

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#02 COOK 37C-3HZ (526'FSL & 2421'FEL,SEC.10)  
Field: WELD COUNTY (KERR MCGEE) Well: COOK 37C-3HZ  
Facility: SEC.10-T2N-R65W Wellbore: COOK 37C-3HZ PWB

Plot reference wellpath is COOK 37C-3HZ (PERMIT) PWP

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#02 COOK 37C-3HZ (526'FSL & 2421'FEL,SEC.10)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wiljae02 on 2/24/2012

## Location Information

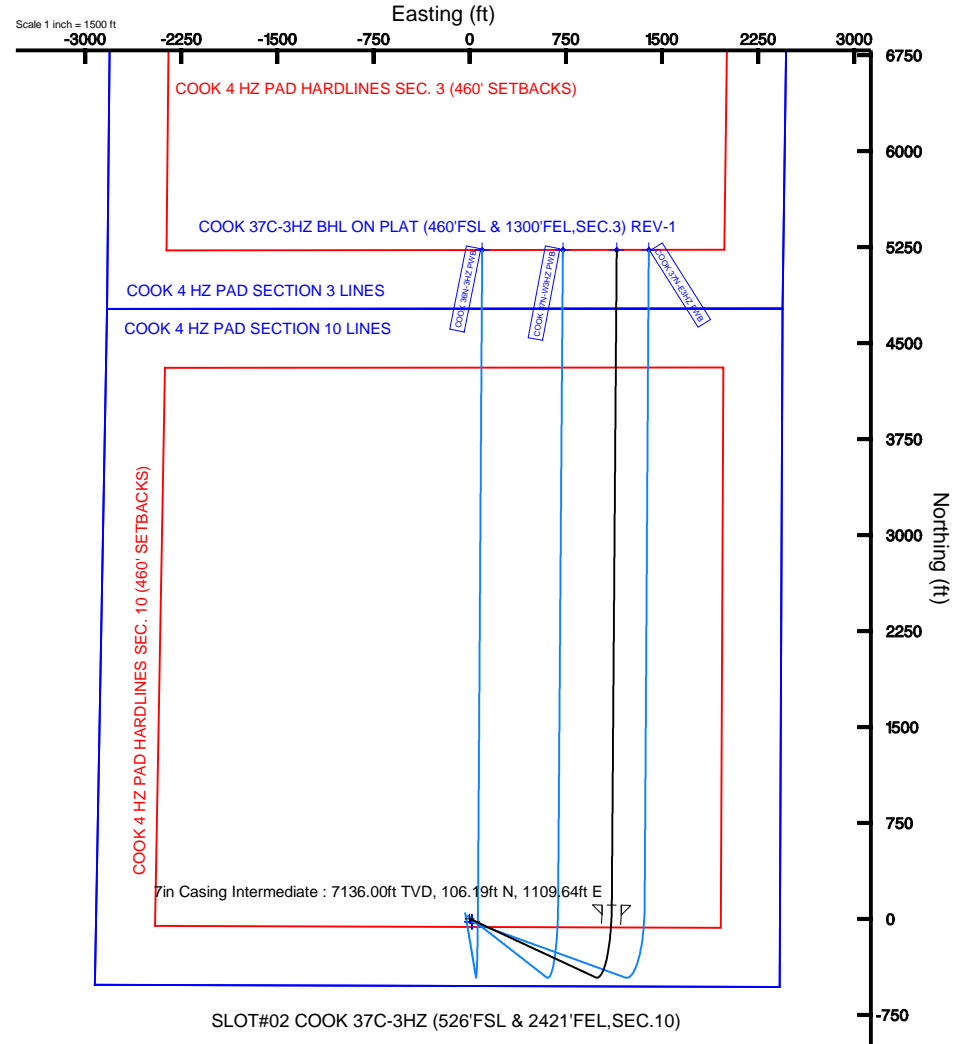
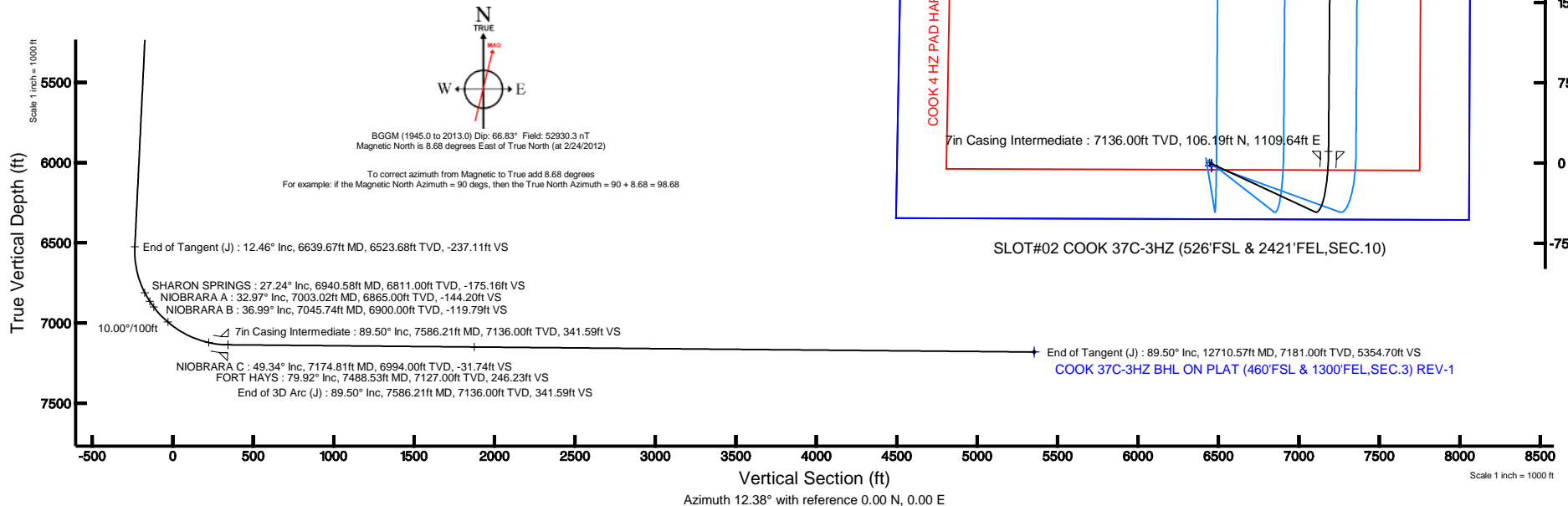
Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.10-T2N-R65W			3237856.502	1297658.335	40°08'50.402"N	104°38'56.857"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#02 COOK 37C-3HZ (526'FSL & 2421'FEL,SEC.10)	24.49	-17.63	3237838.641	1297682.653	40°08'50.644"N	104°38'57.084"W
RIG (RKB) to Mud line (At Slot: SLOT#02 COOK 37C-3HZ (526'FSL & 2421'FEL,SEC.10))			4886ft			
Mean Sea Level to Mud line (At Slot: SLOT#02 COOK 37C-3HZ (526'FSL & 2421'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	115.000	17.00	0.00	0.00	0.00	0.00
End of Tangent	1300.00	0.000	115.000	1300.00	0.00	0.00	0.00	0.00
End of Build (J)	1923.00	12.460	115.000	1918.10	-28.52	61.15	2.00	-14.74
End of Tangent (J)	6639.67	12.460	115.000	6523.68	-458.60	983.47	0.00	-237.11
End of 3D Arc (J)	7586.21	89.497	0.428	7136.00	106.19	1109.64	10.00	341.59
End of Tangent (J)	12710.57	89.497	0.428	7181.00	5230.21	1147.90	0.00	5354.70

## 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	-24.45	17.61	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W
COOK 4 HZ PAD SECTION 3 LINES		0.00	-24.45	17.61	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W
COOK 4 HZ PAD HARDLINES SEC. 10 (460' SETBACKS)	7100.00		-24.45	17.61	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		-24.45	17.61	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W
COOK 37C-3HZ BHL ON PLAT (460'FSL & 1300'FEL,SEC.3) REV-1	12710.57	7181.00	5230.21	1147.90	3238936.25	1302923.41	40°09'42.329"N	104°38'42.299"W





# Planned Wellpath Report

COOK 37C-3HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 COOK 37C-3HZ (526'FSL & 2421'FEL,SEC.10)
Area	COLORADO	Well	COOK 37C-3HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 37C-3HZ 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	2/27/2012 at 11:00:08
Convergence at slot	0.55° East	Database/Source file	WellArchitectDB/COOK_37C-3HZ_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	24.49	-17.63	3237838.64	1297682.65	40°08'50.644"N	104°38'57.084"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#02 COOK 37C-3HZ (526'FSL & 2421'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	12.38°



# Planned Wellpath Report

COOK 37C-3HZ (PERMIT) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 COOK 37C-3HZ (526'FSL & 2421'FEL,SEC.10)
Area	COLORADO	Well	COOK 37C-3HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 37C-3HZ PWB
Facility	SEC.10-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	115.000	0.00	0.00	0.00	0.00	40°08'50.644"N	104°38'57.084"W	0.00	
17.00	0.000	115.000	17.00	0.00	0.00	0.00	40°08'50.644"N	104°38'57.084"W	0.00	Tie On
117.00†	0.000	115.000	117.00	0.00	0.00	0.00	40°08'50.644"N	104°38'57.084"W	0.00	
217.00†	0.000	115.000	217.00	0.00	0.00	0.00	40°08'50.644"N	104°38'57.084"W	0.00	
317.00†	0.000	115.000	317.00	0.00	0.00	0.00	40°08'50.644"N	104°38'57.084"W	0.00	
417.00†	0.000	115.000	417.00	0.00	0.00	0.00	40°08'50.644"N	104°38'57.084"W	0.00	
517.00†	0.000	115.000	517.00	0.00	0.00	0.00	40°08'50.644"N	104°38'57.084"W	0.00	
617.00†	0.000	115.000	617.00	0.00	0.00	0.00	40°08'50.644"N	104°38'57.084"W	0.00	
717.00†	0.000	115.000	717.00	0.00	0.00	0.00	40°08'50.644"N	104°38'57.084"W	0.00	
817.00†	0.000	115.000	817.00	0.00	0.00	0.00	40°08'50.644"N	104°38'57.084"W	0.00	
917.00†	0.000	115.000	917.00	0.00	0.00	0.00	40°08'50.644"N	104°38'57.084"W	0.00	
1017.00†	0.000	115.000	1017.00	0.00	0.00	0.00	40°08'50.644"N	104°38'57.084"W	0.00	
1117.00†	0.000	115.000	1117.00	0.00	0.00	0.00	40°08'50.644"N	104°38'57.084"W	0.00	
1217.00†	0.000	115.000	1217.00	0.00	0.00	0.00	40°08'50.644"N	104°38'57.084"W	0.00	
1300.00	0.000	115.000	1300.00	0.00	0.00	0.00	40°08'50.644"N	104°38'57.084"W	0.00	End of Tangent
1317.00†	0.340	115.000	1317.00	-0.01	-0.02	0.05	40°08'50.644"N	104°38'57.083"W	2.00	
1417.00†	2.340	115.000	1416.97	-0.52	-1.01	2.17	40°08'50.634"N	104°38'57.056"W	2.00	
1517.00†	4.340	115.000	1516.79	-1.79	-3.47	7.45	40°08'50.610"N	104°38'56.988"W	2.00	
1617.00†	6.340	115.000	1616.35	-3.83	-7.40	15.88	40°08'50.571"N	104°38'56.880"W	2.00	
1717.00†	8.340	115.000	1715.53	-6.62	-12.80	27.46	40°08'50.517"N	104°38'56.730"W	2.00	
1817.00†	10.340	115.000	1814.20	-10.17	-19.66	42.17	40°08'50.450"N	104°38'56.541"W	2.00	
1917.00†	12.340	115.000	1912.24	-14.46	-27.97	59.99	40°08'50.368"N	104°38'56.312"W	2.00	
1923.00	12.460	115.000	1918.10	-14.74	-28.52	61.15	40°08'50.362"N	104°38'56.297"W	2.00	End of Build (J)
2017.00†	12.460	115.000	2009.89	-19.18	-37.09	79.53	40°08'50.277"N	104°38'56.060"W	0.00	
2117.00†	12.460	115.000	2107.53	-23.89	-46.21	99.09	40°08'50.187"N	104°38'55.808"W	0.00	
2217.00†	12.460	115.000	2205.18	-28.60	-55.32	118.64	40°08'50.097"N	104°38'55.556"W	0.00	
2317.00†	12.460	115.000	2302.82	-33.32	-64.44	138.20	40°08'50.007"N	104°38'55.304"W	0.00	
2417.00†	12.460	115.000	2400.47	-38.03	-73.56	157.75	40°08'49.917"N	104°38'55.053"W	0.00	
2517.00†	12.460	115.000	2498.11	-42.75	-82.68	177.31	40°08'49.827"N	104°38'54.801"W	0.00	
2617.00†	12.460	115.000	2595.76	-47.46	-91.80	196.86	40°08'49.737"N	104°38'54.549"W	0.00	
2717.00†	12.460	115.000	2693.40	-52.18	-100.92	216.41	40°08'49.647"N	104°38'54.297"W	0.00	
2817.00†	12.460	115.000	2791.04	-56.89	-110.03	235.97	40°08'49.557"N	104°38'54.045"W	0.00	
2917.00†	12.460	115.000	2888.69	-61.61	-119.15	255.52	40°08'49.467"N	104°38'53.794"W	0.00	
3017.00†	12.460	115.000	2986.33	-66.32	-128.27	275.08	40°08'49.376"N	104°38'53.542"W	0.00	
3117.00†	12.460	115.000	3083.98	-71.03	-137.39	294.63	40°08'49.286"N	104°38'53.290"W	0.00	
3217.00†	12.460	115.000	3181.62	-75.75	-146.51	314.19	40°08'49.196"N	104°38'53.038"W	0.00	
3317.00†	12.460	115.000	3279.27	-80.46	-155.63	333.74	40°08'49.106"N	104°38'52.786"W	0.00	
3417.00†	12.460	115.000	3376.91	-85.18	-164.74	353.29	40°08'49.016"N	104°38'52.535"W	0.00	
3517.00†	12.460	115.000	3474.56	-89.89	-173.86	372.85	40°08'48.926"N	104°38'52.283"W	0.00	
3617.00†	12.460	115.000	3572.20	-94.61	-182.98	392.40	40°08'48.836"N	104°38'52.031"W	0.00	
3717.00†	12.460	115.000	3669.85	-99.32	-192.10	411.96	40°08'48.746"N	104°38'51.779"W	0.00	
3817.00†	12.460	115.000	3767.49	-104.04	-201.22	431.51	40°08'48.656"N	104°38'51.527"W	0.00	
3917.00†	12.460	115.000	3865.14	-108.75	-210.34	451.07	40°08'48.565"N	104°38'51.276"W	0.00	
4017.00†	12.460	115.000	3962.78	-113.46	-219.45	470.62	40°08'48.475"N	104°38'51.024"W	0.00	
4055.12†	12.460	115.000	4000.00	-115.26	-222.93	478.07	40°08'48.441"N	104°38'50.928"W	0.00	PARKMAN
4117.00†	12.460	115.000	4060.43	-118.18	-228.57	490.17	40°08'48.385"N	104°38'50.772"W	0.00	
4217.00†	12.460	115.000	4158.07	-122.89	-237.69	509.73	40°08'48.295"N	104°38'50.520"W	0.00	
4317.00†	12.460	115.000	4255.71	-127.61	-246.81	529.28	40°08'48.205"N	104°38'50.268"W	0.00	
4417.00†	12.460	115.000	4353.36	-132.32	-255.93	548.84	40°08'48.115"N	104°38'50.016"W	0.00	
4517.00†	12.460	115.000	4451.00	-137.04	-265.05	568.39	40°08'48.025"N	104°38'49.765"W	0.00	
4590.73†	12.460	115.000	4523.00	-140.51	-271.77	582.81	40°08'47.958"N	104°38'49.579"W	0.00	SUSSEX
4617.00†	12.460	115.000	4548.65	-141.75	-274.16	587.95	40°08'47.935"N	104°38'49.513"W	0.00	
4717.00†	12.460	115.000	4646.29	-146.47	-283.28	607.50	40°08'47.845"N	104°38'49.261"W	0.00	
4817.00†	12.460	115.000	4743.94	-151.18	-292.40	627.05	40°08'47.754"N	104°38'49.009"W	0.00	
4917.00†	12.460	115.000	4841.58	-155.89	-301.52	646.61	40°08'47.664"N	104°38'48.757"W	0.00	
5017.00†	12.460	115.000	4939.23	-160.61	-310.64	666.16	40°08'47.574"N	104°38'48.506"W	0.00	
5117.00†	12.460	115.000	5036.87	-165.32	-319.76	685.72	40°08'47.484"N	104°38'48.254"W	0.00	
5217.00†	12.460	115.000	5134.52	-170.04	-328.87	705.27	40°08'47.394"N	104°38'48.002"W	0.00	
5317.00†	12.460	115.000	5232.16	-174.75	-337.99	724.83	40°08'47.304"N	104°38'47.750"W	0.00	
5417.00†	12.460	115.000	5329.81	-179.47	-347.11	744.38	40°08'47.214"N	104°38'47.498"W	0.00	



# Planned Wellpath Report

COOK 37C-3HZ (PERMIT) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 COOK 37C-3HZ (526'FSL & 2421'FEL,SEC.10)
Area	COLORADO	Well	COOK 37C-3HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 37C-3HZ PWB
Facility	SEC.10-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
5517.00†	12.460	115.000	5427.45	-184.18	-356.23	763.93	40°08'47.124"N	104°38'47.247"W	0.00	
5617.00†	12.460	115.000	5525.10	-188.90	-365.35	783.49	40°08'47.033"N	104°38'46.995"W	0.00	
5717.00†	12.460	115.000	5622.74	-193.61	-374.47	803.04	40°08'46.943"N	104°38'46.743"W	0.00	
5817.00†	12.460	115.000	5720.39	-198.32	-383.58	822.60	40°08'46.853"N	104°38'46.491"W	0.00	
5917.00†	12.460	115.000	5818.03	-203.04	-392.70	842.15	40°08'46.763"N	104°38'46.239"W	0.00	
6017.00†	12.460	115.000	5915.67	-207.75	-401.82	861.71	40°08'46.673"N	104°38'45.988"W	0.00	
6117.00†	12.460	115.000	6013.32	-212.47	-410.94	881.26	40°08'46.583"N	104°38'45.736"W	0.00	
6217.00†	12.460	115.000	6110.96	-217.18	-420.06	900.82	40°08'46.493"N	104°38'45.484"W	0.00	
6317.00†	12.460	115.000	6208.61	-221.90	-429.18	920.37	40°08'46.403"N	104°38'45.232"W	0.00	
6417.00†	12.460	115.000	6306.25	-226.61	-438.29	939.92	40°08'46.313"N	104°38'44.980"W	0.00	
6517.00†	12.460	115.000	6403.90	-231.33	-447.41	959.48	40°08'46.222"N	104°38'44.729"W	0.00	
6617.00†	12.460	115.000	6501.54	-236.04	-456.53	979.03	40°08'46.132"N	104°38'44.477"W	0.00	
6639.67	12.460	115.000	6523.68	-237.11	-458.60	983.47	40°08'46.112"N	104°38'44.420"W	0.00	End of Tangent (J)
6717.00†	11.636	77.504	6599.42	-235.65	-460.44	998.66	40°08'46.094"N	104°38'44.224"W	10.00	
6817.00†	16.873	41.778	6696.48	-218.72	-447.40	1018.23	40°08'46.223"N	104°38'43.972"W	10.00	
6917.00†	25.127	25.675	6789.84	-185.33	-417.37	1037.14	40°08'46.519"N	104°38'43.729"W	10.00	
6940.58†	27.237	23.286	6811.00	-175.16	-407.90	1041.45	40°08'46.613"N	104°38'43.673"W	10.00	SHARON SPRINGS
7003.02†	32.974	18.355	6865.00	-144.20	-378.62	1052.46	40°08'46.902"N	104°38'43.531"W	10.00	NIOBRARA A
7017.00†	34.281	17.458	6876.64	-136.49	-371.25	1054.84	40°08'46.975"N	104°38'43.501"W	10.00	
7045.74†	36.986	15.788	6900.00	-119.79	-355.20	1059.62	40°08'47.134"N	104°38'43.439"W	10.00	NIOBRARA B
7117.00†	43.773	12.425	6954.26	-73.69	-310.45	1070.77	40°08'47.576"N	104°38'43.296"W	10.00	
7174.81†	49.337	10.259	6994.00	-31.74	-269.31	1078.98	40°08'47.982"N	104°38'43.190"W	10.00	NIOBRARA C
7217.00†	53.419	8.897	7020.33	1.17	-236.81	1084.45	40°08'48.304"N	104°38'43.119"W	10.00	
7317.00†	63.146	6.162	7072.84	85.80	-152.58	1095.48	40°08'49.136"N	104°38'42.977"W	10.00	
7417.00†	72.917	3.864	7110.21	177.65	-60.31	1103.51	40°08'50.048"N	104°38'42.874"W	10.00	
7488.53†	79.922	2.372	7127.00	246.23	9.07	1107.28	40°08'50.733"N	104°38'42.825"W	10.00	FORT HAYS
7517.00†	82.712	1.798	7131.30	273.92	37.19	1108.30	40°08'51.011"N	104°38'42.812"W	10.00	
7586.21	89.497	0.428	7136.00	341.59	106.19	1109.64	40°08'51.693"N	104°38'42.795"W	10.00	End of 3D Arc (J)
7617.00†	89.497	0.428	7136.27	371.71	136.98	1109.87	40°08'51.997"N	104°38'42.792"W	0.00	
7717.00†	89.497	0.428	7137.15	469.54	236.97	1110.61	40°08'52.985"N	104°38'42.782"W	0.00	
7817.00†	89.497	0.428	7138.02	567.37	336.96	1111.36	40°08'53.974"N	104°38'42.772"W	0.00	
7917.00†	89.497	0.428	7138.90	665.20	436.96	1112.11	40°08'54.962"N	104°38'42.763"W	0.00	
8017.00†	89.497	0.428	7139.78	763.03	536.95	1112.85	40°08'55.950"N	104°38'42.753"W	0.00	
8117.00†	89.497	0.428	7140.66	860.86	636.94	1113.60	40°08'56.938"N	104°38'42.743"W	0.00	
8217.00†	89.497	0.428	7141.54	958.69	736.94	1114.35	40°08'57.926"N	104°38'42.734"W	0.00	
8317.00†	89.497	0.428	7142.41	1056.52	836.93	1115.09	40°08'58.914"N	104°38'42.724"W	0.00	
8417.00†	89.497	0.428	7143.29	1154.34	936.92	1115.84	40°08'59.902"N	104°38'42.714"W	0.00	
8517.00†	89.497	0.428	7144.17	1252.17	1036.92	1116.59	40°09'00.891"N	104°38'42.705"W	0.00	
8617.00†	89.497	0.428	7145.05	1350.00	1136.91	1117.33	40°09'01.879"N	104°38'42.695"W	0.00	
8717.00†	89.497	0.428	7145.93	1447.83	1236.90	1118.08	40°09'02.867"N	104°38'42.685"W	0.00	
8817.00†	89.497	0.428	7146.81	1545.66	1336.90	1118.82	40°09'03.855"N	104°38'42.676"W	0.00	
8917.00†	89.497	0.428	7147.68	1643.49	1436.89	1119.57	40°09'04.843"N	104°38'42.666"W	0.00	
9017.00†	89.497	0.428	7148.56	1741.32	1536.88	1120.32	40°09'05.831"N	104°38'42.656"W	0.00	
9117.00†	89.497	0.428	7149.44	1839.15	1636.88	1121.06	40°09'06.819"N	104°38'42.647"W	0.00	
9217.00†	89.497	0.428	7150.32	1936.97	1736.87	1121.81	40°09'07.808"N	104°38'42.637"W	0.00	
9317.00†	89.497	0.428	7151.20	2034.80	1836.86	1122.56	40°09'08.796"N	104°38'42.627"W	0.00	
9417.00†	89.497	0.428	7152.08	2132.63	1936.86	1123.30	40°09'09.784"N	104°38'42.618"W	0.00	
9517.00†	89.497	0.428	7152.95	2230.46	2036.85	1124.05	40°09'10.772"N	104°38'42.608"W	0.00	
9617.00†	89.497	0.428	7153.83	2328.29	2136.84	1124.80	40°09'11.760"N	104°38'42.598"W	0.00	
9717.00†	89.497	0.428	7154.71	2426.12	2236.84	1125.54	40°09'12.748"N	104°38'42.589"W	0.00	
9817.00†	89.497	0.428	7155.59	2523.95	2336.83	1126.29	40°09'13.736"N	104°38'42.579"W	0.00	
9917.00†	89.497	0.428	7156.47	2621.78	2436.82	1127.04	40°09'14.725"N	104°38'42.569"W	0.00	
10017.00†	89.497	0.428	7157.34	2719.61	2536.82	1127.78	40°09'15.713"N	104°38'42.560"W	0.00	
10117.00†	89.497	0.428	7158.22	2817.43	2636.81	1128.53	40°09'16.701"N	104°38'42.550"W	0.00	
10217.00†	89.497	0.428	7159.10	2915.26	2736.80	1129.28	40°09'17.689"N	104°38'42.540"W	0.00	
10317.00†	89.497	0.428	7159.98	3013.09	2836.80	1130.02	40°09'18.677"N	104°38'42.531"W	0.00	
10417.00†	89.497	0.428	7160.86	3110.92	2936.79	1130.77	40°09'19.665"N	104°38'42.521"W	0.00	
10517.00†	89.497	0.428	7161.74	3208.75	3036.78	1131.52	40°09'20.653"N	104°38'42.511"W	0.00	
10617.00†	89.497	0.428	7162.61	3306.58	3136.78	1132.26	40°09'21.642"N	104°38'42.502"W	0.00	
10717.00†	89.497	0.428	7163.49	3404.41	3236.77	1133.01	40°09'22.630"N	104°38'42.492"W	0.00	



# Planned Wellpath Report

COOK 37C-3HZ (PERMIT) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 COOK 37C-3HZ (526'FSL & 2421'FEL,SEC.10)
Area	COLORADO	Well	COOK 37C-3HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 37C-3HZ PWB
Facility	SEC.10-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
10817.00†	89.497	0.428	7164.37	3502.24	3336.76	1133.76	40°09'23.618"N	104°38'42.482"W	0.00	
10917.00†	89.497	0.428	7165.25	3600.06	3436.76	1134.50	40°09'24.606"N	104°38'42.473"W	0.00	
11017.00†	89.497	0.428	7166.13	3697.89	3536.75	1135.25	40°09'25.594"N	104°38'42.463"W	0.00	
11117.00†	89.497	0.428	7167.00	3795.72	3636.74	1136.00	40°09'26.582"N	104°38'42.453"W	0.00	
11217.00†	89.497	0.428	7167.88	3893.55	3736.74	1136.74	40°09'27.570"N	104°38'42.444"W	0.00	
11317.00†	89.497	0.428	7168.76	3991.38	3836.73	1137.49	40°09'28.559"N	104°38'42.434"W	0.00	
11417.00†	89.497	0.428	7169.64	4089.21	3936.72	1138.24	40°09'29.547"N	104°38'42.424"W	0.00	
11517.00†	89.497	0.428	7170.52	4187.04	4036.72	1138.98	40°09'30.535"N	104°38'42.414"W	0.00	
11617.00†	89.497	0.428	7171.40	4284.87	4136.71	1139.73	40°09'31.523"N	104°38'42.405"W	0.00	
11717.00†	89.497	0.428	7172.27	4382.69	4236.70	1140.48	40°09'32.511"N	104°38'42.395"W	0.00	
11817.00†	89.497	0.428	7173.15	4480.52	4336.70	1141.22	40°09'33.499"N	104°38'42.385"W	0.00	
11917.00†	89.497	0.428	7174.03	4578.35	4436.69	1141.97	40°09'34.487"N	104°38'42.376"W	0.00	
12017.00†	89.497	0.428	7174.91	4676.18	4536.68	1142.72	40°09'35.476"N	104°38'42.366"W	0.00	
12117.00†	89.497	0.428	7175.79	4774.01	4636.68	1143.46	40°09'36.464"N	104°38'42.356"W	0.00	
12217.00†	89.497	0.428	7176.67	4871.84	4736.67	1144.21	40°09'37.452"N	104°38'42.347"W	0.00	
12317.00†	89.497	0.428	7177.54	4969.67	4836.66	1144.96	40°09'38.440"N	104°38'42.337"W	0.00	
12417.00†	89.497	0.428	7178.42	5067.50	4936.66	1145.70	40°09'39.428"N	104°38'42.327"W	0.00	
12517.00†	89.497	0.428	7179.30	5165.32	5036.65	1146.45	40°09'40.416"N	104°38'42.318"W	0.00	
12617.00†	89.497	0.428	7180.18	5263.15	5136.64	1147.20	40°09'41.404"N	104°38'42.308"W	0.00	
12710.57	89.497	0.428	7181.00 <sup>1</sup>	5354.70	5230.21	1147.90	40°09'42.329"N	104°38'42.299"W	0.00	End of Tangent (J)

## HOLE & CASING SECTIONS - Ref Wellbore: COOK 37C-3HZ PWB Ref Wellpath: COOK 37C-3HZ (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	7586.21	6686.21	900.00	7136.00	0.00	0.00	106.19	1109.64
7in Casing Intermediate	17.00	7586.21	7569.21	17.00	7136.00	0.00	0.00	106.19	1109.64
6.125in Open Hole	7586.21	12710.57	5124.36	7136.00	7181.00	106.19	1109.64	5230.21	1147.90
4.5in Casing Production	17.00	12710.57	12693.57	17.00	7181.00	0.00	0.00	5230.21	1147.90

## 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	-24.45	17.61	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W	polygon
COOK 4 HZ PAD SECTION 3 LINES		0.00	-24.45	17.61	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W	polygon
COOK 4 HZ PAD HARDLINES SEC. 10 (460' SETBACKS)		7100.00	-24.45	17.61	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	-24.45	17.61	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W	polygon
1) COOK 37C-3HZ BHL ON PLAT (460'FSL & 1300'FEL,SEC.3) REV-1	12710.57	7181.00	5230.21	1147.90	3238936.25	1302923.41	40°09'42.329"N	104°38'42.299"W	point

## SURVEY PROGRAM - Ref Wellbore: COOK 37C-3HZ PWB Ref Wellpath: COOK 37C-3HZ (PERMIT) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	12710.57	NaviTrak (Standard)		COOK 37C-3HZ PWB



# Planned Wellpath Report

COOK 37C-3HZ (PERMIT) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 COOK 37C-3HZ (526'FSL & 2421'FEL,SEC.10)
Area	COLORADO	Well	COOK 37C-3HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 37C-3HZ PWB
Facility	SEC.10-T2N-R65W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
4055.12	12.460	115.000	4000.00	PARKMAN
4590.73	12.460	115.000	4523.00	SUSSEX
6940.58	27.237	23.286	6811.00	SHARON SPRINGS
7003.02	32.974	18.355	6865.00	NIOBRARA A
7045.74	36.986	15.788	6900.00	NIOBRARA B
7174.81	49.337	10.259	6994.00	NIOBRARA C
7488.53	79.922	2.372	7127.00	FORT HAYS