

Location:	COLORADO	Slot:	SLOT#04 COOK 36N-3HZ (574'FSL & 2456'FEL,SEC.10)
Field:	WELD COUNTY (KERR MCGEE)	Well:	COOK 36N-3HZ
Facility:	SEC.10-T2N-R65W	Wellbore:	COOK 36N-3HZ PWB

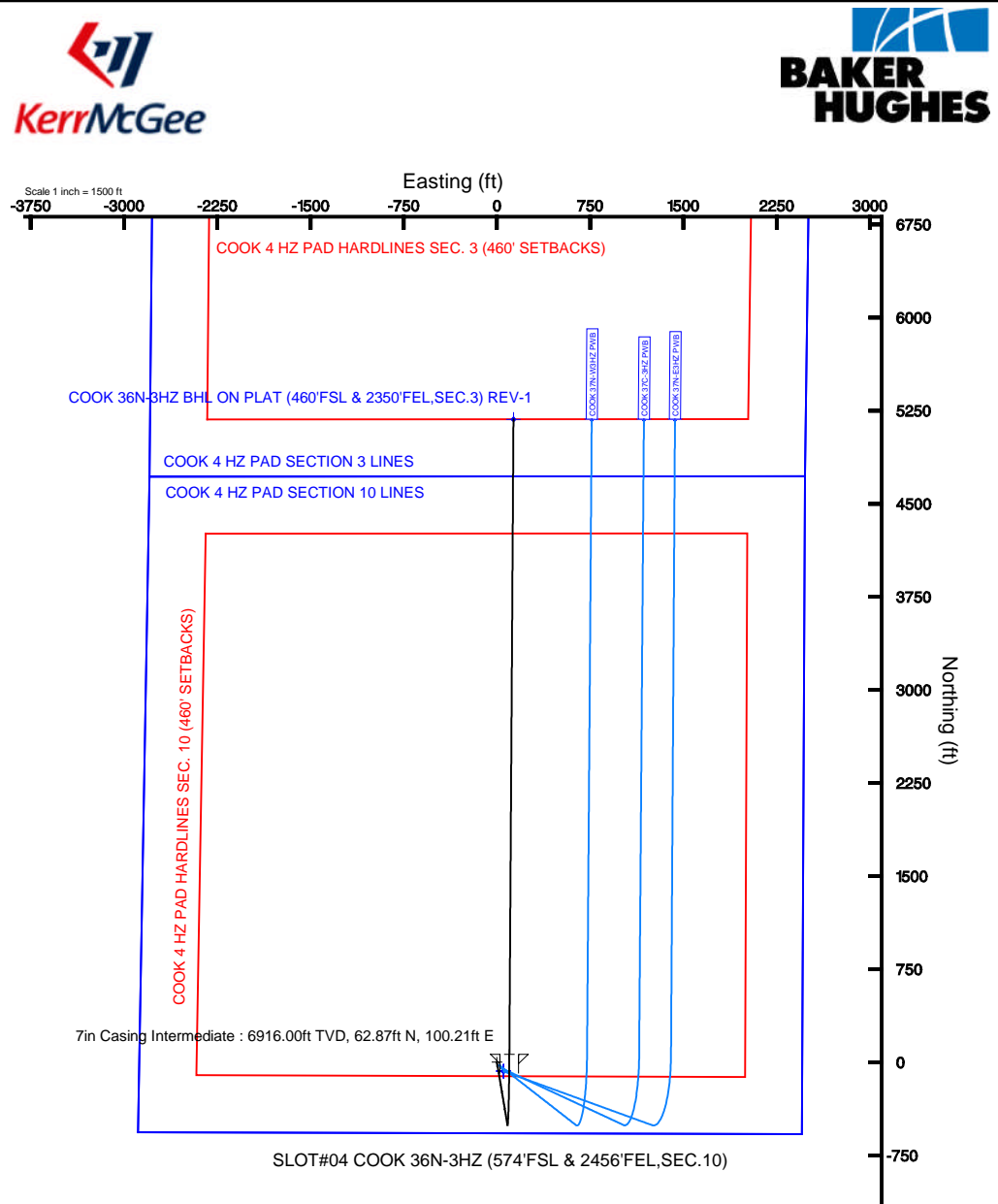
Location:	COLORADO	Slot:	SLOT#04 COOK 36N-3HZ (574'FSL & 2456'FEL,SEC.10)
Field:	WELD COUNTY (KERR MCGEE)	Well:	COOK 36N-3HZ
Facility:	SEC.10-T2N-R65W	Wellbore:	COOK 36N-3HZ PWB

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#04 COOK 36N-3HZ (574FSL & 2456FEL,SEC.10)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wilsjef02 on 2/24/2012

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#04 COOK 36N-3HZ (574FSL & 2456FEL,SEC.10)	72.86	-52.88	3237802.924	1297730.681	40°08'51.122"N	104°38'57.538"W
RIG (RKB) to Mud line (At Slot: SLOT#04 COOK 36N-3HZ (574FSL & 2456FEL,SEC.10))					4896ft	
Mean Sea Level to Mud line (At Slot: SLOT#04 COOK 36N-3HZ (574FSL & 2456FEL,SEC.10))					0ft	
RIG (RKB) to Mean Sea Level					4896ft	

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	170.500	17.00	0.00	0.00	0.00	0.00
End of Tangent	1600.00	0.000	170.500	1600.00	0.00	0.00	0.00	0.00
End of Build (J)	1922.50	6.450	170.500	1921.82	-17.88	2.99	2.00	-17.80
End of Tangent (J)	6308.20	6.450	170.500	6279.76	-503.80	84.31	0.00	-501.47
End of 3D Arc (J)	7269.06	89.731	0.368	6916.00	62.86	100.21	10.00	65.41
End of Tangent (J)	12387.77	89.731	0.368	6940.00	5181.41	133.07	0.00	5183.12

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	-72.82	52.87	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W
COOK 4 HZ PAD SECTION 3 LINES		0.00	-72.82	52.87	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W
COOK 389N-9HZ BHL ON PLAT (460 FSL & 2350 FSL SEC.) REV-1	12987.77	6940.40	5181.41	133.07	3237888.28	1302912.90	40°09'42.325"N	104°38'55.624"W
COOK 4 HZ PAD HARDLINES SEC. 10 (460' SETBACKS)		7100.00	-72.82	52.87	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	-72.82	52.87	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W



SLOT#04 COOK 36N-3HZ (574'FSL & 2456'FEL,SEC.10)



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COOK 36N-3HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 COOK 36N-3HZ (574'FSL & 2456'FEL,SEC.10)
Area	COLORADO	Well	COOK 36N-3HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 36N-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	2/24/2012 at 13:53:35
Convergence at slot	0.55° East	Database/Source file	WellArchitectDB/COOK_36N-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	72.86	-52.88	3237802.92	1297730.68	40°08'51.122"N	104°38'57.538"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#04 COOK 36N-3HZ (574'FSL & 2456'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	1.47°



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COOK 36N-3HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 COOK 36N-3HZ (574'FSL & 2456'FEL,SEC.10)
Area	COLORADO	Well	COOK 36N-3HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 36N-3HZ PWB
Facility	SEC.10-T2N-R65W		

WELLPATH DATA (135 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	170.500	0.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	
17.00	0.000	170.500	17.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	Tie On
117.00†	0.000	170.500	117.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	
217.00†	0.000	170.500	217.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	
317.00†	0.000	170.500	317.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	
417.00†	0.000	170.500	417.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	
517.00†	0.000	170.500	517.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	
617.00†	0.000	170.500	617.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	
717.00†	0.000	170.500	717.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	
817.00†	0.000	170.500	817.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	
917.00†	0.000	170.500	917.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	
1017.00†	0.000	170.500	1017.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	
1117.00†	0.000	170.500	1117.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	
1217.00†	0.000	170.500	1217.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	
1317.00†	0.000	170.500	1317.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	
1417.00†	0.000	170.500	1417.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	
1517.00†	0.000	170.500	1517.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	
1600.00	0.000	170.500	1600.00	0.00	0.00	0.00	40°08'51.122"N	104°38'57.538"W	0.00	End of Tangent
1617.00†	0.340	170.500	1617.00	-0.05	-0.05	0.01	40°08'51.122"N	104°38'57.538"W	2.00	
1717.00†	2.340	170.500	1716.97	-2.35	-2.36	0.39	40°08'51.099"N	104°38'57.533"W	2.00	
1817.00†	4.340	170.500	1816.79	-8.06	-8.10	1.36	40°08'51.042"N	104°38'57.521"W	2.00	
1917.00†	6.340	170.500	1916.35	-17.20	-17.28	2.89	40°08'50.951"N	104°38'57.501"W	2.00	
1922.50	6.450	170.500	1921.82	-17.80	-17.88	2.99	40°08'50.945"N	104°38'57.499"W	2.00	End of Build (J)
2017.00†	6.450	170.500	2015.72	-28.22	-28.35	4.74	40°08'50.842"N	104°38'57.477"W	0.00	
2117.00†	6.450	170.500	2115.09	-39.25	-39.43	6.60	40°08'50.732"N	104°38'57.453"W	0.00	
2217.00†	6.450	170.500	2214.46	-50.28	-50.51	8.45	40°08'50.623"N	104°38'57.429"W	0.00	
2317.00†	6.450	170.500	2313.82	-61.31	-61.59	10.31	40°08'50.513"N	104°38'57.405"W	0.00	
2417.00†	6.450	170.500	2413.19	-72.34	-72.67	12.16	40°08'50.404"N	104°38'57.381"W	0.00	
2517.00†	6.450	170.500	2512.56	-83.37	-83.75	14.02	40°08'50.294"N	104°38'57.358"W	0.00	
2617.00†	6.450	170.500	2611.92	-94.39	-94.83	15.87	40°08'50.185"N	104°38'57.334"W	0.00	
2717.00†	6.450	170.500	2711.29	-105.42	-105.91	17.72	40°08'50.075"N	104°38'57.310"W	0.00	
2817.00†	6.450	170.500	2810.66	-116.45	-116.99	19.58	40°08'49.966"N	104°38'57.286"W	0.00	
2917.00†	6.450	170.500	2910.02	-127.48	-128.07	21.43	40°08'49.856"N	104°38'57.262"W	0.00	
3017.00†	6.450	170.500	3009.39	-138.51	-139.15	23.29	40°08'49.747"N	104°38'57.238"W	0.00	
3117.00†	6.450	170.500	3108.76	-149.53	-150.23	25.14	40°08'49.637"N	104°38'57.214"W	0.00	
3217.00†	6.450	170.500	3208.13	-160.56	-161.31	26.99	40°08'49.528"N	104°38'57.190"W	0.00	
3317.00†	6.450	170.500	3307.49	-171.59	-172.39	28.85	40°08'49.418"N	104°38'57.167"W	0.00	
3417.00†	6.450	170.500	3406.86	-182.62	-183.47	30.70	40°08'49.309"N	104°38'57.143"W	0.00	
3517.00†	6.450	170.500	3506.23	-193.65	-194.55	32.56	40°08'49.199"N	104°38'57.119"W	0.00	
3617.00†	6.450	170.500	3605.59	-204.68	-205.63	34.41	40°08'49.090"N	104°38'57.095"W	0.00	
3717.00†	6.450	170.500	3704.96	-215.70	-216.71	36.26	40°08'48.980"N	104°38'57.071"W	0.00	
3817.00†	6.450	170.500	3804.33	-226.73	-227.79	38.12	40°08'48.871"N	104°38'57.047"W	0.00	
3917.00†	6.450	170.500	3903.69	-237.76	-238.87	39.97	40°08'48.762"N	104°38'57.023"W	0.00	
3971.65†	6.450	170.500	3958.00	-243.79	-244.92	40.99	40°08'48.702"N	104°38'57.010"W	0.00	PARKMAN
4017.00†	6.450	170.500	4003.06	-248.79	-249.95	41.83	40°08'48.652"N	104°38'56.999"W	0.00	
4117.00†	6.450	170.500	4102.43	-259.82	-261.03	43.68	40°08'48.543"N	104°38'56.976"W	0.00	
4217.00†	6.450	170.500	4201.80	-270.85	-272.10	45.53	40°08'48.433"N	104°38'56.952"W	0.00	
4317.00†	6.450	170.500	4301.16	-281.87	-283.18	47.39	40°08'48.324"N	104°38'56.928"W	0.00	
4417.00†	6.450	170.500	4400.53	-292.90	-294.26	49.24	40°08'48.214"N	104°38'56.904"W	0.00	
4517.00†	6.450	170.500	4499.90	-303.93	-305.34	51.10	40°08'48.105"N	104°38'56.880"W	0.00	
4559.37†	6.450	170.500	4542.00	-308.60	-310.04	51.88	40°08'48.058"N	104°38'56.870"W	0.00	SUSSEX
4617.00†	6.450	170.500	4599.26	-314.96	-316.42	52.95	40°08'47.995"N	104°38'56.856"W	0.00	
4717.00†	6.450	170.500	4698.63	-325.99	-327.50	54.81	40°08'47.886"N	104°38'56.832"W	0.00	
4817.00†	6.450	170.500	4798.00	-337.02	-338.58	56.66	40°08'47.776"N	104°38'56.808"W	0.00	
4917.00†	6.450	170.500	4897.36	-348.04	-349.66	58.51	40°08'47.667"N	104°38'56.785"W	0.00	
5017.00†	6.450	170.500	4996.73	-359.07	-360.74	60.37	40°08'47.557"N	104°38'56.761"W	0.00	
5117.00†	6.450	170.500	5096.10	-370.10	-371.82	62.22	40°08'47.448"N	104°38'56.737"W	0.00	
5217.00†	6.450	170.500	5195.47	-381.13	-382.90	64.08	40°08'47.338"N	104°38'56.713"W	0.00	
5317.00†	6.450	170.500	5294.83	-392.16	-393.98	65.93	40°08'47.229"N	104°38'56.689"W	0.00	
5417.00†	6.450	170.500	5394.20	-403.19	-405.06	67.78	40°08'47.119"N	104°38'56.665"W	0.00	



Planned Wellpath Report

COOK 36N-3HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 COOK 36N-3HZ (574'FSL & 2456'FEL,SEC.10)
Area	COLORADO	Well	COOK 36N-3HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 36N-3HZ PWB
Facility	SEC.10-T2N-R65W		

WELLPATH DATA (135 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5517.00†	6.450	170.500	5493.57	-414.21	-416.14	69.64	40°08'47.010"N	104°38'56.641"W	0.00	
5617.00†	6.450	170.500	5592.93	-425.24	-427.22	71.49	40°08'46.900"N	104°38'56.617"W	0.00	
5717.00†	6.450	170.500	5692.30	-436.27	-438.30	73.35	40°08'46.791"N	104°38'56.594"W	0.00	
5817.00†	6.450	170.500	5791.67	-447.30	-449.38	75.20	40°08'46.681"N	104°38'56.570"W	0.00	
5917.00†	6.450	170.500	5891.04	-458.33	-460.46	77.05	40°08'46.572"N	104°38'56.546"W	0.00	
6017.00†	6.450	170.500	5990.40	-469.36	-471.54	78.91	40°08'46.462"N	104°38'56.522"W	0.00	
6117.00†	6.450	170.500	6089.77	-480.38	-482.62	80.76	40°08'46.353"N	104°38'56.498"W	0.00	
6217.00†	6.450	170.500	6189.14	-491.41	-493.70	82.62	40°08'46.243"N	104°38'56.474"W	0.00	
6308.20	6.450	170.500	6279.76	-501.47	-503.80	84.31	40°08'46.143"N	104°38'56.452"W	0.00	End of Tangent (J)
6317.00†	5.585	168.942	6288.51	-502.37	-504.71	84.47	40°08'46.134"N	104°38'56.450"W	10.00	
6417.00†	4.659	14.107	6388.36	-503.16	-505.55	86.40	40°08'46.126"N	104°38'56.425"W	10.00	
6517.00†	14.567	4.636	6486.84	-486.60	-489.03	88.41	40°08'46.289"N	104°38'56.400"W	10.00	
6617.00†	24.549	2.792	6580.95	-453.19	-455.66	90.44	40°08'46.619"N	104°38'56.373"W	10.00	
6717.00†	34.541	1.975	6667.84	-403.95	-406.46	92.44	40°08'47.105"N	104°38'56.348"W	10.00	
6817.00†	44.537	1.490	6744.86	-340.37	-342.90	94.33	40°08'47.733"N	104°38'56.323"W	10.00	
6917.00†	54.533	1.153	6809.68	-264.39	-266.94	96.07	40°08'48.484"N	104°38'56.301"W	10.00	
6965.28†	59.360	1.020	6836.00	-223.93	-226.49	96.83	40°08'48.884"N	104°38'56.291"W	10.00	SHARON SPRINGS
7017.00†	64.531	0.891	6860.32	-178.31	-180.87	97.59	40°08'49.335"N	104°38'56.281"W	10.00	
7085.46†	71.376	0.737	6886.00	-114.89	-117.46	98.49	40°08'49.961"N	104°38'56.270"W	10.00	NIOBRARA A
7105.27†	73.356	0.694	6892.00	-96.02	-98.59	98.73	40°08'50.148"N	104°38'56.267"W	10.00	NIOBRARA B
7117.00†	74.529	0.670	6895.24	-84.75	-87.31	98.86	40°08'50.259"N	104°38'56.265"W	10.00	
7217.00†	84.527	0.469	6913.40	13.45	10.89	99.83	40°08'51.230"N	104°38'56.252"W	10.00	
7269.06	89.731	0.368	6916.00	65.41	62.86	100.21	40°08'51.743"N	104°38'56.247"W	10.00	End of 3D Arc (J)
7317.00†	89.731	0.368	6916.23	113.35	110.80	100.52	40°08'52.217"N	104°38'56.244"W	0.00	
7417.00†	89.731	0.368	6916.70	213.33	210.80	101.16	40°08'53.205"N	104°38'56.235"W	0.00	
7517.00†	89.731	0.368	6917.17	313.31	310.80	101.81	40°08'54.193"N	104°38'56.227"W	0.00	
7617.00†	89.731	0.368	6917.63	413.29	410.79	102.45	40°08'55.181"N	104°38'56.219"W	0.00	
7717.00†	89.731	0.368	6918.10	513.27	510.79	103.09	40°08'56.170"N	104°38'56.210"W	0.00	
7817.00†	89.731	0.368	6918.57	613.25	610.79	103.73	40°08'57.158"N	104°38'56.202"W	0.00	
7917.00†	89.731	0.368	6919.04	713.23	710.78	104.37	40°08'58.146"N	104°38'56.194"W	0.00	
8017.00†	89.731	0.368	6919.51	813.21	810.78	105.02	40°08'59.134"N	104°38'56.186"W	0.00	
8117.00†	89.731	0.368	6919.98	913.19	910.78	105.66	40°09'00.122"N	104°38'56.177"W	0.00	
8217.00†	89.731	0.368	6920.45	1013.17	1010.78	106.30	40°09'01.111"N	104°38'56.169"W	0.00	
8317.00†	89.731	0.368	6920.92	1113.15	1110.77	106.94	40°09'02.099"N	104°38'56.161"W	0.00	
8417.00†	89.731	0.368	6921.39	1213.13	1210.77	107.58	40°09'03.087"N	104°38'56.153"W	0.00	
8517.00†	89.731	0.368	6921.85	1313.11	1310.77	108.23	40°09'04.075"N	104°38'56.144"W	0.00	
8617.00†	89.731	0.368	6922.32	1413.09	1410.76	108.87	40°09'05.063"N	104°38'56.136"W	0.00	
8717.00†	89.731	0.368	6922.79	1513.07	1510.76	109.51	40°09'06.051"N	104°38'56.128"W	0.00	
8817.00†	89.731	0.368	6923.26	1613.05	1610.76	110.15	40°09'07.040"N	104°38'56.119"W	0.00	
8917.00†	89.731	0.368	6923.73	1713.03	1710.75	110.79	40°09'08.028"N	104°38'56.111"W	0.00	
9017.00†	89.731	0.368	6924.20	1813.01	1810.75	111.44	40°09'09.016"N	104°38'56.103"W	0.00	
9117.00†	89.731	0.368	6924.67	1912.99	1910.75	112.08	40°09'10.004"N	104°38'56.095"W	0.00	
9217.00†	89.731	0.368	6925.14	2012.97	2010.74	112.72	40°09'10.992"N	104°38'56.086"W	0.00	
9317.00†	89.731	0.368	6925.60	2112.96	2110.74	113.36	40°09'11.980"N	104°38'56.078"W	0.00	
9417.00†	89.731	0.368	6926.07	2212.94	2210.74	114.00	40°09'12.969"N	104°38'56.070"W	0.00	
9517.00†	89.731	0.368	6926.54	2312.92	2310.73	114.64	40°09'13.957"N	104°38'56.062"W	0.00	
9617.00†	89.731	0.368	6927.01	2412.90	2410.73	115.29	40°09'14.945"N	104°38'56.053"W	0.00	
9717.00†	89.731	0.368	6927.48	2512.88	2510.73	115.93	40°09'15.933"N	104°38'56.045"W	0.00	
9817.00†	89.731	0.368	6927.95	2612.86	2610.72	116.57	40°09'16.921"N	104°38'56.037"W	0.00	
9917.00†	89.731	0.368	6928.42	2712.84	2710.72	117.21	40°09'17.910"N	104°38'56.028"W	0.00	
10017.00†	89.731	0.368	6928.89	2812.82	2810.72	117.85	40°09'18.898"N	104°38'56.020"W	0.00	
10117.00†	89.731	0.368	6929.35	2912.80	2910.72	118.50	40°09'19.886"N	104°38'56.012"W	0.00	
10217.00†	89.731	0.368	6929.82	3012.78	3010.71	119.14	40°09'20.874"N	104°38'56.004"W	0.00	
10317.00†	89.731	0.368	6930.29	3112.76	3110.71	119.78	40°09'21.862"N	104°38'55.995"W	0.00	
10417.00†	89.731	0.368	6930.76	3212.74	3210.71	120.42	40°09'22.850"N	104°38'55.987"W	0.00	
10517.00†	89.731	0.368	6931.23	3312.72	3310.70	121.06	40°09'23.839"N	104°38'55.979"W	0.00	
10617.00†	89.731	0.368	6931.70	3412.70	3410.70	121.71	40°09'24.827"N	104°38'55.971"W	0.00	
10717.00†	89.731	0.368	6932.17	3512.68	3510.70	122.35	40°09'25.815"N	104°38'55.962"W	0.00	
10817.00†	89.731	0.368	6932.64	3612.66	3610.69	122.99	40°09'26.803"N	104°38'55.954"W	0.00	
10917.00†	89.731	0.368	6933.11	3712.64	3710.69	123.63	40°09'27.791"N	104°38'55.946"W	0.00	



Planned Wellpath Report

COOK 36N-3HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 COOK 36N-3HZ (574'FSL & 2456'FEL,SEC.10)
Area	COLORADO	Well	COOK 36N-3HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 36N-3HZ PWB
Facility	SEC.10-T2N-R65W		

WELLPATH DATA (135 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11017.00†	89.731	0.368	6933.57	3812.62	3810.69	124.27	40°09'28.779"N	104°38'55.937"W	0.00	
11117.00†	89.731	0.368	6934.04	3912.60	3910.68	124.92	40°09'29.768"N	104°38'55.929"W	0.00	
11217.00†	89.731	0.368	6934.51	4012.58	4010.68	125.56	40°09'30.756"N	104°38'55.921"W	0.00	
11317.00†	89.731	0.368	6934.98	4112.56	4110.68	126.20	40°09'31.744"N	104°38'55.913"W	0.00	
11417.00†	89.731	0.368	6935.45	4212.54	4210.67	126.84	40°09'32.732"N	104°38'55.904"W	0.00	
11517.00†	89.731	0.368	6935.92	4312.52	4310.67	127.48	40°09'33.720"N	104°38'55.896"W	0.00	
11617.00†	89.731	0.368	6936.39	4412.50	4410.67	128.13	40°09'34.708"N	104°38'55.888"W	0.00	
11717.00†	89.731	0.368	6936.86	4512.48	4510.66	128.77	40°09'35.697"N	104°38'55.880"W	0.00	
11817.00†	89.731	0.368	6937.32	4612.46	4610.66	129.41	40°09'36.685"N	104°38'55.871"W	0.00	
11917.00†	89.731	0.368	6937.79	4712.44	4710.66	130.05	40°09'37.673"N	104°38'55.863"W	0.00	
12017.00†	89.731	0.368	6938.26	4812.42	4810.66	130.69	40°09'38.661"N	104°38'55.855"W	0.00	
12117.00†	89.731	0.368	6938.73	4912.41	4910.65	131.34	40°09'39.649"N	104°38'55.846"W	0.00	
12217.00†	89.731	0.368	6939.20	5012.39	5010.65	131.98	40°09'40.638"N	104°38'55.838"W	0.00	
12317.00†	89.731	0.368	6939.67	5112.37	5110.65	132.62	40°09'41.626"N	104°38'55.830"W	0.00	
12387.77	89.731	0.368	6940.00 ¹	5183.12	5181.41	133.07	40°09'42.325"N	104°38'55.824"W	0.00	End of Tangent (J)

HOLE & CASING SECTIONS - Ref Wellbore: COOK 36N-3HZ PWB Ref Wellpath: COOK 36N-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	7269.06	6369.06	900.00	6916.00	0.00	0.00	62.87	100.21
7in Casing Intermediate	17.00	7269.06	7252.06	17.00	6916.00	0.00	0.00	62.87	100.21
6.125in Open Hole	7269.06	12387.77	5118.71	6916.00	6940.00	62.87	100.21	5181.41	133.07
4.5in Casing Production	17.00	12387.77	12370.77	17.00	6940.00	0.00	0.00	5181.41	133.07

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	-72.82	52.87	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W	polygon
COOK 4 HZ PAD SECTION 3 LINES		0.00	-72.82	52.87	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W	polygon
1) COOK 36N-3HZ BHL ON PLAT (460'FSL & 2350'FEL,SEC.3) REV-1	12387.77	6940.00	5181.41	133.07	3237886.28	1302912.90	40°09'42.325"N	104°38'55.824"W	point
COOK 4 HZ PAD HARDLINES SEC. 10 (460' SETBACKS)		7100.00	-72.82	52.87	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	-72.82	52.87	3237856.49	1297658.38	40°08'50.402"N	104°38'56.857"W	polygon

SURVEY PROGRAM - Ref Wellbore: COOK 36N-3HZ PWB Ref Wellpath: COOK 36N-3HZ (PERMIT) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	12387.77	NaviTrak (Standard)		COOK 36N-3HZ PWB



Planned Wellpath Report

COOK 36N-3HZ (PERMIT) PWP

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**REFERENCE WELLPATH IDENTIFICATION**

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 COOK 36N-3HZ (574'FSL & 2456'FEL,SEC.10)
Area	COLORADO	Well	COOK 36N-3HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COOK 36N-3HZ PWB
Facility	SEC.10-T2N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
3971.65	6.450	170.500	3958.00	PARKMAN
4559.37	6.450	170.500	4542.00	SUSSEX
6965.28	59.360	1.020	6836.00	SHARON SPRINGS
7085.46	71.376	0.737	6886.00	NIOBRARA A
7105.27	73.356	0.694	6892.00	NIOBRARA B