

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4)
Field: WELD COUNTY (KERR MCGEE) Well: REIGLE 4N-9HZ
Facility: SEC.04-T2N-R65W Wellbore: REIGLE 4N-9HZ PWB

Plot reference wellpath is REIGLE 4N-9HZ (PERMIT) PWP

True vertical depths are referenced to Rig on SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to Rig on SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4) (RKB)	North Reference: True north
Rig on SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4) (RKB) to Mean Sea Level: 4886 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wjls02 on 8/23/2012

Location Information

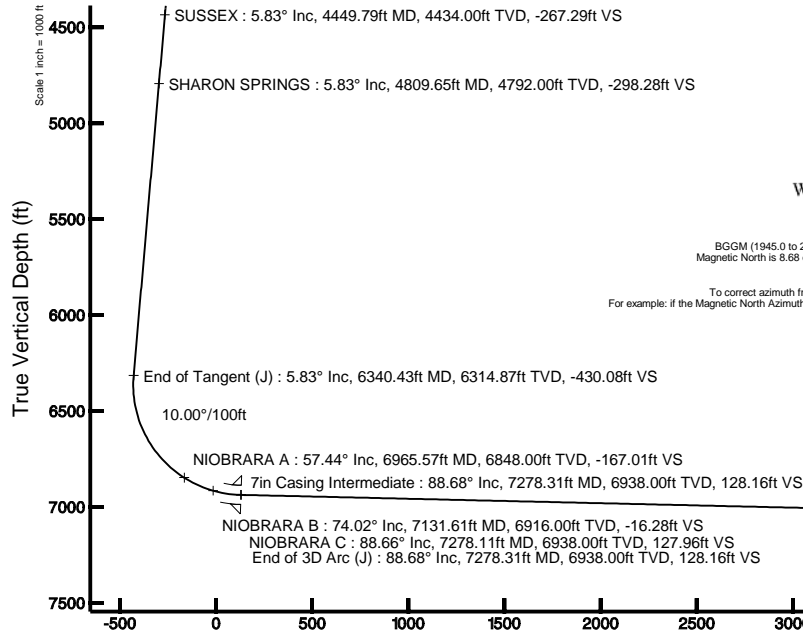
Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.04-T2N-R65W			3232187.417	1305339.416	40°10'06.838"N	104°40'08.933"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4)	1724.24	-2223.06	3229948.401	1307042.675	40°10'23.876"N	104°40'37.571"W
Rig on SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4) (RKB) to Mud line (At Slot: SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4))			4886ft			
Mean Sea Level to Mud line (At Slot: SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4))			0ft			
Rig on SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4) (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	29.280	17.00	0.00	0.00	0.00	0.00
End of Tangent	1200.00	0.000	29.280	1200.00	0.00	0.00	0.00	0.00
End of Build (J)	1491.35	5.827	29.280	1490.85	12.91	7.24	2.00	-12.55
End of Tangent (J)	6340.43	5.827	29.280	6314.87	442.32	248.01	0.00	-430.08
End of 3D Arc (J)	7278.31	88.676	180.613	6938.00	-115.43	271.86	10.00	128.16
End of Tangent (J)	11866.32	88.676	180.613	7044.00	-4701.95	222.78	0.00	4707.22

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
REIGLE 4-4HZ PAD SECTION LINES		0.00	0.00	0.00	3229948.40	1307042.68	40°10'23.876"N	104°40'37.571"W
REIGLE 4N-9HZ BHL ON PLAT (51'FNL & 545'FWL, SEC.9) REV-1		7044.00	-4701.97	222.75	3230214.76	1302343.19	40°09'37.411"N	104°40'34.702"W
REIGLE 4-4HZ PAD HARDLINES (460' SETBACKS)		7220.00	0.00	0.00	3229948.40	1307042.68	40°10'23.876"N	104°40'37.571"W

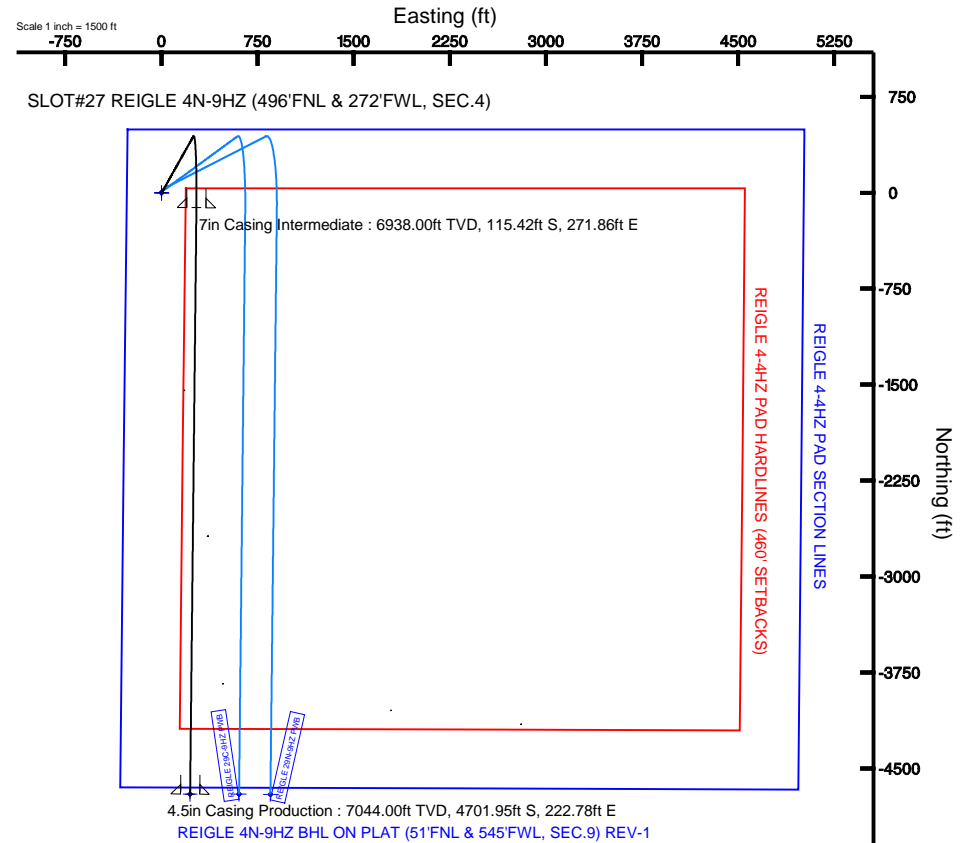


BGGM (1945.0 to 2014.0) Dip: 66.82° Field: 52857.8 nT
Magnetic North is 8.68 degrees East of True North (at 8/23/2012)

To correct azimuth from Magnetic to True add 8.68 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the True North Azimuth = 90 + 8.68 = 98.68

Vertical Section (ft)

Azimuth 177.29° with reference 0.00 N, 0.00 E





Planned Wellpath Report

REIGLE 4N-9HZ (PERMIT) PWP

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**REFERENCE WELLPATH IDENTIFICATION**

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4)
Area	COLORADO	Well	REIGLE 4N-9HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	REIGLE 4N-9HZ PWB
Facility	SEC.04-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	8/23/2012 at 21:36:35
Convergence at slot	0.53° East	Database/Source file	WellArchitectDB/REIGLE_4N-9HZ_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	1724.24	-2223.06	3229948.40	1307042.68	40°10'23.876"N	104°40'37.571"W
Facility Reference Pt			3232187.42	1305339.42	40°10'06.838"N	104°40'08.933"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 on SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4) (RKB) to Facility Vertical Datum
Horizontal Reference Pt	Slot	Rig on SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4) (RKB) to Mean Sea Level
Vertical Reference Pt	Rig on SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4) (RKB)	Rig on SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4) (RKB) to Mud Line at Slot (SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4) (RKB) to Mean Sea Level)
MD Reference Pt	Rig on SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4) (RKB)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth



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REIGLE 4N-9HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4)
Area	COLORADO	Well	REIGLE 4N-9HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	REIGLE 4N-9HZ PWB
Facility	SEC.04-T2N-R6SW		

WELLPATH DATA (131 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	29.280	0.00	0.00	0.00	0.00	40°10'23.876"N	104°40'37.571"W	0.00	
17.00	0.000	29.280	17.00	0.00	0.00	0.00	40°10'23.876"N	104°40'37.571"W	0.00	Tie On
117.00†	0.000	29.280	117.00	0.00	0.00	0.00	40°10'23.876"N	104°40'37.571"W	0.00	
217.00†	0.000	29.280	217.00	0.00	0.00	0.00	40°10'23.876"N	104°40'37.571"W	0.00	
317.00†	0.000	29.280	317.00	0.00	0.00	0.00	40°10'23.876"N	104°40'37.571"W	0.00	
417.00†	0.000	29.280	417.00	0.00	0.00	0.00	40°10'23.876"N	104°40'37.571"W	0.00	
517.00†	0.000	29.280	517.00	0.00	0.00	0.00	40°10'23.876"N	104°40'37.571"W	0.00	
617.00†	0.000	29.280	617.00	0.00	0.00	0.00	40°10'23.876"N	104°40'37.571"W	0.00	
717.00†	0.000	29.280	717.00	0.00	0.00	0.00	40°10'23.876"N	104°40'37.571"W	0.00	
817.00†	0.000	29.280	817.00	0.00	0.00	0.00	40°10'23.876"N	104°40'37.571"W	0.00	
917.00†	0.000	29.280	917.00	0.00	0.00	0.00	40°10'23.876"N	104°40'37.571"W	0.00	
1017.00†	0.000	29.280	1017.00	0.00	0.00	0.00	40°10'23.876"N	104°40'37.571"W	0.00	
1117.00†	0.000	29.280	1117.00	0.00	0.00	0.00	40°10'23.876"N	104°40'37.571"W	0.00	
1200.00	0.000	29.280	1200.00	0.00	0.00	0.00	40°10'23.876"N	104°40'37.571"W	0.00	End of Tangent
1217.00†	0.340	29.280	1217.00	-0.04	0.04	0.02	40°10'23.876"N	104°40'37.571"W	2.00	
1317.00†	2.340	29.280	1316.97	-2.03	2.08	1.17	40°10'23.897"N	104°40'37.556"W	2.00	
1417.00†	4.340	29.280	1416.79	-6.97	7.17	4.02	40°10'23.947"N	104°40'37.519"W	2.00	
1491.35	5.827	29.280	1490.85	-12.55	12.91	7.24	40°10'24.004"N	104°40'37.478"W	2.00	End of Build (J)
1517.00†	5.827	29.280	1516.37	-14.76	15.18	8.51	40°10'24.026"N	104°40'37.461"W	0.00	
1617.00†	5.827	29.280	1615.85	-23.37	24.04	13.48	40°10'24.114"N	104°40'37.397"W	0.00	
1717.00†	5.827	29.280	1715.33	-31.98	32.89	18.44	40°10'24.201"N	104°40'37.333"W	0.00	
1817.00†	5.827	29.280	1814.82	-40.59	41.75	23.41	40°10'24.289"N	104°40'37.269"W	0.00	
1917.00†	5.827	29.280	1914.30	-49.20	50.60	28.37	40°10'24.376"N	104°40'37.205"W	0.00	
2017.00†	5.827	29.280	2013.78	-57.82	59.46	33.34	40°10'24.464"N	104°40'37.142"W	0.00	
2117.00†	5.827	29.280	2113.27	-66.43	68.32	38.31	40°10'24.551"N	104°40'37.078"W	0.00	
2217.00†	5.827	29.280	2212.75	-75.04	77.17	43.27	40°10'24.639"N	104°40'37.014"W	0.00	
2317.00†	5.827	29.280	2312.23	-83.65	86.03	48.24	40°10'24.726"N	104°40'36.950"W	0.00	
2417.00†	5.827	29.280	2411.72	-92.26	94.88	53.20	40°10'24.814"N	104°40'36.886"W	0.00	
2517.00†	5.827	29.280	2511.20	-100.87	103.74	58.17	40°10'24.901"N	104°40'36.822"W	0.00	
2617.00†	5.827	29.280	2610.68	-109.48	112.59	63.13	40°10'24.989"N	104°40'36.758"W	0.00	
2717.00†	5.827	29.280	2710.17	-118.09	121.45	68.10	40°10'25.076"N	104°40'36.694"W	0.00	
2817.00†	5.827	29.280	2809.65	-126.70	130.30	73.06	40°10'25.164"N	104°40'36.630"W	0.00	
2917.00†	5.827	29.280	2909.13	-135.31	139.16	78.03	40°10'25.251"N	104°40'36.566"W	0.00	
3017.00†	5.827	29.280	3008.61	-143.92	148.01	82.99	40°10'25.339"N	104°40'36.502"W	0.00	
3117.00†	5.827	29.280	3108.10	-152.53	156.87	87.96	40°10'25.426"N	104°40'36.438"W	0.00	
3217.00†	5.827	29.280	3207.58	-161.14	165.72	92.92	40°10'25.514"N	104°40'36.374"W	0.00	
3317.00†	5.827	29.280	3307.06	-169.75	174.58	97.89	40°10'25.601"N	104°40'36.310"W	0.00	
3417.00†	5.827	29.280	3406.55	-178.36	183.44	102.86	40°10'25.689"N	104°40'36.246"W	0.00	
3517.00†	5.827	29.280	3506.03	-186.97	192.29	107.82	40°10'25.776"N	104°40'36.182"W	0.00	
3617.00†	5.827	29.280	3605.51	-195.58	201.15	112.79	40°10'25.864"N	104°40'36.118"W	0.00	
3717.00†	5.827	29.280	3705.00	-204.19	210.00	117.75	40°10'25.951"N	104°40'36.054"W	0.00	
3817.00†	5.827	29.280	3804.48	-212.80	218.86	122.72	40°10'26.039"N	104°40'35.990"W	0.00	
3917.00†	5.827	29.280	3903.96	-221.41	227.71	127.68	40°10'26.126"N	104°40'35.926"W	0.00	
3965.28†	5.827	29.280	3952.00	-225.57	231.99	130.08	40°10'26.169"N	104°40'35.895"W	0.00	PARKMAN
4017.00†	5.827	29.280	4003.45	-230.03	236.57	132.65	40°10'26.214"N	104°40'35.862"W	0.00	



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REIGLE 4N-9HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4)
Area	COLORADO	Well	REIGLE 4N-9HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	REIGLE 4N-9HZ PWB
Facility	SEC.04-T2N-R6SW		

WELLPATH DATA (131 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4117.00†	5.827	29.280	4102.93	-238.64	245.42	137.61	40°10'26.301"N	104°40'35.798"W	0.00	
4217.00†	5.827	29.280	4202.41	-247.25	254.28	142.58	40°10'26.389"N	104°40'35.734"W	0.00	
4317.00†	5.827	29.280	4301.90	-255.86	263.13	147.54	40°10'26.476"N	104°40'35.670"W	0.00	
4417.00†	5.827	29.280	4401.38	-264.47	271.99	152.51	40°10'26.564"N	104°40'35.606"W	0.00	
4449.79†	5.827	29.280	4434.00	-267.29	274.89	154.14	40°10'26.593"N	104°40'35.585"W	0.00	SUSSEX
4517.00†	5.827	29.280	4500.86	-273.08	280.85	157.47	40°10'26.651"N	104°40'35.542"W	0.00	
4617.00†	5.827	29.280	4600.35	-281.69	289.70	162.44	40°10'26.739"N	104°40'35.478"W	0.00	
4717.00†	5.827	29.280	4699.83	-290.30	298.56	167.41	40°10'26.826"N	104°40'35.414"W	0.00	
4809.65†	5.827	29.280	4792.00	-298.28	306.76	172.01	40°10'26.907"N	104°40'35.355"W	0.00	SHARON SPRINGS
4817.00†	5.827	29.280	4799.31	-298.91	307.41	172.37	40°10'26.914"N	104°40'35.350"W	0.00	
4917.00†	5.827	29.280	4898.80	-307.52	316.27	177.34	40°10'27.001"N	104°40'35.286"W	0.00	
5017.00†	5.827	29.280	4998.28	-316.13	325.12	182.30	40°10'27.089"N	104°40'35.223"W	0.00	
5117.00†	5.827	29.280	5097.76	-324.74	333.98	187.27	40°10'27.176"N	104°40'35.159"W	0.00	
5217.00†	5.827	29.280	5197.25	-333.35	342.83	192.23	40°10'27.264"N	104°40'35.095"W	0.00	
5317.00†	5.827	29.280	5296.73	-341.96	351.69	197.20	40°10'27.351"N	104°40'35.031"W	0.00	
5417.00†	5.827	29.280	5396.21	-350.57	360.54	202.16	40°10'27.439"N	104°40'34.967"W	0.00	
5517.00†	5.827	29.280	5495.70	-359.18	369.40	207.13	40°10'27.526"N	104°40'34.903"W	0.00	
5617.00†	5.827	29.280	5595.18	-367.79	378.26	212.09	40°10'27.614"N	104°40'34.839"W	0.00	
5717.00†	5.827	29.280	5694.66	-376.40	387.11	217.06	40°10'27.701"N	104°40'34.775"W	0.00	
5817.00†	5.827	29.280	5794.15	-385.01	395.97	222.02	40°10'27.789"N	104°40'34.711"W	0.00	
5917.00†	5.827	29.280	5893.63	-393.62	404.82	226.99	40°10'27.876"N	104°40'34.647"W	0.00	
6017.00†	5.827	29.280	5993.11	-402.24	413.68	231.95	40°10'27.964"N	104°40'34.583"W	0.00	
6117.00†	5.827	29.280	6092.60	-410.85	422.53	236.92	40°10'28.051"N	104°40'34.519"W	0.00	
6217.00†	5.827	29.280	6192.08	-419.46	431.39	241.89	40°10'28.139"N	104°40'34.455"W	0.00	
6317.00†	5.827	29.280	6291.56	-428.07	440.24	246.85	40°10'28.226"N	104°40'34.391"W	0.00	
6340.43	5.827	29.280	6314.87	-430.08	442.32	248.01	40°10'28.247"N	104°40'34.376"W	0.00	End of Tangent (J)
6417.00†	3.780	132.986	6391.28	-431.58	443.99	251.77	40°10'28.264"N	104°40'34.328"W	10.00	
6517.00†	12.846	168.307	6490.17	-418.20	430.82	256.44	40°10'28.133"N	104°40'34.267"W	10.00	
6617.00†	22.707	173.973	6585.28	-387.88	400.67	260.73	40°10'27.835"N	104°40'34.212"W	10.00	
6717.00†	32.650	176.305	6673.73	-341.52	354.44	264.51	40°10'27.379"N	104°40'34.163"W	10.00	
6817.00†	42.617	177.634	6752.82	-280.54	293.54	267.65	40°10'26.777"N	104°40'34.123"W	10.00	
6917.00†	52.595	178.537	6820.16	-206.79	219.82	270.07	40°10'26.048"N	104°40'34.092"W	10.00	
6965.57†	57.444	178.890	6848.00	-167.01	180.04	270.96	40°10'25.655"N	104°40'34.080"W	10.00	NIOBRARA A
7017.00†	62.579	179.225	6873.70	-122.51	135.52	271.69	40°10'25.215"N	104°40'34.071"W	10.00	
7117.00†	72.565	179.799	6911.80	-30.26	43.20	272.46	40°10'24.303"N	104°40'34.061"W	10.00	
7131.61†	74.024	179.876	6916.00	-16.28	29.21	272.50	40°10'24.165"N	104°40'34.061"W	10.00	NIOBRARA B
7217.00†	82.552	180.312	6933.32	67.15	-54.32	272.36	40°10'23.339"N	104°40'34.062"W	10.00	
7278.11†	88.655	180.612	6938.00	127.96	-115.22	271.86	40°10'22.737"N	104°40'34.069"W	10.00	NIOBRARA C
7278.31	88.676	180.613	6938.00	128.16	-115.43	271.86	40°10'22.735"N	104°40'34.069"W	10.00	End of 3D Arc (J)
7317.00†	88.676	180.613	6938.90	166.77	-154.10	271.45	40°10'22.353"N	104°40'34.074"W	0.00	
7417.00†	88.676	180.613	6941.21	266.58	-254.07	270.38	40°10'21.365"N	104°40'34.088"W	0.00	
7517.00†	88.676	180.613	6943.52	366.38	-354.04	269.31	40°10'20.377"N	104°40'34.102"W	0.00	
7617.00†	88.676	180.613	6945.83	466.19	-454.00	268.24	40°10'19.390"N	104°40'34.116"W	0.00	
7717.00†	88.676	180.613	6948.14	565.99	-553.97	267.17	40°10'18.402"N	104°40'34.129"W	0.00	
7817.00†	88.676	180.613	6950.45	665.80	-653.94	266.10	40°10'17.414"N	104°40'34.143"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4)
Area	COLORADO	Well	REIGLE 4N-9HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	REIGLE 4N-9HZ PWB
Facility	SEC.04-T2N-R65W		

WELLPATH DATA (131 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7917.00†	88.676	180.613	6952.76	765.60	-753.91	265.03	40°10'16.426"N	104°40'34.157"W	0.00	
8017.00†	88.676	180.613	6955.07	865.41	-853.87	263.96	40°10'15.438"N	104°40'34.171"W	0.00	
8117.00†	88.676	180.613	6957.38	965.21	-953.84	262.89	40°10'14.450"N	104°40'34.185"W	0.00	
8217.00†	88.676	180.613	6959.69	1065.02	-1053.81	261.82	40°10'13.462"N	104°40'34.198"W	0.00	
8317.00†	88.676	180.613	6962.00	1164.82	-1153.78	260.75	40°10'12.474"N	104°40'34.212"W	0.00	
8417.00†	88.676	180.613	6964.31	1264.63	-1253.74	259.68	40°10'11.486"N	104°40'34.226"W	0.00	
8517.00†	88.676	180.613	6966.62	1364.43	-1353.71	258.61	40°10'10.499"N	104°40'34.240"W	0.00	
8617.00†	88.676	180.613	6968.93	1464.24	-1453.68	257.54	40°10'09.511"N	104°40'34.253"W	0.00	
8717.00†	88.676	180.613	6971.24	1564.04	-1553.65	256.47	40°10'08.523"N	104°40'34.267"W	0.00	
8817.00†	88.676	180.613	6973.55	1663.85	-1653.61	255.40	40°10'07.535"N	104°40'34.281"W	0.00	
8917.00†	88.676	180.613	6975.86	1763.65	-1753.58	254.33	40°10'06.547"N	104°40'34.295"W	0.00	
9017.00†	88.676	180.613	6978.17	1863.46	-1853.55	253.26	40°10'05.559"N	104°40'34.309"W	0.00	
9117.00†	88.676	180.613	6980.48	1963.26	-1953.52	252.19	40°10'04.571"N	104°40'34.322"W	0.00	
9217.00†	88.676	180.613	6982.79	2063.07	-2053.48	251.12	40°10'03.583"N	104°40'34.336"W	0.00	
9317.00†	88.676	180.613	6985.10	2162.87	-2153.45	250.05	40°10'02.596"N	104°40'34.350"W	0.00	
9417.00†	88.676	180.613	6987.41	2262.68	-2253.42	248.98	40°10'01.608"N	104°40'34.364"W	0.00	
9517.00†	88.676	180.613	6989.72	2362.48	-2353.39	247.91	40°10'00.620"N	104°40'34.378"W	0.00	
9617.00†	88.676	180.613	6992.03	2462.29	-2453.35	246.84	40°09'59.632"N	104°40'34.391"W	0.00	
9717.00†	88.676	180.613	6994.34	2562.09	-2553.32	245.77	40°09'58.644"N	104°40'34.405"W	0.00	
9817.00†	88.676	180.613	6996.66	2661.90	-2653.29	244.70	40°09'57.656"N	104°40'34.419"W	0.00	
9917.00†	88.676	180.613	6998.97	2761.70	-2753.26	243.63	40°09'56.668"N	104°40'34.433"W	0.00	
10017.00†	88.676	180.613	7001.28	2861.51	-2853.23	242.57	40°09'55.680"N	104°40'34.447"W	0.00	
10117.00†	88.676	180.613	7003.59	2961.31	-2953.19	241.50	40°09'54.692"N	104°40'34.460"W	0.00	
10217.00†	88.676	180.613	7005.90	3061.12	-3053.16	240.43	40°09'53.705"N	104°40'34.474"W	0.00	
10317.00†	88.676	180.613	7008.21	3160.92	-3153.13	239.36	40°09'52.717"N	104°40'34.488"W	0.00	
10417.00†	88.676	180.613	7010.52	3260.73	-3253.10	238.29	40°09'51.729"N	104°40'34.502"W	0.00	
10517.00†	88.676	180.613	7012.83	3360.53	-3353.06	237.22	40°09'50.741"N	104°40'34.516"W	0.00	
10617.00†	88.676	180.613	7015.14	3460.34	-3453.03	236.15	40°09'49.753"N	104°40'34.529"W	0.00	
10717.00†	88.676	180.613	7017.45	3560.14	-3553.00	235.08	40°09'48.765"N	104°40'34.543"W	0.00	
10817.00†	88.676	180.613	7019.76	3659.95	-3652.97	234.01	40°09'47.777"N	104°40'34.557"W	0.00	
10917.00†	88.676	180.613	7022.07	3759.75	-3752.93	232.94	40°09'46.789"N	104°40'34.571"W	0.00	
11017.00†	88.676	180.613	7024.38	3859.56	-3852.90	231.87	40°09'45.801"N	104°40'34.584"W	0.00	
11117.00†	88.676	180.613	7026.69	3959.36	-3952.87	230.80	40°09'44.814"N	104°40'34.598"W	0.00	
11217.00†	88.676	180.613	7029.00	4059.17	-4052.84	229.73	40°09'43.826"N	104°40'34.612"W	0.00	
11317.00†	88.676	180.613	7031.31	4158.97	-4152.80	228.66	40°09'42.838"N	104°40'34.626"W	0.00	
11417.00†	88.676	180.613	7033.62	4258.78	-4252.77	227.59	40°09'41.850"N	104°40'34.640"W	0.00	
11517.00†	88.676	180.613	7035.93	4358.58	-4352.74	226.52	40°09'40.862"N	104°40'34.653"W	0.00	
11617.00†	88.676	180.613	7038.24	4458.39	-4452.71	225.45	40°09'39.874"N	104°40'34.667"W	0.00	
11717.00†	88.676	180.613	7040.55	4558.19	-4552.67	224.38	40°09'38.886"N	104°40'34.681"W	0.00	
11817.00†	88.676	180.613	7042.86	4658.00	-4652.64	223.31	40°09'37.898"N	104°40'34.695"W	0.00	
11866.32	88.676	180.613	7044.00†	4707.22	-4701.95	222.78	40°09'37.411"N	104°40'34.702"W	0.00	End of Tangent (J)



Planned Wellpath Report

REIGLE 4N-9HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4)
Area	COLORADO	Well	REIGLE 4N-9HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	REIGLE 4N-9HZ PWB
Facility	SEC.04-T2N-R65W		

HOLE & CASING SECTIONS - Ref Wellbore: REIGLE 4N-9HZ PWB Ref Wellpath: REIGLE 4N-9HZ (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	856.00	839.00	17.00	856.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	856.00	839.00	17.00	856.00	0.00	0.00	0.00	0.00
8.75in Open Hole	856.00	7278.31	6422.31	856.00	6938.00	0.00	0.00	-115.42	271.86
7in Casing Intermediate	17.00	7278.31	7261.31	17.00	6938.00	0.00	0.00	-115.42	271.86
6.125in Open Hole	7278.31	11866.32	4588.01	6938.00	7044.00	-115.42	271.86	-4701.95	222.78
4.5in Casing Production	17.00	11866.32	11849.32	17.00	7044.00	0.00	0.00	-4701.95	222.78

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
REIGLE 4-4HZ PAD SECTION LINES		0.00	0.00	0.00	3229948.40	1307042.68	40°10'23.876"N	104°40'37.571"W	polygon
1) REIGLE 4N-9HZ BHL ON PLAT (51'FNL & 545'FWL, SEC.9) REV-1		7044.00	-4701.97	222.75	3230214.76	1302343.19	40°09'37.411"N	104°40'34.702"W	point
REIGLE 4-4HZ PAD HARDLINES (460' SETBACKS)		7220.00	0.00	0.00	3229948.40	1307042.68	40°10'23.876"N	104°40'37.571"W	polygon

SURVEY PROGRAM - Ref Wellbore: REIGLE 4N-9HZ PWB Ref Wellpath: REIGLE 4N-9HZ (PERMIT) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	7278.31	NaviTrak (Standard)		REIGLE 4N-9HZ PWB
7278.31	11866.32	OnTrak (Standard)		REIGLE 4N-9HZ PWB



Planned Wellpath Report
REIGLE 4N-9HZ (PERMIT) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#27 REIGLE 4N-9HZ (496'FNL & 272'FWL, SEC.4)
Area	COLORADO	Well	REIGLE 4N-9HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	REIGLE 4N-9HZ PWB
Facility	SEC.04-T2N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
3965.28	5.827	29.280	3952.00	PARKMAN
4449.79	5.827	29.280	4434.00	SUSSEX
4809.65	5.827	29.280	4792.00	SHARON SPRINGS
6965.57	57.444	178.890	6848.00	NIOBRARA A
7131.61	74.024	179.876	6916.00	NIOBRARA B
7278.11	88.655	180.612	6938.00	NIOBRARA C