104°41'13.178"W	polygon
SEC.29-T2N-R65W SECTION LINES	-18.00	146.71	-2006.80	1728017.66	14564577.53	40°06'12.609"N	104°41'12.203"W	polygon
ALVIN 27G-29HZ BHL ON PLAT (50°FNL & 1269°FEL, SEC.29)	7115.00	4928.91	-947.83	1729058.99	14569361.63	40°06'59.868"N	104°40'58.577"W	point
ALVIN 27G-29HZ HEEL (50°FSL & 1220°FEL, SEC.29)	7128.00	-265.41	-876.38	1729149.12	14564169.64	40°06'08.537"N	104°40'57.655"W	point
ALVIN 27G-29HZ LAND BOX	7128.00	0.00	0.00	1730024.19	14564438.10	40°06'11.160"N	104°40'46.377"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: ALVIN 27G-29HZ AWB <12833> Ref Wellpath: ALVIN 27G-29HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	1867.00	Custom_APC_ISCWSA REV 2 MWD	SDI MWD SURVEYS 13.5" HOLE <125-1867>	ALVIN 27G-29HZ AWB <12833>
1867.00	12788.00	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)	BHI MWD (IFR+SC) SURVEYS 8.5" HOLE <1945-12788>	ALVIN 27G-29HZ AWB <12833>
12788.00	12833.00	Blind Drilling (std)	Projection to bit	ALVIN 27G-29HZ AWB <12833>



Actual Wellpath Report

ALVIN 27G-29HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#25 ALVIN 27G-29HZ (316'FSL & 343'FEL, SEC.29)
Area	COLORADO	Well	ALVIN 27G-29HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	ALVIN 27G-29HZ AWP <12833>
Facility	SEC.29-T2N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
125.00	0.110	129.000	125.00	BEGIN MWD SURVEYS
1867.00	19.210	225.830	1832.06	TIED-ONTO MWD SURVEYS
1945.00	19.720	225.240	1905.60	FIRST BHI MWD (IFR+SC) SURVEYS
3270.00	20.580	227.400	3152.84	ENTERED LANDBOX
7188.00	46.369	358.462	6932.80	SSPG
7260.00	51.780	357.827	6980.18	NBRR
7389.00	61.199	355.229	7048.45	N470_B_CK
7536.00	74.074	0.372	7108.33	N700_C_CK
7670.00	86.563	2.096	7130.05	LANDING POINT
12788.00	89.910	359.970	7117.24	LAST BHI MWD (IFR+SC) SURVEYS
12833.00	89.910	359.970	7117.31	PROJECTION TO BIT