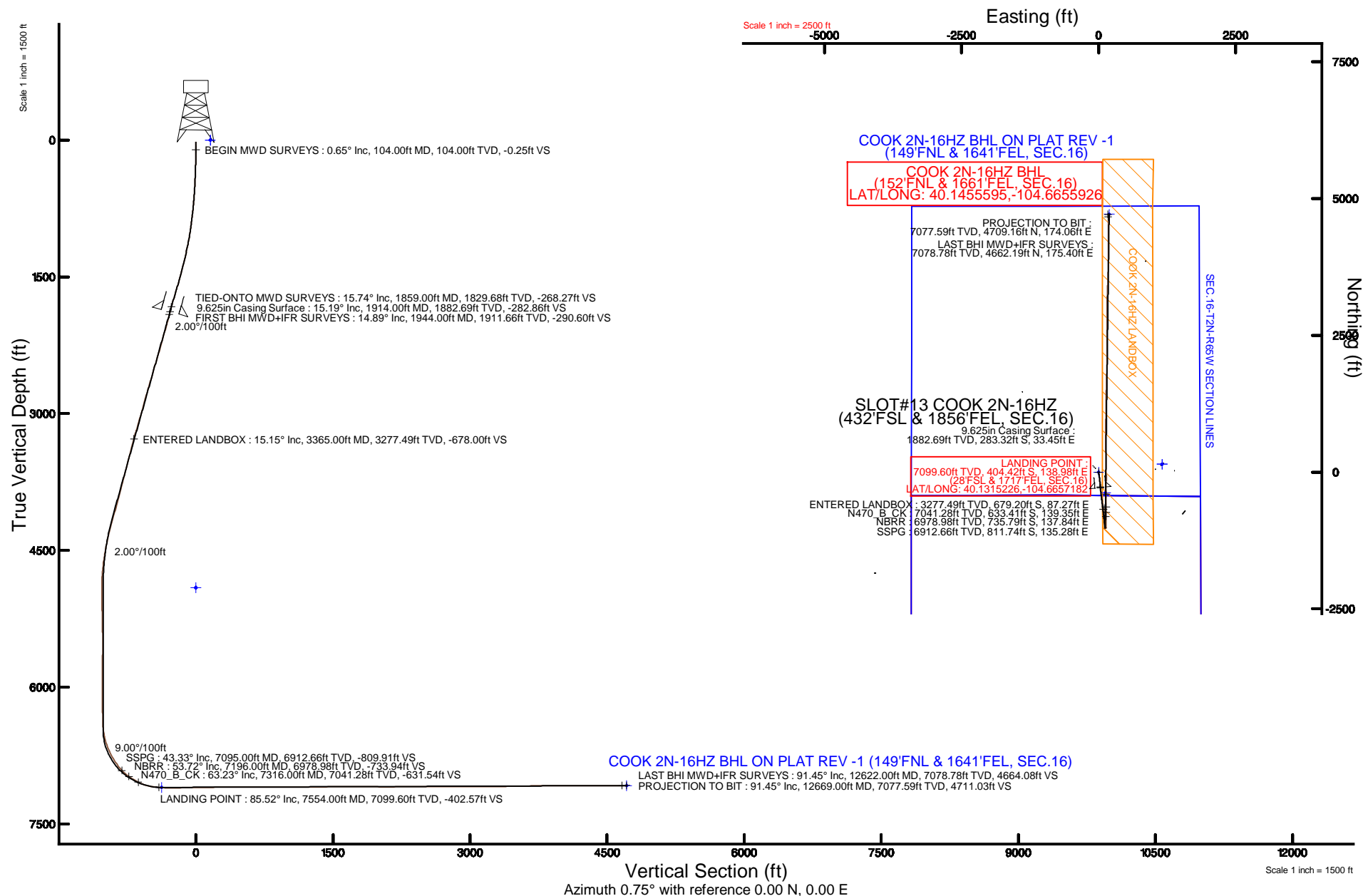


Location:	COLORADO	Slot:	SLOT#13 COOK 2N-16HZ (432'FSL & 1856'FEL, SEC.16)
Field:	WELD COUNTY (UTM/TRUE NORTH)	Well:	COOK 2N-16HZ
Facility:	SEC.16-T2N-R65W	Wellbore:	COOK 2N-16HZ PWB

Plot reference wellpath is COOK 2N-16HZ (REV-A.0) PWP	
True vertical depths are referenced to H&P 307 (25'KB) (RKB)	Grid System: NAD83 / UTM Zone 13 North, US feet
Measured depths are referenced to H&P 307 (25'KB) (RKB)	North Reference: True North
H&P 307 (25'KB) (RKB) to Mean Sea Level: 4909 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#13 COOK 2N-16HZ (432'FSL & 1856'FEL, SEC.16)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: amarcos on 17/Dec/2015





# Actual Wellpath Report

COOK 2N-16HZ AWP

Page 1 of 6



## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#13 COOK 2N-16HZ (432'FSL & 1856'FEL, SEC.16)
Area	COLORADO	Well	COOK 2N-16HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	COOK 2N-16HZ AWB <12669>
Facility	SEC.16-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	0.99961	Report Generated	18/Dec/2015 at 10:52
Convergence at slot	0.22° East	Database/Source file	WA_DEN_Anadarko_Defn/COOK_2N-16HZ_AWB__12669_.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-113.54	98.18	1733712.38	14575206.15	40°07'57.478"N	104°39'58.375"W
Facility Reference Pt			1733613.81	14575319.27	40°07'58.600"N	104°39'59.639"W
Field Reference Pt			1698235.31	14552047.82	40°04'09.600"N	104°47'36.000"W

## WELLPATH DATUM

Calculation method	Minimum curvature	H&P 307 (25'KB) (RKB) to Facility Vertical Datum	4909.00ft
Horizontal Reference Pt	Slot	H&P 307 (25'KB) (RKB) to Mean Sea Level	4909.00ft
Vertical Reference Pt	H&P 307 (25'KB) (RKB)	H&P 307 (25'KB) (RKB) to Mud Line at Slot (SLOT#13 COOK 2N-16HZ (432'FSL & 1856'FEL, SEC.16))	4909.00ft
MD Reference Pt	H&P 307 (25'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.75°

# Actual Wellpath Report

COOK 2N-16HZ AWP

Page 2 of 6

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#13 COOK 2N-16HZ (432'FSL & 1856'FEL, SEC.16)
Area	COLORADO	Well	COOK 2N-16HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	COOK 2N-16HZ AWB <12669>
Facility	SEC.16-T2N-R65W		

## WELLPATH DATA (136 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	124.410	0.00	0.00	0.00	0.00	40°07'57.478"N	104°39'58.375"W	0.00	
25.00	0.000	124.410	25.00	0.00	0.00	0.00	40°07'57.478"N	104°39'58.375"W	0.00	
104.00	0.650	124.410	104.00	-0.25	-0.25	0.37	40°07'57.475"N	104°39'58.370"W	0.82	BEGIN MWD SURVEYS
194.00	1.070	133.150	193.99	-1.10	-1.12	1.40	40°07'57.467"N	104°39'58.357"W	0.49	
283.00	1.860	153.460	282.96	-2.94	-2.98	2.66	40°07'57.449"N	104°39'58.341"W	1.05	
390.00	2.490	170.350	389.88	-6.77	-6.82	3.82	40°07'57.411"N	104°39'58.326"W	0.83	
480.00	3.200	174.510	479.77	-11.19	-11.25	4.39	40°07'57.367"N	104°39'58.318"W	0.82	
570.00	3.610	178.870	569.61	-16.52	-16.58	4.69	40°07'57.314"N	104°39'58.315"W	0.54	
660.00	4.310	175.140	659.40	-22.72	-22.79	5.03	40°07'57.253"N	104°39'58.310"W	0.83	
750.00	5.490	171.610	749.07	-30.33	-30.41	5.94	40°07'57.177"N	104°39'58.298"W	1.35	
840.00	6.940	170.420	838.53	-39.94	-40.04	7.48	40°07'57.082"N	104°39'58.279"W	1.62	
930.00	7.960	171.080	927.77	-51.43	-51.55	9.35	40°07'56.969"N	104°39'58.255"W	1.14	
1021.00	9.450	172.530	1017.72	-65.03	-65.19	11.30	40°07'56.834"N	104°39'58.230"W	1.65	
1111.00	11.020	170.690	1106.29	-80.82	-81.00	13.65	40°07'56.678"N	104°39'58.199"W	1.78	
1201.00	11.810	172.830	1194.51	-98.41	-98.63	16.19	40°07'56.503"N	104°39'58.167"W	1.00	
1291.00	12.710	171.920	1282.45	-117.32	-117.57	18.73	40°07'56.316"N	104°39'58.134"W	1.02	
1381.00	14.030	172.660	1370.01	-137.90	-138.19	21.52	40°07'56.112"N	104°39'58.098"W	1.48	
1471.00	15.200	175.580	1457.10	-160.45	-160.78	23.82	40°07'55.889"N	104°39'58.068"W	1.54	
1561.00	16.240	175.500	1543.73	-184.74	-185.09	25.72	40°07'55.649"N	104°39'58.044"W	1.16	
1651.00	16.690	175.760	1630.04	-210.14	-210.52	27.66	40°07'55.398"N	104°39'58.019"W	0.51	
1741.00	16.490	176.030	1716.30	-235.75	-236.15	29.50	40°07'55.144"N	104°39'57.995"W	0.24	
1831.00	15.830	175.090	1802.74	-260.69	-261.13	31.43	40°07'54.898"N	104°39'57.970"W	0.79	
1859.00	15.740	174.800	1829.68	-268.27	-268.71	32.10	40°07'54.823"N	104°39'57.962"W	0.43	TIED-ONTO MWD SURVEYS
1944.00	14.890	174.560	1911.66	-290.60	-291.07	34.18	40°07'54.602"N	104°39'57.935"W	1.00	FIRST BHI MWD+IFR SURVEYS
2038.00	14.530	174.140	2002.58	-314.32	-314.82	36.53	40°07'54.367"N	104°39'57.905"W	0.40	
2132.00	16.190	172.190	2093.22	-338.99	-339.54	39.52	40°07'54.123"N	104°39'57.866"W	1.85	
2227.00	15.970	171.250	2184.51	-364.98	-365.57	43.31	40°07'53.865"N	104°39'57.817"W	0.36	
2322.00	15.800	170.790	2275.88	-390.61	-391.26	47.36	40°07'53.612"N	104°39'57.765"W	0.22	
2511.00	17.010	172.700	2457.18	-443.32	-444.08	55.00	40°07'53.090"N	104°39'57.667"W	0.70	
2700.00	15.710	170.980	2638.53	-495.92	-496.77	62.52	40°07'52.569"N	104°39'57.570"W	0.73	
2795.00	17.120	169.600	2729.65	-522.31	-523.23	67.06	40°07'52.307"N	104°39'57.512"W	1.54	
2890.00	16.090	174.320	2820.69	-549.11	-550.09	70.89	40°07'52.042"N	104°39'57.462"W	1.79	
2984.00	15.640	174.230	2911.11	-574.65	-575.65	73.45	40°07'51.789"N	104°39'57.429"W	0.48	
3079.00	15.290	174.320	3002.67	-599.82	-600.86	75.98	40°07'51.540"N	104°39'57.397"W	0.37	
3174.00	16.840	171.760	3093.96	-625.86	-626.94	79.19	40°07'51.282"N	104°39'57.355"W	1.79	
3268.00	16.180	171.430	3184.09	-652.23	-653.37	83.09	40°07'51.021"N	104°39'57.305"W	0.71	
3363.00	15.140	170.200	3275.56	-677.49	-678.68	87.18	40°07'50.771"N	104°39'57.253"W	1.15	
3365.00†	15.148	170.351	3277.49	-678.00	-679.20	87.27	40°07'50.766"N	104°39'57.252"W	2.01	ENTERED LANDBOX
3458.00	15.630	177.160	3367.16	-702.46	-703.69	89.92	40°07'50.524"N	104°39'57.217"W	2.01	
3552.00	14.380	175.060	3457.96	-726.72	-727.97	91.56	40°07'50.284"N	104°39'57.196"W	1.45	
3647.00	14.630	176.280	3549.93	-750.42	-751.70	93.35	40°07'50.050"N	104°39'57.173"W	0.42	
3742.00	14.080	175.710	3641.96	-773.89	-775.19	94.99	40°07'49.817"N	104°39'57.152"W	0.60	
3836.00	14.310	178.820	3733.09	-796.89	-798.21	96.09	40°07'49.590"N	104°39'57.138"W	0.85	
3931.00	15.200	175.170	3824.96	-821.02	-822.36	97.38	40°07'49.351"N	104°39'57.121"W	1.35	
4025.00	14.050	173.340	3915.91	-844.60	-845.97	99.74	40°07'49.118"N	104°39'57.091"W	1.32	

# Actual Wellpath Report

COOK 2N-16HZ AWP

Page 3 of 6

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#13 COOK 2N-16HZ (432'FSL & 1856'FEL, SEC.16)
Area	COLORADO	Well	COOK 2N-16HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	COOK 2N-16HZ AWB <12669>
Facility	SEC.16-T2N-R65W		

## WELLPATH DATA (136 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4120.00	15.850	176.430	4007.70	-868.97	-870.37	101.88	40°07'48.877"N	104°39'57.063"W	2.07	
4215.00	15.570	176.250	4099.15	-894.62	-896.05	103.53	40°07'48.623"N	104°39'57.042"W	0.30	
4309.00	15.210	175.260	4189.78	-919.47	-920.92	105.37	40°07'48.377"N	104°39'57.018"W	0.47	
4403.00	14.020	173.810	4280.73	-943.05	-944.53	107.62	40°07'48.144"N	104°39'56.990"W	1.32	
4498.00	12.860	175.400	4373.13	-965.00	-966.51	109.71	40°07'47.927"N	104°39'56.963"W	1.28	
4592.00	10.680	177.010	4465.15	-984.11	-985.64	111.00	40°07'47.738"N	104°39'56.946"W	2.35	
4687.00	9.300	174.390	4558.71	-1000.52	-1002.07	112.21	40°07'47.575"N	104°39'56.930"W	1.53	
4781.00	6.660	174.830	4651.79	-1013.49	-1015.06	113.44	40°07'47.447"N	104°39'56.915"W	2.81	
4875.00	5.010	175.280	4745.30	-1023.00	-1024.58	114.27	40°07'47.353"N	104°39'56.904"W	1.76	
4970.00	2.050	152.890	4840.11	-1028.64	-1030.23	115.39	40°07'47.297"N	104°39'56.889"W	3.38	
5064.00	0.610	66.340	4934.09	-1029.92	-1031.52	116.61	40°07'47.284"N	104°39'56.874"W	2.24	
5253.00	1.830	47.020	5123.04	-1027.41	-1029.06	119.74	40°07'47.309"N	104°39'56.833"W	0.67	
5348.00	1.980	35.710	5217.99	-1025.02	-1026.70	121.81	40°07'47.332"N	104°39'56.807"W	0.43	
5443.00	1.700	46.580	5312.94	-1022.69	-1024.39	123.79	40°07'47.355"N	104°39'56.781"W	0.47	
5537.00	1.250	66.170	5406.91	-1021.30	-1023.02	125.74	40°07'47.368"N	104°39'56.756"W	0.71	
5631.00	0.300	130.350	5500.90	-1021.03	-1022.77	126.87	40°07'47.371"N	104°39'56.742"W	1.22	
5820.00	0.740	98.560	5689.90	-1021.51	-1023.27	128.45	40°07'47.366"N	104°39'56.721"W	0.27	
6009.00	1.030	96.030	5878.87	-1021.83	-1023.63	131.35	40°07'47.362"N	104°39'56.684"W	0.15	
6198.00	0.960	83.010	6067.84	-1021.77	-1023.62	134.61	40°07'47.363"N	104°39'56.642"W	0.12	
6293.00	1.050	269.420	6162.84	-1021.69	-1023.53	134.53	40°07'47.363"N	104°39'56.643"W	2.11	
6482.00	0.750	310.410	6351.82	-1020.94	-1022.74	131.85	40°07'47.371"N	104°39'56.677"W	0.37	
6577.00	5.810	20.000	6446.65	-1016.00	-1017.82	133.03	40°07'47.420"N	104°39'56.662"W	5.89	
6671.00	12.970	359.410	6539.35	-1000.94	-1002.78	134.55	40°07'47.568"N	104°39'56.643"W	8.30	
6766.00	18.630	0.650	6630.72	-975.08	-976.92	134.61	40°07'47.824"N	104°39'56.642"W	5.97	
6860.00	25.570	359.850	6717.76	-939.74	-941.58	134.73	40°07'48.173"N	104°39'56.641"W	7.39	
6955.00	32.270	358.810	6800.87	-893.84	-895.67	134.15	40°07'48.627"N	104°39'56.648"W	7.07	
7049.00	37.910	1.520	6877.76	-839.84	-841.67	134.39	40°07'49.161"N	104°39'56.645"W	6.22	
7095.00†	43.332	1.855	6912.66	-809.91	-811.74	135.28	40°07'49.456"N	104°39'56.633"W	11.80	SSPG
7143.00	48.990	2.140	6945.89	-775.31	-777.16	136.49	40°07'49.798"N	104°39'56.618"W	11.80	
7196.00†	53.720	1.614	6978.98	-733.94	-735.79	137.84	40°07'50.207"N	104°39'56.600"W	8.96	NBRR
7238.00	57.470	1.240	7002.71	-699.29	-701.16	138.70	40°07'50.549"N	104°39'56.589"W	8.96	
7316.00†	63.227	359.906	7041.28	-631.54	-633.41	139.35	40°07'51.219"N	104°39'56.581"W	7.53	N470_B_CK
7332.00	64.410	359.650	7048.34	-617.18	-619.05	139.30	40°07'51.360"N	104°39'56.582"W	7.53	
7427.00	76.080	359.800	7080.40	-527.94	-529.80	138.87	40°07'52.243"N	104°39'56.587"W	12.29	
7521.00	84.050	0.150	7096.60	-435.43	-437.28	138.84	40°07'53.157"N	104°39'56.588"W	8.49	
7554.00†	85.519	0.366	7099.60	-402.57	-404.42	138.98	40°07'53.482"N	104°39'56.586"W	4.50	LANDING POINT
7616.00	88.280	0.770	7102.95	-340.67	-342.52	139.60	40°07'54.093"N	104°39'56.578"W	4.50	
7710.00	90.520	0.560	7103.94	-246.68	-248.54	140.69	40°07'55.022"N	104°39'56.564"W	2.39	
7805.00	91.380	0.360	7102.36	-151.69	-153.55	141.45	40°07'55.961"N	104°39'56.554"W	0.93	
7899.00	90.220	359.690	7101.05	-57.71	-59.56	141.49	40°07'56.889"N	104°39'56.553"W	1.43	
7994.00	90.550	358.870	7100.41	37.25	35.43	140.30	40°07'57.828"N	104°39'56.569"W	0.93	
8088.00	91.450	358.290	7098.77	131.17	129.38	137.97	40°07'58.757"N	104°39'56.599"W	1.14	
8183.00	90.280	358.970	7097.34	226.09	224.34	135.70	40°07'59.695"N	104°39'56.628"W	1.42	
8277.00	91.290	358.700	7096.05	320.03	318.31	133.79	40°08'00.624"N	104°39'56.653"W	1.11	
8371.00	89.510	359.880	7095.39	413.99	412.30	132.62	40°08'01.552"N	104°39'56.668"W	2.27	

# Actual Wellpath Report

COOK 2N-16HZ AWP

Page 4 of 6

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#13 COOK 2N-16HZ (432'FSL & 1856'FEL, SEC.16)
Area	COLORADO	Well	COOK 2N-16HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	COOK 2N-16HZ AWB <12669>
Facility	SEC.16-T2N-R65W		

## WELLPATH DATA (136 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8466.00	89.750	359.620	7096.01	508.97	507.29	132.21	40°08'02.491"N	104°39'56.673"W	0.37	
8561.00	90.030	359.600	7096.19	603.96	602.29	131.56	40°08'03.430"N	104°39'56.681"W	0.30	
8655.00	90.460	359.320	7095.79	697.93	696.29	130.68	40°08'04.359"N	104°39'56.693"W	0.55	
8749.00	89.600	0.620	7095.74	791.92	790.28	130.63	40°08'05.288"N	104°39'56.693"W	1.66	
8844.00	90.120	0.850	7095.97	886.92	885.27	131.85	40°08'06.226"N	104°39'56.677"W	0.60	
8939.00	90.280	0.880	7095.64	981.92	980.26	133.28	40°08'07.165"N	104°39'56.659"W	0.17	
9033.00	90.250	0.550	7095.20	1075.92	1074.25	134.45	40°08'08.094"N	104°39'56.644"W	0.35	
9127.00	90.710	0.560	7094.42	1169.91	1168.25	135.36	40°08'09.023"N	104°39'56.632"W	0.49	
9222.00	89.910	1.460	7093.90	1264.91	1263.23	137.04	40°08'09.961"N	104°39'56.611"W	1.27	
9316.00	90.370	1.260	7093.67	1358.90	1357.20	139.27	40°08'10.890"N	104°39'56.582"W	0.53	
9411.00	91.290	0.570	7092.30	1453.89	1452.18	140.79	40°08'11.829"N	104°39'56.562"W	1.21	
9505.00	90.490	2.160	7090.84	1547.87	1546.14	143.02	40°08'12.757"N	104°39'56.534"W	1.89	
9600.00	89.540	1.420	7090.81	1642.85	1641.09	145.99	40°08'13.695"N	104°39'56.495"W	1.27	
9694.00	90.030	1.360	7091.16	1736.85	1735.06	148.27	40°08'14.624"N	104°39'56.466"W	0.53	
9789.00	90.860	1.190	7090.43	1831.84	1830.03	150.39	40°08'15.563"N	104°39'56.439"W	0.89	
9883.00	88.490	0.580	7090.96	1925.83	1924.01	151.84	40°08'16.491"N	104°39'56.420"W	2.60	
9978.00	89.200	0.720	7092.87	2020.81	2018.99	152.92	40°08'17.430"N	104°39'56.406"W	0.76	
10072.00	90.370	0.960	7093.23	2114.81	2112.97	154.29	40°08'18.359"N	104°39'56.388"W	1.27	
10167.00	91.260	1.130	7091.88	2209.79	2207.95	156.03	40°08'19.297"N	104°39'56.366"W	0.95	
10261.00	91.360	359.360	7089.73	2303.76	2301.92	156.43	40°08'20.226"N	104°39'56.361"W	1.89	
10355.00	90.000	359.870	7088.61	2397.73	2395.91	155.80	40°08'21.155"N	104°39'56.369"W	1.55	
10450.00	90.000	359.480	7088.61	2492.72	2490.91	155.26	40°08'22.093"N	104°39'56.376"W	0.41	
10544.00	90.650	359.720	7088.08	2586.70	2584.90	154.60	40°08'23.022"N	104°39'56.384"W	0.74	
10638.00	88.710	359.500	7088.60	2680.67	2678.89	153.96	40°08'23.951"N	104°39'56.393"W	2.08	
10733.00	89.260	359.450	7090.29	2775.63	2773.87	153.09	40°08'24.890"N	104°39'56.404"W	0.58	
10827.00	89.260	0.850	7091.50	2869.62	2867.86	153.34	40°08'25.818"N	104°39'56.401"W	1.49	
10921.00	90.120	0.470	7092.01	2963.62	2961.85	154.42	40°08'26.747"N	104°39'56.387"W	1.00	
11016.00	91.320	0.670	7090.81	3058.61	3056.84	155.36	40°08'27.686"N	104°39'56.374"W	1.28	
11110.00	90.960	0.680	7088.94	3152.59	3150.82	156.47	40°08'28.615"N	104°39'56.360"W	0.38	
11205.00	89.720	2.720	7088.38	3247.57	3245.76	159.29	40°08'29.553"N	104°39'56.324"W	2.51	
11299.00	90.310	2.310	7088.36	3341.52	3339.67	163.41	40°08'30.481"N	104°39'56.271"W	0.76	
11394.00	91.570	1.780	7086.80	3436.48	3434.60	166.80	40°08'31.419"N	104°39'56.227"W	1.44	
11488.00	90.590	2.470	7085.03	3530.44	3528.51	170.29	40°08'32.347"N	104°39'56.182"W	1.27	
11583.00	91.360	1.630	7083.41	3625.40	3623.44	173.69	40°08'33.285"N	104°39'56.139"W	1.20	
11677.00	90.860	2.530	7081.59	3719.35	3717.36	177.10	40°08'34.213"N	104°39'56.095"W	1.10	
11772.00	89.450	0.900	7081.33	3814.33	3812.31	179.94	40°08'35.152"N	104°39'56.058"W	2.27	
11866.00	90.030	0.430	7081.76	3908.33	3906.30	181.03	40°08'36.080"N	104°39'56.044"W	0.79	
11961.00	91.390	0.080	7080.58	4003.32	4001.29	181.45	40°08'37.019"N	104°39'56.038"W	1.48	
12055.00	89.510	359.480	7079.84	4097.30	4095.28	181.09	40°08'37.948"N	104°39'56.043"W	2.10	
12150.00	90.300	359.120	7080.00	4192.26	4190.27	179.93	40°08'38.887"N	104°39'56.058"W	0.91	
12244.00	89.200	0.450	7080.41	4286.25	4284.27	179.58	40°08'39.816"N	104°39'56.063"W	1.84	
12339.00	89.320	359.830	7081.64	4381.23	4379.26	179.81	40°08'40.754"N	104°39'56.060"W	0.66	
12433.00	90.520	359.350	7081.77	4475.21	4473.26	179.14	40°08'41.683"N	104°39'56.068"W	1.37	
12528.00	90.830	358.870	7080.65	4570.17	4568.24	177.66	40°08'42.622"N	104°39'56.087"W	0.60	
12622.00	91.450	358.370	7078.78	4664.08	4662.19	175.40	40°08'43.550"N	104°39'56.116"W	0.85	LAST BHI MWD+IFR SURVEYS

# Actual Wellpath Report

COOK 2N-16HZ AWP

Page 5 of 6

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#13 COOK 2N-16HZ (432'FSL & 1856'FEL, SEC.16)
Area	COLORADO	Well	COOK 2N-16HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	COOK 2N-16HZ AWP <12669>
Facility	SEC.16-T2N-R65W		

## WELLPATH DATA (136 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12669.00	91.450	358.370	7077.59	4711.03	4709.16	174.06	40°08'44.014"N	104°39'56.134"W	0.00	PROJECTION TO BIT

## HOLE & CASING SECTIONS - Ref Wellbore: COOK 2N-16HZ AWP <12669> Ref Wellpath: COOK 2N-16HZ 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	25.00	1924.00	1899.00	25.00	1892.35	0.00	0.00	-285.92	33.70
9.625in Casing Surface	25.00	1914.00	1889.00	25.00	1882.69	0.00	0.00	-283.32	33.45
8.5in Open Hole	1924.00	12669.00	10745.00	1892.35	7077.59	-285.92	33.70	4709.16	174.06

## TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.16-T2N-R65W SECTION LINES	0.00	142.10	1158.17	1734869.55	14575352.54	40°07'58.882"N	104°39'43.464"W	polygon
SEC.21-T2N-R65W SECTION LINES	0.00	142.10	1158.17	1734869.55	14575352.54	40°07'58.882"N	104°39'43.464"W	polygon
COOK 2N-16HZ LANDBOX	4909.00	0.00	0.00	1733712.38	14575206.15	40°07'57.478"N	104°39'58.375"W	polygon
COOK 2N-16HZ BHL ON PLAT REV -1 (149'FNL & 1641'FEL, SEC.16)	7079.00	4711.88	193.82	1733888.43	14579916.87	40°08'44.041"N	104°39'55.879"W	point
COOK 2N-16HZ HEEL (55'FSL & 1730'FEL, SEC.16)	7099.00	-378.42	127.46	1733841.21	14574828.35	40°07'53.738"N	104°39'56.734"W	point

## WELLPATH COMPOSITION - Ref Wellbore: COOK 2N-16HZ AWP <12669> Ref Wellpath: COOK 2N-16HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	1859.00	Custom APC_ISCWSA REV 2 MWD	SDI MWD SURVEYS 13.5" HOLE <104-1859>	COOK 2N-16HZ AWP <12669>
1859.00	12622.00	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)	BHI MWD (IFR+SC) SURVEYS 8.5" HOLE <1944-12622>	COOK 2N-16HZ AWP <12669>
12622.00	12669.00	Blind Drilling (std)	Projection to bit	COOK 2N-16HZ AWP <12669>



# Actual Wellpath Report

COOK 2N-16HZ AWP  
Page 6 of 6



## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#13 COOK 2N-16HZ (432'FSL & 1856'FEL, SEC.16)
Area	COLORADO	Well	COOK 2N-16HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	COOK 2N-16HZ AWB <12669>
Facility	SEC.16-T2N-R65W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
104.00	0.650	124.410	104.00	BEGIN MWD SURVEYS
1859.00	15.740	174.800	1829.68	TIED-ONTO MWD SURVEYS
1944.00	14.890	174.560	1911.66	FIRST BHI MWD+IFR SURVEYS
3365.00	15.148	170.351	3277.49	ENTERED LANDBOX
7095.00	43.332	1.855	6912.66	SSPG
7196.00	53.720	1.614	6978.98	NBRR
7316.00	63.227	359.906	7041.28	N470_B_CK
7554.00	85.519	0.366	7099.60	LANDING POINT
12622.00	91.450	358.370	7078.78	LAST BHI MWD+IFR SURVEYS
12669.00	91.450	358.370	7077.59	PROJECTION TO BIT