

Location:	COLORADO	Slot:	SLOT#12 NICHOLS 1N-5HZ (2493°FNL & 578°FEL, SEC. 08)
Field:	WELD COUNTY (KERR MCGEE)	Well:	NICHOLS 1N-5HZ
Facility:	SEC.08-T2N-R65W	Wellbore:	NICHOLS 1N-5HZ PWB

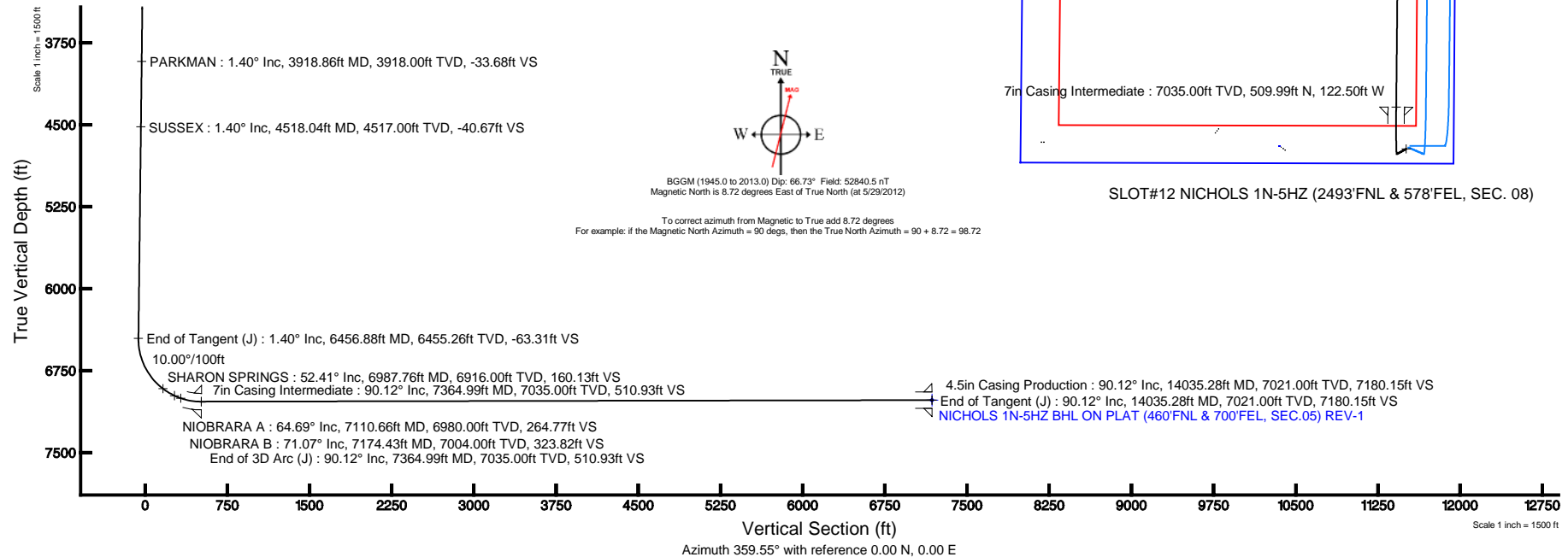
Location:	COLORADO	Slot:	SLOT#12 NICHOLS 1N-5HZ (2493'FNL & 578'FEL, SEC. 08)
Field:	WELD COUNTY (KERR MCGEE)	Well:	NICHOLS 1N-5HZ
Facility:	SEC.08-T2N-R65W	Wellbore:	NICHOLS 1N-5HZ PWB

True vertical depths are referenced to Rig on SLOT#12 NICHOLS 1N-5HZ (2493FNL & 578FEL, SEC. 08) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to Rig on SLOT#12 NICHOLS 1N-5HZ (2493FNL & 578FEL, SEC. 08) (RKB)	North Reference: True north
Rig on SLOT#12 NICHOLS 1N-5HZ (2493FNL & 578FEL, SEC. 08) (RKB) to Mean Sea Level: 4910 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#12 NICHOLS 1N-5HZ (2493FNL & 578FEL, SEC. 08)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wlsje02 on 6/5/2012

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC-08-T2N-R65W	3197771.840	1268891.290	40°04'00.600"N	104°47'36.000"W
<div> <div>Site</div> <div>Local N (ft)</div> <div>Local E (ft)</div> </div>				
SLOT#12 NICHOLS 1N-54Z (2493FN, & 578FTEL, SEC. 08)	30705.67	31174.77	Grid East (US ft)	Grid North (US ft)
			40°09'13.284"N	104°40'49.361"W
Rig on SLOT#12 NICHOLS 1N-54Z (2493FN, & 578FTEL, SEC. 08) (R003) to Mud line (At Slot: SLOT#12 NICHOLS 1N-54Z (2493FN, & 578FTEL, SEC. 08))			4910ft	
Mean Sea Level to Mud line (At Slot: SLOT#12 NICHOLS 1N-54Z (2493FN, & 578FTEL, SEC. 08))			0ft	
Rig on SLOT#12 NICHOLS 1N-54Z (2493FN, & 578FTEL, SEC. 08) (R003) to Mean Sea Level			4910ft	

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	241.000	17.00	0.00	0.00	0.00	0.00
End of Tangent	1000.00	0.000	241.000	1000.00	0.00	0.00	0.00	0.00
End of Build (J)	1070.00	1.400	241.000	1069.99	-0.41	-0.75	2.00	-0.41
End of Tangent (J)	6456.88	1.400	241.000	6455.26	-64.22	-115.86	0.00	-63.31
End of 3D Arc (J)	7364.99	90.120	0.570	7035.00	509.99	-122.50	10.00	510.93
End of Tangent (J)	14035.28	90.120	0.570	7021.00	7179.93	-56.15	0.00	7180.15

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
NICHOLS SECTION 5 LINES		-18.00	36.48	-1549.16	3227549.93	1299913.51	40°09'13.64"N	104°41'09.312"W
NICHOLS SECTION 8 LINES		-18.00	36.48	-1549.16	3227549.93	1299913.51	40°09'13.64"N	104°41'09.312"W
NICHOLS 1N-SH2 BHL ON PLAT (460'FNL & 700'FEL SEC.05) REV-1	14035.28	7021.00	7179.93	-56.15	3228976.78	1307070.15	40°10'34.236"N	104°40'50.084"W
NICHOLS HARDLINES (460' SETBACKS)		7182.00	36.48	-1549.16	3227549.93	1299913.51	40°09'13.64"N	104°41'09.312"W





Planned Wellpath Report

NICHOLS 1N-5HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 NICHOLS 1N-5HZ (2493'FNL & 578'FEL, SEC. 08)
Area	COLORADO	Well	NICHOLS 1N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 1N-5HZ PWB
Facility	SEC.08-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	6/5/2012 at 19:26:33
Convergence at slot	0.53° East	Database/Source file	WellArchitectDB/NICHOLS_1N-5HZ_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	30750.67	31574.77	3229099.29	1299891.36	40°09'13.284"N	104°40'49.361"W
Facility Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"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#12 NICHOLS 1N-5HZ (2493'FNL & 578'FEL, SEC. 08) (RKB) to Facility Vertical Datum
Horizontal Reference Pt	Slot	Rig on SLOT#12 NICHOLS 1N-5HZ (2493'FNL & 578'FEL, SEC. 08) (RKB) to Mean Sea Level
Vertical Reference Pt	Rig on SLOT#12 NICHOLS 1N-5HZ (2493'FNL & 578'FEL, SEC. 08) (RKB)	Rig on SLOT#12 NICHOLS 1N-5HZ (2493'FNL & 578'FEL, SEC. 08) (RKB) to Mud Line at Slot (SLOT#12 NICHOLS 1N-5HZ)
MD Reference Pt	Rig on SLOT#12 NICHOLS 1N-5HZ (2493'FNL & 578'FEL, SEC. 08) (RKB)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth



Planned Wellpath Report

NICHOLS 1N-5HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 NICHOLS 1N-5HZ (2493'FNL & 578'FEL, SEC. 08)
Area	COLORADO	Well	NICHOLS 1N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 1N-5HZ PWB
Facility	SEC.08-T2N-R6SW		

WELLPATH DATA (152 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	241.000	0.00	0.00	0.00	0.00	40°09'13.284"N	104°40'49.361"W	0.00	
17.00	0.000	241.000	17.00	0.00	0.00	0.00	40°09'13.284"N	104°40'49.361"W	0.00	Tie On
117.00†	0.000	241.000	117.00	0.00	0.00	0.00	40°09'13.284"N	104°40'49.361"W	0.00	
217.00†	0.000	241.000	217.00	0.00	0.00	0.00	40°09'13.284"N	104°40'49.361"W	0.00	
317.00†	0.000	241.000	317.00	0.00	0.00	0.00	40°09'13.284"N	104°40'49.361"W	0.00	
417.00†	0.000	241.000	417.00	0.00	0.00	0.00	40°09'13.284"N	104°40'49.361"W	0.00	
517.00†	0.000	241.000	517.00	0.00	0.00	0.00	40°09'13.284"N	104°40'49.361"W	0.00	
617.00†	0.000	241.000	617.00	0.00	0.00	0.00	40°09'13.284"N	104°40'49.361"W	0.00	
717.00†	0.000	241.000	717.00	0.00	0.00	0.00	40°09'13.284"N	104°40'49.361"W	0.00	
817.00†	0.000	241.000	817.00	0.00	0.00	0.00	40°09'13.284"N	104°40'49.361"W	0.00	
917.00†	0.000	241.000	917.00	0.00	0.00	0.00	40°09'13.284"N	104°40'49.361"W	0.00	
1000.00	0.000	241.000	1000.00	0.00	0.00	0.00	40°09'13.284"N	104°40'49.361"W	0.00	End of Tangent
1017.00†	0.340	241.000	1017.00	-0.02	-0.02	-0.04	40°09'13.284"N	104°40'49.362"W	2.00	
1070.00	1.400	241.000	1069.99	-0.41	-0.41	-0.75	40°09'13.280"N	104°40'49.371"W	2.00	End of Build (J)
1117.00†	1.400	241.000	1116.98	-0.96	-0.97	-1.75	40°09'13.274"N	104°40'49.384"W	0.00	
1217.00†	1.400	241.000	1216.95	-2.13	-2.16	-3.89	40°09'13.263"N	104°40'49.411"W	0.00	
1317.00†	1.400	241.000	1316.92	-3.29	-3.34	-6.03	40°09'13.251"N	104°40'49.439"W	0.00	
1417.00†	1.400	241.000	1416.89	-4.46	-4.52	-8.16	40°09'13.239"N	104°40'49.466"W	0.00	
1517.00†	1.400	241.000	1516.86	-5.63	-5.71	-10.30	40°09'13.228"N	104°40'49.494"W	0.00	
1617.00†	1.400	241.000	1616.83	-6.80	-6.89	-12.44	40°09'13.216"N	104°40'49.521"W	0.00	
1717.00†	1.400	241.000	1716.80	-7.96	-8.08	-14.57	40°09'13.204"N	104°40'49.549"W	0.00	
1817.00†	1.400	241.000	1816.77	-9.13	-9.26	-16.71	40°09'13.192"N	104°40'49.576"W	0.00	
1917.00†	1.400	241.000	1916.74	-10.30	-10.45	-18.85	40°09'13.181"N	104°40'49.604"W	0.00	
2017.00†	1.400	241.000	2016.71	-11.47	-11.63	-20.98	40°09'13.169"N	104°40'49.631"W	0.00	
2117.00†	1.400	241.000	2116.68	-12.64	-12.82	-23.12	40°09'13.157"N	104°40'49.659"W	0.00	
2217.00†	1.400	241.000	2216.65	-13.80	-14.00	-25.26	40°09'13.146"N	104°40'49.686"W	0.00	
2317.00†	1.400	241.000	2316.62	-14.97	-15.19	-27.39	40°09'13.134"N	104°40'49.714"W	0.00	
2417.00†	1.400	241.000	2416.59	-16.14	-16.37	-29.53	40°09'13.122"N	104°40'49.741"W	0.00	
2517.00†	1.400	241.000	2516.56	-17.31	-17.55	-31.67	40°09'13.111"N	104°40'49.769"W	0.00	
2617.00†	1.400	241.000	2616.53	-18.47	-18.74	-33.81	40°09'13.099"N	104°40'49.796"W	0.00	
2717.00†	1.400	241.000	2716.50	-19.64	-19.92	-35.94	40°09'13.087"N	104°40'49.824"W	0.00	
2817.00†	1.400	241.000	2816.47	-20.81	-21.11	-38.08	40°09'13.075"N	104°40'49.851"W	0.00	
2917.00†	1.400	241.000	2916.44	-21.98	-22.29	-40.22	40°09'13.064"N	104°40'49.879"W	0.00	
3017.00†	1.400	241.000	3016.41	-23.14	-23.48	-42.35	40°09'13.052"N	104°40'49.906"W	0.00	
3117.00†	1.400	241.000	3116.38	-24.31	-24.66	-44.49	40°09'13.040"N	104°40'49.934"W	0.00	
3217.00†	1.400	241.000	3216.35	-25.48	-25.85	-46.63	40°09'13.029"N	104°40'49.961"W	0.00	
3317.00†	1.400	241.000	3316.32	-26.65	-27.03	-48.76	40°09'13.017"N	104°40'49.989"W	0.00	
3417.00†	1.400	241.000	3416.29	-27.82	-28.21	-50.90	40°09'13.005"N	104°40'50.017"W	0.00	
3517.00†	1.400	241.000	3516.26	-28.98	-29.40	-53.04	40°09'12.993"N	104°40'50.044"W	0.00	
3617.00†	1.400	241.000	3616.23	-30.15	-30.58	-55.17	40°09'12.982"N	104°40'50.072"W	0.00	
3717.00†	1.400	241.000	3716.20	-31.32	-31.77	-57.31	40°09'12.970"N	104°40'50.099"W	0.00	
3817.00†	1.400	241.000	3816.17	-32.49	-32.95	-59.45	40°09'12.958"N	104°40'50.127"W	0.00	
3917.00†	1.400	241.000	3916.14	-33.65	-34.14	-61.59	40°09'12.947"N	104°40'50.154"W	0.00	
3918.86†	1.400	241.000	3918.00	-33.68	-34.16	-61.62	40°09'12.946"N	104°40'50.155"W	0.00	PARKMAN
4017.00†	1.400	241.000	4016.11	-34.82	-35.32	-63.72	40°09'12.935"N	104°40'50.182"W	0.00	



Planned Wellpath Report

NICHOLS 1N-5HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 NICHOLS 1N-5HZ (2493'FNL & 578'FEL, SEC. 08)
Area	COLORADO	Well	NICHOLS 1N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 1N-5HZ PWB
Facility	SEC.08-T2N-R6SW		

WELLPATH DATA (152 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4117.00†	1.400	241.000	4116.08	-35.99	-36.51	-65.86	40°09'12.923"N	104°40'50.209"W	0.00	
4217.00†	1.400	241.000	4216.05	-37.16	-37.69	-68.00	40°09'12.912"N	104°40'50.237"W	0.00	
4317.00†	1.400	241.000	4316.02	-38.33	-38.88	-70.13	40°09'12.900"N	104°40'50.264"W	0.00	
4417.00†	1.400	241.000	4415.99	-39.49	-40.06	-72.27	40°09'12.888"N	104°40'50.292"W	0.00	
4517.00†	1.400	241.000	4515.96	-40.66	-41.24	-74.41	40°09'12.876"N	104°40'50.319"W	0.00	
4518.04†	1.400	241.000	4517.00	-40.67	-41.26	-74.43	40°09'12.876"N	104°40'50.320"W	0.00	SUSSEX
4617.00†	1.400	241.000	4615.93	-41.83	-42.43	-76.54	40°09'12.865"N	104°40'50.347"W	0.00	
4717.00†	1.400	241.000	4715.90	-43.00	-43.61	-78.68	40°09'12.853"N	104°40'50.374"W	0.00	
4817.00†	1.400	241.000	4815.87	-44.16	-44.80	-80.82	40°09'12.841"N	104°40'50.402"W	0.00	
4917.00†	1.400	241.000	4915.84	-45.33	-45.98	-82.95	40°09'12.830"N	104°40'50.429"W	0.00	
5017.00†	1.400	241.000	5015.81	-46.50	-47.17	-85.09	40°09'12.818"N	104°40'50.457"W	0.00	
5117.00†	1.400	241.000	5115.78	-47.67	-48.35	-87.23	40°09'12.806"N	104°40'50.484"W	0.00	
5217.00†	1.400	241.000	5215.76	-48.84	-49.54	-89.36	40°09'12.794"N	104°40'50.512"W	0.00	
5317.00†	1.400	241.000	5315.73	-50.00	-50.72	-91.50	40°09'12.783"N	104°40'50.539"W	0.00	
5417.00†	1.400	241.000	5415.70	-51.17	-51.90	-93.64	40°09'12.771"N	104°40'50.567"W	0.00	
5517.00†	1.400	241.000	5515.67	-52.34	-53.09	-95.78	40°09'12.759"N	104°40'50.594"W	0.00	
5617.00†	1.400	241.000	5615.64	-53.51	-54.27	-97.91	40°09'12.748"N	104°40'50.622"W	0.00	
5717.00†	1.400	241.000	5715.61	-54.67	-55.46	-100.05	40°09'12.736"N	104°40'50.649"W	0.00	
5817.00†	1.400	241.000	5815.58	-55.84	-56.64	-102.19	40°09'12.724"N	104°40'50.677"W	0.00	
5917.00†	1.400	241.000	5915.55	-57.01	-57.83	-104.32	40°09'12.713"N	104°40'50.705"W	0.00	
6017.00†	1.400	241.000	6015.52	-58.18	-59.01	-106.46	40°09'12.701"N	104°40'50.732"W	0.00	
6117.00†	1.400	241.000	6115.49	-59.34	-60.20	-108.60	40°09'12.689"N	104°40'50.760"W	0.00	
6217.00†	1.400	241.000	6215.46	-60.51	-61.38	-110.73	40°09'12.677"N	104°40'50.787"W	0.00	
6317.00†	1.400	241.000	6315.43	-61.68	-62.57	-112.87	40°09'12.666"N	104°40'50.815"W	0.00	
6417.00†	1.400	241.000	6415.40	-62.85	-63.75	-115.01	40°09'12.654"N	104°40'50.842"W	0.00	
6456.88	1.400	241.000	6455.26	-63.31	-64.22	-115.86	40°09'12.649"N	104°40'50.853"W	0.00	End of Tangent (J)
6517.00†	5.458	347.714	6515.29	-60.86	-61.78	-117.11	40°09'12.673"N	104°40'50.869"W	10.00	
6617.00†	15.368	356.132	6613.53	-42.94	-43.87	-119.02	40°09'12.850"N	104°40'50.894"W	10.00	
6717.00†	25.349	357.996	6707.17	-8.22	-9.17	-120.67	40°09'13.193"N	104°40'50.915"W	10.00	
6817.00†	35.339	358.849	6793.36	42.22	41.27	-122.00	40°09'13.692"N	104°40'50.932"W	10.00	
6917.00†	45.334	359.363	6869.49	106.87	105.91	-122.98	40°09'14.331"N	104°40'50.945"W	10.00	
6987.76†	52.407	359.630	6916.00	160.13	159.17	-123.44	40°09'14.857"N	104°40'50.951"W	10.00	SHARON SPRINGS
7017.00†	55.330	359.725	6933.24	183.74	182.78	-123.57	40°09'15.090"N	104°40'50.952"W	10.00	
7110.66†	64.693	359.991	6980.00	264.77	263.81	-123.77	40°09'15.891"N	104°40'50.955"W	10.00	NIOBRARA A
7117.00†	65.327	0.008	6982.68	270.52	269.56	-123.77	40°09'15.948"N	104°40'50.955"W	10.00	
7174.43†	71.069	0.150	7004.00	323.82	322.86	-123.69	40°09'16.475"N	104°40'50.954"W	10.00	NIOBRARA B
7217.00†	75.325	0.248	7016.30	364.56	363.60	-123.55	40°09'16.877"N	104°40'50.952"W	10.00	
7317.00†	85.322	0.468	7033.09	463.00	462.05	-122.93	40°09'17.850"N	104°40'50.944"W	10.00	
7364.99	90.120	0.570	7035.00	510.93	509.99	-122.50	40°09'18.324"N	104°40'50.939"W	10.00	End of 3D Arc (J)
7417.00†	90.120	0.570	7034.89	562.93	562.00	-121.98	40°09'18.838"N	104°40'50.932"W	0.00	
7517.00†	90.120	0.570	7034.68	662.92	661.99	-120.99	40°09'19.826"N	104°40'50.919"W	0.00	
7617.00†	90.120	0.570	7034.47	762.90	761.99	-119.99	40°09'20.814"N	104°40'50.906"W	0.00	
7717.00†	90.120	0.570	7034.26	862.89	861.98	-119.00	40°09'21.802"N	104°40'50.894"W	0.00	
7817.00†	90.120	0.570	7034.05	962.87	961.98	-118.00	40°09'22.790"N	104°40'50.881"W	0.00	
7917.00†	90.120	0.570	7033.84	1062.85	1061.97	-117.01	40°09'23.778"N	104°40'50.868"W	0.00	



Planned Wellpath Report

NICHOLS 1N-5HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 NICHOLS 1N-5HZ (2493'FNL & 578'FEL, SEC. 08)
Area	COLORADO	Well	NICHOLS 1N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 1N-5HZ PWB
Facility	SEC.08-T2N-R65W		

WELLPATH DATA (152 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8017.00†	90.120	0.570	7033.63	1162.84	1161.97	-116.01	40°09'24.767"N	104°40'50.855"W	0.00	
8117.00†	90.120	0.570	7033.42	1262.82	1261.96	-115.02	40°09'25.755"N	104°40'50.842"W	0.00	
8217.00†	90.120	0.570	7033.21	1362.81	1361.96	-114.02	40°09'26.743"N	104°40'50.830"W	0.00	
8317.00†	90.120	0.570	7033.00	1462.79	1461.95	-113.03	40°09'27.731"N	104°40'50.817"W	0.00	
8417.00†	90.120	0.570	7032.79	1562.77	1561.95	-112.03	40°09'28.719"N	104°40'50.804"W	0.00	
8517.00†	90.120	0.570	7032.58	1662.76	1661.94	-111.04	40°09'29.707"N	104°40'50.791"W	0.00	
8617.00†	90.120	0.570	7032.37	1762.74	1761.94	-110.05	40°09'30.696"N	104°40'50.778"W	0.00	
8717.00†	90.120	0.570	7032.16	1862.73	1861.93	-109.05	40°09'31.684"N	104°40'50.766"W	0.00	
8817.00†	90.120	0.570	7031.95	1962.71	1961.93	-108.06	40°09'32.672"N	104°40'50.753"W	0.00	
8917.00†	90.120	0.570	7031.74	2062.69	2061.92	-107.06	40°09'33.660"N	104°40'50.740"W	0.00	
9017.00†	90.120	0.570	7031.53	2162.68	2161.92	-106.07	40°09'34.648"N	104°40'50.727"W	0.00	
9117.00†	90.120	0.570	7031.32	2262.66	2261.91	-105.07	40°09'35.636"N	104°40'50.714"W	0.00	
9217.00†	90.120	0.570	7031.11	2362.65	2361.90	-104.08	40°09'36.624"N	104°40'50.701"W	0.00	
9317.00†	90.120	0.570	7030.90	2462.63	2461.90	-103.08	40°09'37.613"N	104°40'50.689"W	0.00	
9417.00†	90.120	0.570	7030.69	2562.61	2561.89	-102.09	40°09'38.601"N	104°40'50.676"W	0.00	
9517.00†	90.120	0.570	7030.48	2662.60	2661.89	-101.09	40°09'39.589"N	104°40'50.663"W	0.00	
9617.00†	90.120	0.570	7030.27	2762.58	2761.88	-100.10	40°09'40.577"N	104°40'50.650"W	0.00	
9717.00†	90.120	0.570	7030.06	2862.57	2861.88	-99.10	40°09'41.565"N	104°40'50.637"W	0.00	
9817.00†	90.120	0.570	7029.85	2962.55	2961.87	-98.11	40°09'42.553"N	104°40'50.625"W	0.00	
9917.00†	90.120	0.570	7029.64	3062.53	3061.87	-97.12	40°09'43.542"N	104°40'50.612"W	0.00	
10017.00†	90.120	0.570	7029.43	3162.52	3161.86	-96.12	40°09'44.530"N	104°40'50.599"W	0.00	
10117.00†	90.120	0.570	7029.22	3262.50	3261.86	-95.13	40°09'45.518"N	104°40'50.586"W	0.00	
10217.00†	90.120	0.570	7029.01	3362.49	3361.85	-94.13	40°09'46.506"N	104°40'50.573"W	0.00	
10317.00†	90.120	0.570	7028.80	3462.47	3461.85	-93.14	40°09'47.494"N	104°40'50.561"W	0.00	
10417.00†	90.120	0.570	7028.59	3562.45	3561.84	-92.14	40°09'48.482"N	104°40'50.548"W	0.00	
10517.00†	90.120	0.570	7028.38	3662.44	3661.84	-91.15	40°09'49.470"N	104°40'50.535"W	0.00	
10617.00†	90.120	0.570	7028.17	3762.42	3761.83	-90.15	40°09'50.459"N	104°40'50.522"W	0.00	
10717.00†	90.120	0.570	7027.96	3862.41	3861.83	-89.16	40°09'51.447"N	104°40'50.509"W	0.00	
10817.00†	90.120	0.570	7027.75	3962.39	3961.82	-88.16	40°09'52.435"N	104°40'50.497"W	0.00	
10917.00†	90.120	0.570	7027.54	4062.37	4061.82	-87.17	40°09'53.423"N	104°40'50.484"W	0.00	
11017.00†	90.120	0.570	7027.33	4162.36	4161.81	-86.17	40°09'54.411"N	104°40'50.471"W	0.00	
11117.00†	90.120	0.570	7027.12	4262.34	4261.81	-85.18	40°09'55.399"N	104°40'50.458"W	0.00	
11217.00†	90.120	0.570	7026.91	4362.33	4361.80	-84.19	40°09'56.388"N	104°40'50.445"W	0.00	
11317.00†	90.120	0.570	7026.70	4462.31	4461.80	-83.19	40°09'57.376"N	104°40'50.433"W	0.00	
11417.00†	90.120	0.570	7026.49	4562.29	4561.79	-82.20	40°09'58.364"N	104°40'50.420"W	0.00	
11517.00†	90.120	0.570	7026.28	4662.28	4661.79	-81.20	40°09'59.352"N	104°40'50.407"W	0.00	
11617.00†	90.120	0.570	7026.07	4762.26	4761.78	-80.21	40°10'00.340"N	104°40'50.394"W	0.00	
11717.00†	90.120	0.570	7025.87	4862.25	4861.78	-79.21	40°10'01.328"N	104°40'50.381"W	0.00	
11817.00†	90.120	0.570	7025.66	4962.23	4961.77	-78.22	40°10'02.316"N	104°40'50.369"W	0.00	
11917.00†	90.120	0.570	7025.45	5062.21	5061.77	-77.22	40°10'03.305"N	104°40'50.356"W	0.00	
12017.00†	90.120	0.570	7025.24	5162.20	5161.76	-76.23	40°10'04.293"N	104°40'50.343"W	0.00	
12117.00†	90.120	0.570	7025.03	5262.18	5261.75	-75.23	40°10'05.281"N	104°40'50.330"W	0.00	
12217.00†	90.120	0.570	7024.82	5362.17	5361.75	-74.24	40°10'06.269"N	104°40'50.317"W	0.00	
12317.00†	90.120	0.570	7024.61	5462.15	5461.74	-73.24	40°10'07.257"N	104°40'50.304"W	0.00	
12417.00†	90.120	0.570	7024.40	5562.13	5561.74	-72.25	40°10'08.245"N	104°40'50.292"W	0.00	



Planned Wellpath Report

NICHOLS 1N-5HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 NICHOLS 1N-5HZ (2493'FNL & 578'FEL, SEC. 08)
Area	COLORADO	Well	NICHOLS 1N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 1N-5HZ PWB
Facility	SEC.08-T2N-R65W		

WELLPATH DATA (152 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12517.00†	90.120	0.570	7024.19	5662.12	5661.73	-71.26	40°10'09.234"N	104°40'50.279"W	0.00	
12617.00†	90.120	0.570	7023.98	5762.10	5761.73	-70.26	40°10'10.222"N	104°40'50.266"W	0.00	
12717.00†	90.120	0.570	7023.77	5862.09	5861.72	-69.27	40°10'11.210"N	104°40'50.253"W	0.00	
12817.00†	90.120	0.570	7023.56	5962.07	5961.72	-68.27	40°10'12.198"N	104°40'50.240"W	0.00	
12917.00†	90.120	0.570	7023.35	6062.05	6061.71	-67.28	40°10'13.186"N	104°40'50.228"W	0.00	
13017.00†	90.120	0.570	7023.14	6162.04	6161.71	-66.28	40°10'14.174"N	104°40'50.215"W	0.00	
13117.00†	90.120	0.570	7022.93	6262.02	6261.70	-65.29	40°10'15.162"N	104°40'50.202"W	0.00	
13217.00†	90.120	0.570	7022.72	6362.01	6361.70	-64.29	40°10'16.151"N	104°40'50.189"W	0.00	
13317.00†	90.120	0.570	7022.51	6461.99	6461.69	-63.30	40°10'17.139"N	104°40'50.176"W	0.00	
13417.00†	90.120	0.570	7022.30	6561.97	6561.69	-62.30	40°10'18.127"N	104°40'50.164"W	0.00	
13517.00†	90.120	0.570	7022.09	6661.96	6661.68	-61.31	40°10'19.115"N	104°40'50.151"W	0.00	
13617.00†	90.120	0.570	7021.88	6761.94	6761.68	-60.31	40°10'20.103"N	104°40'50.138"W	0.00	
13717.00†	90.120	0.570	7021.67	6861.93	6861.67	-59.32	40°10'21.091"N	104°40'50.125"W	0.00	
13817.00†	90.120	0.570	7021.46	6961.91	6961.67	-58.33	40°10'22.080"N	104°40'50.112"W	0.00	
13917.00†	90.120	0.570	7021.25	7061.89	7061.66	-57.33	40°10'23.068"N	104°40'50.100"W	0.00	
14017.00†	90.120	0.570	7021.04	7161.88	7161.66	-56.34	40°10'24.056"N	104°40'50.087"W	0.00	
14035.28	90.120	0.570	7021.00†	7180.15	7179.93	-56.15	40°10'24.236"N	104°40'50.084"W	0.00	End of Tangent (J)

HOLE & CASING SECTIONS - Ref Wellbore: NICHOLS 1N-5HZ PWB Ref Wellpath: NICHOLS 1N-5HZ (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	825.00	808.00	17.00	825.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	825.00	808.00	17.00	825.00	0.00	0.00	0.00	0.00
8.75in Open Hole	825.00	7364.99	6539.99	825.00	7035.00	0.00	0.00	509.99	-122.50
7in Casing Intermediate	17.00	7364.99	7347.99	17.00	7035.00	0.00	0.00	509.99	-122.50
6.125in Open Hole	7364.99	14035.28	6670.29	7035.00	7021.00	509.99	-122.50	7179.93	-56.15
4.5in Casing Production	17.00	14035.28	14018.28	17.00	7021.00	0.00	0.00	7179.93	-56.15

**Planned Wellpath Report**

NICHOLS 1N-5HZ (PERMIT) PWP

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**REFERENCE WELLPATH IDENTIFICATION**

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 NICHOLS 1N-5HZ (2493'FNL & 578'FEL, SEC. 08)
Area	COLORADO	Well	NICHOLS 1N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 1N-5HZ PWB
Facility	SEC.08-T2N-R65W		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
NICHOLS SECTION 5 LINES		-18.00	36.48	-1549.16	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W	polygon
NICHOLS SECTION 8 LINES		-18.00	36.48	-1549.16	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W	polygon
1) NICHOLS 1N-5HZ BHL ON PLAT (460'FNL & 700'FEL, SEC.05) REV-1	14035.28	7021.00	7179.93	-56.15	3228976.78	1307070.15	40°10'24.236"N	104°40'50.084"W	point
NICHOLS HARDLINES (460' SETBACKS)		7182.00	36.48	-1549.16	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W	polygon

SURVEY PROGRAM - Ref Wellbore: NICHOLS 1N-5HZ PWB Ref Wellpath: NICHOLS 1N-5HZ (PERMIT) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	14035.28	NaviTrak (Standard)		NICHOLS 1N-5HZ PWB



Planned Wellpath Report
NICHOLS 1N-5HZ (PERMIT) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 NICHOLS 1N-5HZ (2493'FNL & 578'FEL, SEC. 08)
Area	COLORADO	Well	NICHOLS 1N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 1N-5HZ PWB
Facility	SEC.08-T2N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
3918.86	1.400	241.000	3918.00	PARKMAN
4518.04	1.400	241.000	4517.00	SUSSEX
6987.76	52.407	359.630	6916.00	SHARON SPRINGS
7110.66	64.693	359.991	6980.00	NIOBRARA A
7174.43	71.069	0.150	7004.00	NIOBRARA B