

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#03 COOK 37N-W3HZ (549°FSL & 2439°FEL,SEC.10)
Field: WELD COUNTY (KERR MCGEE) Well: COOK 37N-W3HZ
Facility: SEC.10-T2N-R65W Wellbore: COOK 37N-W3HZ PWB

Plot reference wellpath is COOK 37N-W3HZ (PERMIT) PWB

True vertical depths are referenced to RIG (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to RIG (RKB)	North Reference: True north
RIG (RKB) to Mean Sea Level: 4886 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#03 COOK 37N-W3HZ (549°FSL & 2439°FEL,SEC.10)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wilsjef02 on 2/24/2012

Location Information

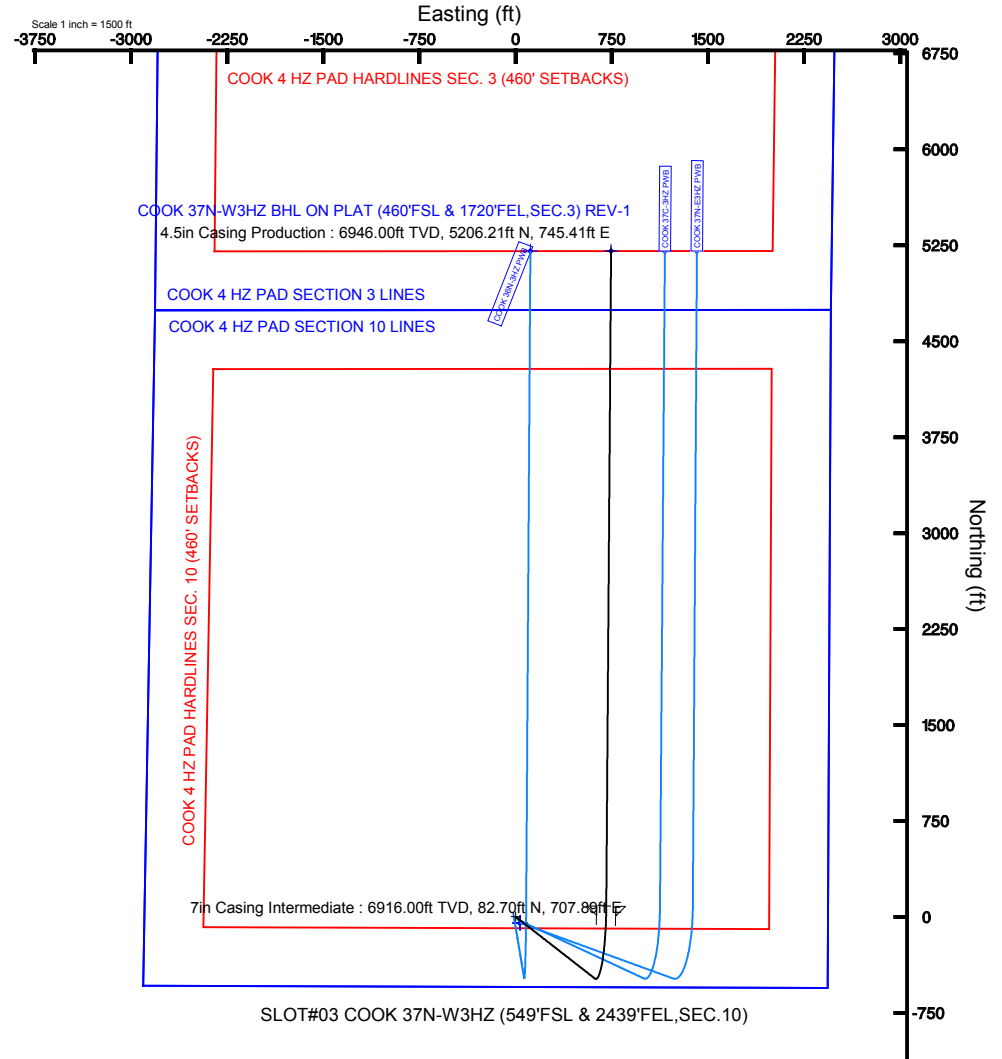
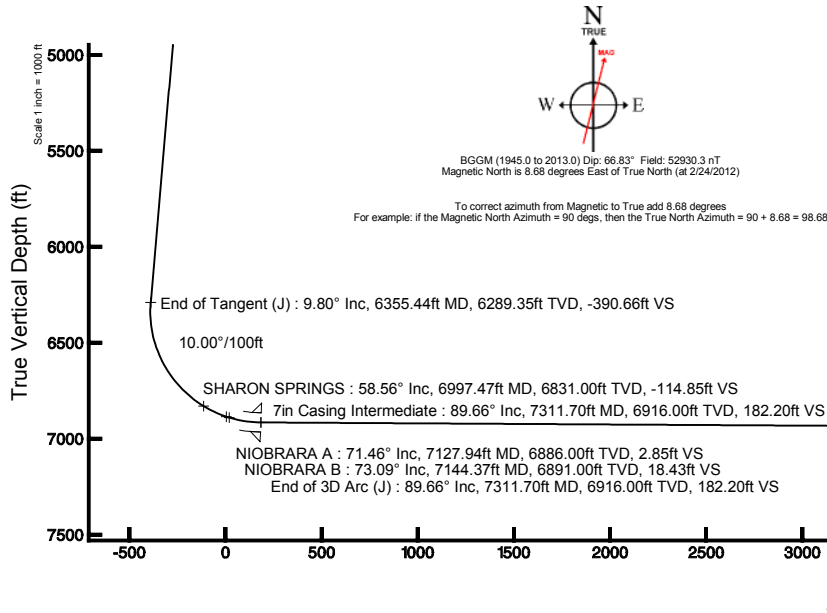
Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.10-T2N-R65W			3237856.502	1297658.335	40°08'50.402"N	104°38'56.857"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#03 COOK 37N-W3HZ (549°FSL & 2439°FEL,SEC.10)	48.47	-35.26	3237820.784	1297706.464	40°08'50.881"N	104°38'57.311"W
RIG (RKB) to Mud line (At Slot: SLOT#03 COOK 37N-W3HZ (549°FSL & 2439°FEL,SEC.10))					4886ft	
Mean Sea Level to Mud line (At Slot: SLOT#03 COOK 37N-W3HZ (549°FSL & 2439°FEL,SEC.10))					0ft	
RIG (RKB) to Mean Sea Level					4886ft	

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	128.000	17.00	0.00	0.00	0.00	0.00
End of Tangent	1500.00	0.000	128.000	1500.00	0.00	0.00	0.00	0.00
End of Build (J)	1990.00	9.800	128.000	1987.61	-25.74	32.94	2.00	-20.81
End of Tangent (J)	6355.44	9.800	128.000	6289.35	-483.20	618.46	0.00	-390.66
End of 3D Arc (J)	7311.70	89.665	0.420	6916.00	82.70	707.89	10.00	182.20
End of Tangent (J)	12435.44	89.665	0.420	6946.00	5206.21	745.41	0.00	5259.31

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US Ft)	Grid North (US Ft)	Latitude	Longitude
COOK 4 HZ PAD SECTION 10 LINES		0.00	-48.43	35.24	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W
COOK 4 HZ PAD SECTION 3 LINES		0.00	-48.43	35.24	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W
COOK 37N-W3HZ BHL ON PLAT (460°FSL & 1720°FEL,SEC.3) REV-1	12435.44	6946.00	5206.21	745.41	3238516.19	1302919.36	40°09'42.329"N	104°38'47.710"W
COOK 4 HZ PAD HARDLINES SEC. 10 (460' SETBACKS)	7100.00		-48.43	35.24	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W
COOK 4 HZ PAD HARDLINES SEC. 3 (460' SETBACKS)		7100.00	-48.43	35.24	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W





Planned Wellpath Report

COOK 37N-W3HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 COOK 37N-W3HZ (549'FSL & 2439'FEL,SEC.10)
Area	COLORADO	Well	COOK 37N-W3HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 37N-W3HZ PWB
Facility	SEC.10-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	0.999958	Report Generated	2/24/2012 at 13:43:25
Convergence at slot	0.55° East	Database/Source file	WellArchitectDB/COOK_37N-W3HZ_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	48.47	-35.26	3237820.78	1297706.46	40°08'50.881"N	104°38'57.311"W
Facility Reference Pt			3237856.50	1297658.34	40°08'50.402"N	104°38'56.857"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	RIG (RKB) to Facility Vertical Datum	4886.00ft
Horizontal Reference Pt	Slot	RIG (RKB) to Mean Sea Level	4886.00ft
Vertical Reference Pt	RIG (RKB)	RIG (RKB) to Mud Line at Slot (SLOT#03 COOK 37N-W3HZ (549'FSL & 2439'FEL,SEC.10))	4886.00ft
MD Reference Pt	RIG (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	8.15°



Planned Wellpath Report

COOK 37N-W3HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 COOK 37N-W3HZ (549'FSL & 2439'FEL,SEC.10)
Area	COLORADO	Well	COOK 37N-W3HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 37N-W3HZ PWB
Facility	SEC.10-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	128.000	0.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	
17.00	0.000	128.000	17.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	Tie On
117.00†	0.000	128.000	117.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	
217.00†	0.000	128.000	217.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	
317.00†	0.000	128.000	317.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	
417.00†	0.000	128.000	417.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	
517.00†	0.000	128.000	517.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	
617.00†	0.000	128.000	617.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	
717.00†	0.000	128.000	717.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	
817.00†	0.000	128.000	817.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	
917.00†	0.000	128.000	917.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	
1017.00†	0.000	128.000	1017.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	
1117.00†	0.000	128.000	1117.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	
1217.00†	0.000	128.000	1217.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	
1317.00†	0.000	128.000	1317.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	
1417.00†	0.000	128.000	1417.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	
1500.00	0.000	128.000	1500.00	0.00	0.00	0.00	40°08'50.881"N	104°38'57.311"W	0.00	End of Tangent
1517.00†	0.340	128.000	1517.00	-0.03	-0.03	0.04	40°08'50.881"N	104°38'57.310"W	2.00	
1617.00†	2.340	128.000	1616.97	-1.19	-1.47	1.88	40°08'50.866"N	104°38'57.287"W	2.00	
1717.00†	4.340	128.000	1716.79	-4.09	-5.06	6.47	40°08'50.831"N	104°38'57.228"W	2.00	
1817.00†	6.340	128.000	1816.35	-8.72	-10.79	13.81	40°08'50.774"N	104°38'57.133"W	2.00	
1917.00†	8.340	128.000	1915.53	-15.08	-18.65	23.87	40°08'50.697"N	104°38'57.004"W	2.00	
1990.00	9.800	128.000	1987.61	-20.81	-25.74	32.94	40°08'50.627"N	104°38'56.887"W	2.00	End of Build (J)
2017.00†	9.800	128.000	2014.22	-23.10	-28.57	36.56	40°08'50.599"N	104°38'56.840"W	0.00	
2117.00†	9.800	128.000	2112.76	-31.57	-39.05	49.98	40°08'50.495"N	104°38'56.667"W	0.00	
2217.00†	9.800	128.000	2211.30	-40.04	-49.52	63.39	40°08'50.392"N	104°38'56.495"W	0.00	
2317.00†	9.800	128.000	2309.84	-48.51	-60.00	76.80	40°08'50.288"N	104°38'56.322"W	0.00	
2417.00†	9.800	128.000	2408.38	-56.98	-70.48	90.21	40°08'50.184"N	104°38'56.149"W	0.00	
2517.00†	9.800	128.000	2506.92	-65.46	-80.96	103.63	40°08'50.081"N	104°38'55.977"W	0.00	
2617.00†	9.800	128.000	2605.47	-73.93	-91.44	117.04	40°08'49.977"N	104°38'55.804"W	0.00	
2717.00†	9.800	128.000	2704.01	-82.40	-101.92	130.45	40°08'49.874"N	104°38'55.631"W	0.00	
2817.00†	9.800	128.000	2802.55	-90.87	-112.40	143.86	40°08'49.770"N	104°38'55.458"W	0.00	
2917.00†	9.800	128.000	2901.09	-99.35	-122.88	157.28	40°08'49.667"N	104°38'55.286"W	0.00	
3017.00†	9.800	128.000	2999.63	-107.82	-133.36	170.69	40°08'49.563"N	104°38'55.113"W	0.00	
3117.00†	9.800	128.000	3098.17	-116.29	-143.84	184.10	40°08'49.460"N	104°38'54.940"W	0.00	
3217.00†	9.800	128.000	3196.71	-124.76	-154.32	197.52	40°08'49.356"N	104°38'54.768"W	0.00	
3317.00†	9.800	128.000	3295.25	-133.24	-164.79	210.93	40°08'49.252"N	104°38'54.595"W	0.00	
3417.00†	9.800	128.000	3393.79	-141.71	-175.27	224.34	40°08'49.149"N	104°38'54.422"W	0.00	
3517.00†	9.800	128.000	3492.33	-150.18	-185.75	237.75	40°08'49.045"N	104°38'54.249"W	0.00	
3617.00†	9.800	128.000	3590.87	-158.65	-196.23	251.17	40°08'48.942"N	104°38'54.077"W	0.00	
3717.00†	9.800	128.000	3689.41	-167.13	-206.71	264.58	40°08'48.838"N	104°38'53.904"W	0.00	
3817.00†	9.800	128.000	3787.95	-175.60	-217.19	277.99	40°08'48.735"N	104°38'53.731"W	0.00	
3917.00†	9.800	128.000	3886.50	-184.07	-227.67	291.40	40°08'48.631"N	104°38'53.559"W	0.00	
3989.56†	9.800	128.000	3958.00	-190.22	-235.27	301.14	40°08'48.556"N	104°38'53.433"W	0.00	PARKMAN
4017.00†	9.800	128.000	3985.04	-192.54	-238.15	304.82	40°08'48.528"N	104°38'53.386"W	0.00	
4117.00†	9.800	128.000	4083.58	-201.01	-248.63	318.23	40°08'48.424"N	104°38'53.213"W	0.00	
4217.00†	9.800	128.000	4182.12	-209.49	-259.11	331.64	40°08'48.320"N	104°38'53.040"W	0.00	
4317.00†	9.800	128.000	4280.66	-217.96	-269.59	345.05	40°08'48.217"N	104°38'52.868"W	0.00	
4417.00†	9.800	128.000	4379.20	-226.43	-280.07	358.47	40°08'48.113"N	104°38'52.695"W	0.00	
4517.00†	9.800	128.000	4477.74	-234.90	-290.54	371.88	40°08'48.010"N	104°38'52.522"W	0.00	
4581.20†	9.800	128.000	4541.00	-240.34	-297.27	380.49	40°08'47.943"N	104°38'52.411"W	0.00	SUSSEX
4617.00†	9.800	128.000	4576.28	-243.38	-301.02	385.29	40°08'47.906"N	104°38'52.349"W	0.00	
4717.00†	9.800	128.000	4674.82	-251.85	-311.50	398.71	40°08'47.803"N	104°38'52.177"W	0.00	
4817.00†	9.800	128.000	4773.36	-260.32	-321.98	412.12	40°08'47.699"N	104°38'52.004"W	0.00	
4917.00†	9.800	128.000	4871.90	-268.79	-332.46	425.53	40°08'47.596"N	104°38'51.831"W	0.00	
5017.00†	9.800	128.000	4970.44	-277.27	-342.94	438.94	40°08'47.492"N	104°38'51.659"W	0.00	
5117.00†	9.800	128.000	5068.98	-285.74	-353.42	452.36	40°08'47.388"N	104°38'51.486"W	0.00	
5217.00†	9.800	128.000	5167.53	-294.21	-363.90	465.77	40°08'47.285"N	104°38'51.313"W	0.00	
5317.00†	9.800	128.000	5266.07	-302.68	-374.38	479.18	40°08'47.181"N	104°38'51.140"W	0.00	
5417.00†	9.800	128.000	5364.61	-311.16	-384.86	492.59	40°08'47.078"N	104°38'50.968"W	0.00	



Planned Wellpath Report

COOK 37N-W3HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 COOK 37N-W3HZ (549'FSL & 2439'FEL,SEC.10)
Area	COLORADO	Well	COOK 37N-W3HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 37N-W3HZ PWB
Facility	SEC.10-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
5517.00†	9.800	128.000	5463.15	-319.63	-395.34	506.01	40°08'46.974"N	104°38'50.795"W	0.00	
5617.00†	9.800	128.000	5561.69	-328.10	-405.82	519.42	40°08'46.871"N	104°38'50.622"W	0.00	
5717.00†	9.800	128.000	5660.23	-336.57	-416.29	532.83	40°08'46.767"N	104°38'50.450"W	0.00	
5817.00†	9.800	128.000	5758.77	-345.04	-426.77	546.25	40°08'46.664"N	104°38'50.277"W	0.00	
5917.00†	9.800	128.000	5857.31	-353.52	-437.25	559.66	40°08'46.560"N	104°38'50.104"W	0.00	
6017.00†	9.800	128.000	5955.85	-361.99	-447.73	573.07	40°08'46.456"N	104°38'49.931"W	0.00	
6117.00†	9.800	128.000	6054.39	-370.46	-458.21	586.48	40°08'46.353"N	104°38'49.759"W	0.00	
6217.00†	9.800	128.000	6152.93	-378.93	-468.69	599.90	40°08'46.249"N	104°38'49.586"W	0.00	
6317.00†	9.800	128.000	6251.47	-387.41	-479.17	613.31	40°08'46.146"N	104°38'49.413"W	0.00	
6355.44	9.800	128.000	6289.35	-390.66	-483.20	618.46	40°08'46.106"N	104°38'49.347"W	0.00	End of Tangent (J)
6417.00†	7.792	88.962	6350.24	-392.61	-486.35	626.77	40°08'46.075"N	104°38'49.240"W	10.00	
6517.00†	12.803	37.389	6448.78	-381.83	-477.40	640.31	40°08'46.163"N	104°38'49.066"W	10.00	
6617.00†	21.583	20.606	6544.28	-354.13	-451.32	653.55	40°08'46.421"N	104°38'48.895"W	10.00	
6717.00†	31.088	13.488	6633.82	-310.35	-408.89	666.07	40°08'46.840"N	104°38'48.734"W	10.00	
6817.00†	40.813	9.489	6714.68	-251.83	-351.40	677.51	40°08'47.408"N	104°38'48.587"W	10.00	
6917.00†	50.631	6.819	6784.42	-180.33	-280.61	687.51	40°08'48.108"N	104°38'48.458"W	10.00	
6997.47†	58.565	5.170	6831.00	-114.85	-215.43	694.31	40°08'48.752"N	104°38'48.370"W	10.00	SHARON SPRINGS
7017.00†	60.494	4.814	6840.90	-98.04	-198.66	695.78	40°08'48.918"N	104°38'48.351"W	10.00	
7117.00†	70.382	3.169	6882.42	-7.45	-108.04	702.05	40°08'49.813"N	104°38'48.271"W	10.00	
7127.94†	71.465	3.003	6886.00	2.85	-97.72	702.60	40°08'49.915"N	104°38'48.263"W	10.00	NIOBRARA A
7144.37†	73.091	2.757	6891.00	18.43	-82.09	703.39	40°08'50.070"N	104°38'48.253"W	10.00	NIOBRARA B
7217.00†	80.283	1.716	6907.71	88.69	-11.51	706.14	40°08'50.767"N	104°38'48.218"W	10.00	
7311.70	89.665	0.420	6916.00	182.20	82.70	707.89	40°08'51.698"N	104°38'48.195"W	10.00	End of 3D Arc (J)
7317.00†	89.665	0.420	6916.03	187.45	88.00	707.92	40°08'51.751"N	104°38'48.195"W	0.00	
7417.00†	89.665	0.420	6916.62	286.54	188.00	708.66	40°08'52.739"N	104°38'48.185"W	0.00	
7517.00†	89.665	0.420	6917.20	385.63	287.99	709.39	40°08'53.727"N	104°38'48.176"W	0.00	
7617.00†	89.665	0.420	6917.79	484.72	387.99	710.12	40°08'54.715"N	104°38'48.166"W	0.00	
7717.00†	89.665	0.420	6918.38	583.81	487.98	710.85	40°08'55.703"N	104°38'48.157"W	0.00	
7817.00†	89.665	0.420	6918.96	682.90	587.98	711.59	40°08'56.691"N	104°38'48.147"W	0.00	
7917.00†	89.665	0.420	6919.55	781.99	687.97	712.32	40°08'57.680"N	104°38'48.138"W	0.00	
8017.00†	89.665	0.420	6920.13	881.08	787.97	713.05	40°08'58.668"N	104°38'48.128"W	0.00	
8117.00†	89.665	0.420	6920.72	980.17	887.97	713.78	40°08'59.656"N	104°38'48.119"W	0.00	
8217.00†	89.665	0.420	6921.30	1079.26	987.96	714.52	40°09'00.644"N	104°38'48.110"W	0.00	
8317.00†	89.665	0.420	6921.89	1178.35	1087.96	715.25	40°09'01.632"N	104°38'48.100"W	0.00	
8417.00†	89.665	0.420	6922.47	1277.44	1187.95	715.98	40°09'02.620"N	104°38'48.091"W	0.00	
8517.00†	89.665	0.420	6923.06	1376.53	1287.95	716.71	40°09'03.608"N	104°38'48.081"W	0.00	
8617.00†	89.665	0.420	6923.64	1475.62	1387.94	717.45	40°09'04.597"N	104°38'48.072"W	0.00	
8717.00†	89.665	0.420	6924.23	1574.71	1487.94	718.18	40°09'05.585"N	104°38'48.062"W	0.00	
8817.00†	89.665	0.420	6924.82	1673.80	1587.93	718.91	40°09'06.573"N	104°38'48.053"W	0.00	
8917.00†	89.665	0.420	6925.40	1772.89	1687.93	719.64	40°09'07.561"N	104°38'48.043"W	0.00	
9017.00†	89.665	0.420	6925.99	1871.98	1787.93	720.38	40°09'08.549"N	104°38'48.034"W	0.00	
9117.00†	89.665	0.420	6926.57	1971.07	1887.92	721.11	40°09'09.537"N	104°38'48.024"W	0.00	
9217.00†	89.665	0.420	6927.16	2070.16	1987.92	721.84	40°09'10.526"N	104°38'48.015"W	0.00	
9317.00†	89.665	0.420	6927.74	2169.25	2087.91	722.57	40°09'11.514"N	104°38'48.005"W	0.00	
9417.00†	89.665	0.420	6928.33	2268.34	2187.91	723.31	40°09'12.502"N	104°38'47.996"W	0.00	
9517.00†	89.665	0.420	6928.91	2367.43	2287.90	724.04	40°09'13.490"N	104°38'47.986"W	0.00	
9617.00†	89.665	0.420	6929.50	2466.52	2387.90	724.77	40°09'14.478"N	104°38'47.977"W	0.00	
9717.00†	89.665	0.420	6930.08	2565.61	2487.90	725.50	40°09'15.466"N	104°38'47.967"W	0.00	
9817.00†	89.665	0.420	6930.67	2664.70	2587.89	726.24	40°09'16.455"N	104°38'47.958"W	0.00	
9917.00†	89.665	0.420	6931.26	2763.79	2687.89	726.97	40°09'17.443"N	104°38'47.949"W	0.00	
10017.00†	89.665	0.420	6931.84	2862.88	2787.88	727.70	40°09'18.431"N	104°38'47.939"W	0.00	
10117.00†	89.665	0.420	6932.43	2961.97	2887.88	728.43	40°09'19.419"N	104°38'47.930"W	0.00	
10217.00†	89.665	0.420	6933.01	3061.06	2987.87	729.17	40°09'20.407"N	104°38'47.920"W	0.00	
10317.00†	89.665	0.420	6933.60	3160.15	3087.87	729.90	40°09'21.395"N	104°38'47.911"W	0.00	
10417.00†	89.665	0.420	6934.18	3259.24	3187.86	730.63	40°09'22.384"N	104°38'47.901"W	0.00	
10517.00†	89.665	0.420	6934.77	3358.33	3287.86	731.36	40°09'23.372"N	104°38'47.892"W	0.00	
10617.00†	89.665	0.420	6935.35	3457.42	3387.86	732.10	40°09'24.360"N	104°38'47.882"W	0.00	
10717.00†	89.665	0.420	6935.94	3556.51	3487.85	732.83	40°09'25.348"N	104°38'47.873"W	0.00	
10817.00†	89.665	0.420	6936.52	3655.60	3587.85	733.56	40°09'26.336"N	104°38'47.863"W	0.00	
10917.00†	89.665	0.420	6937.11	3754.69	3687.84	734.29	40°09'27.324"N	104°38'47.854"W	0.00	



Planned Wellpath Report

COOK 37N-W3HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP		Slot	SLOT#03 COOK 37N-W3HZ (549'FSL & 2439'FEL,SEC.10)
Area	COLORADO		Well	COOK 37N-W3HZ
Field	WELD COUNTY (KERR MCGEE)		Wellbore	COOK 37N-W3HZ PWB
Facility	SEC.10-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
11017.00†	89.665	0.420	6937.70	3853.78	3787.84	735.03	40°09'28.313"N	104°38'47.844"W	0.00	
11117.00†	89.665	0.420	6938.28	3952.87	3887.83	735.76	40°09'29.301"N	104°38'47.835"W	0.00	
11217.00†	89.665	0.420	6938.87	4051.96	3987.83	736.49	40°09'30.289"N	104°38'47.825"W	0.00	
11317.00†	89.665	0.420	6939.45	4151.05	4087.83	737.22	40°09'31.277"N	104°38'47.816"W	0.00	
11417.00†	89.665	0.420	6940.04	4250.14	4187.82	737.95	40°09'32.265"N	104°38'47.806"W	0.00	
11517.00†	89.665	0.420	6940.62	4349.23	4287.82	738.69	40°09'33.253"N	104°38'47.797"W	0.00	
11617.00†	89.665	0.420	6941.21	4448.32	4387.81	739.42	40°09'34.242"N	104°38'47.788"W	0.00	
11717.00†	89.665	0.420	6941.79	4547.41	4487.81	740.15	40°09'35.230"N	104°38'47.778"W	0.00	
11817.00†	89.665	0.420	6942.38	4646.50	4587.80	740.88	40°09'36.218"N	104°38'47.769"W	0.00	
11917.00†	89.665	0.420	6942.96	4745.59	4687.80	741.62	40°09'37.206"N	104°38'47.759"W	0.00	
12017.00†	89.665	0.420	6943.55	4844.68	4787.79	742.35	40°09'38.194"N	104°38'47.750"W	0.00	
12117.00†	89.665	0.420	6944.14	4943.77	4887.79	743.08	40°09'39.182"N	104°38'47.740"W	0.00	
12217.00†	89.665	0.420	6944.72	5042.86	4987.79	743.81	40°09'40.170"N	104°38'47.731"W	0.00	
12317.00†	89.665	0.420	6945.31	5141.95	5087.78	744.55	40°09'41.159"N	104°38'47.721"W	0.00	
12417.00†	89.665	0.420	6945.89	5241.04	5187.78	745.28	40°09'42.147"N	104°38'47.712"W	0.00	
12435.44	89.665	0.420	6946.00 [†]	5259.31	5206.21	745.41	40°09'42.329"N	104°38'47.710"W	0.00	End of Tangent (J)

HOLE & CASING SECTIONS - Ref Wellbore: COOK 37N-W3HZ PWB Ref Wellpath: COOK 37N-W3HZ (PERMIT) PWP									
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	17.00	900.00	883.00	17.00	900.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	900.00	883.00	17.00	900.00	0.00	0.00	0.00	0.00
8.75in Open Hole	900.00	7311.70	6411.70	900.00	6916.00	0.00	0.00	82.70	707.89
7in Casing Intermediate	17.00	7311.70	7294.70	17.00	6916.00	0.00	0.00	82.70	707.89
6.125in Open Hole	7311.70	12435.44	5123.74	6916.00	6946.00	82.70	707.89	5206.21	745.41
4.5in Casing Production	17.00	12435.44	12418.44	17.00	6946.00	0.00	0.00	5206.21	745.41

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
COOK 4 HZ PAD SECTION 10 LINES		0.00	-48.43	35.24	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W	polygon
COOK 4 HZ PAD SECTION 3 LINES		0.00	-48.43	35.24	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W	polygon
1) COOK 37N-W3HZ BHL ON PLAT (460'FSL & 1720'FEL,SEC.3) REV-1	12435.44	6946.00	5206.21	745.41	3238516.19	1302919.36	40°09'42.329"N	104°38'47.710"W	point
COOK 4 HZ PAD HARDLINES SEC. 10 (460' SETBACKS)		7100.00	-48.43	35.24	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W	polygon
COOK 4 HZ PAD HARDLINES SEC. 3 (460' SETBACKS)		7100.00	-48.43	35.24	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W	polygon

SURVEY PROGRAM - Ref Wellbore: COOK 37N-W3HZ PWB Ref Wellpath: COOK 37N-W3HZ (PERMIT) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	12435.44	NaviTrak (Standard)		COOK 37N-W3HZ PWB



Planned Wellpath Report

COOK 37N-W3HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 COOK 37N-W3HZ (549'FSL & 2439'FEL,SEC.10)
Area	COLORADO	Well	COOK 37N-W3HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 37N-W3HZ PWB
Facility	SEC.10-T2N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
3989.56	9.800	128.000	3958.00	PARKMAN
4581.20	9.800	128.000	4541.00	SUSSEX
6997.47	58.565	5.170	6831.00	SHARON SPRINGS
7127.94	71.465	3.003	6886.00	NIOBRARA A
7144.37	73.091	2.757	6891.00	NIOBRARA B