

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08)  
Field: WELD COUNTY (KERR MCGEE) Well: NICHOLS 26N-5HZ  
Facility: SEC.08-T2N-R65W Wellbore: NICHOLS 26N-5HZ PWB

Plot reference wellpath is NICHOLS 26N-5HZ (PERMIT) PWP

True vertical depths are referenced to Rig on SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to Rig on SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08) (RKB)	North Reference: True north
Rig on SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08) (RKB) to Mean Sea Level: 4910 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wlsjg02 on 6/5/2012

## Location Information

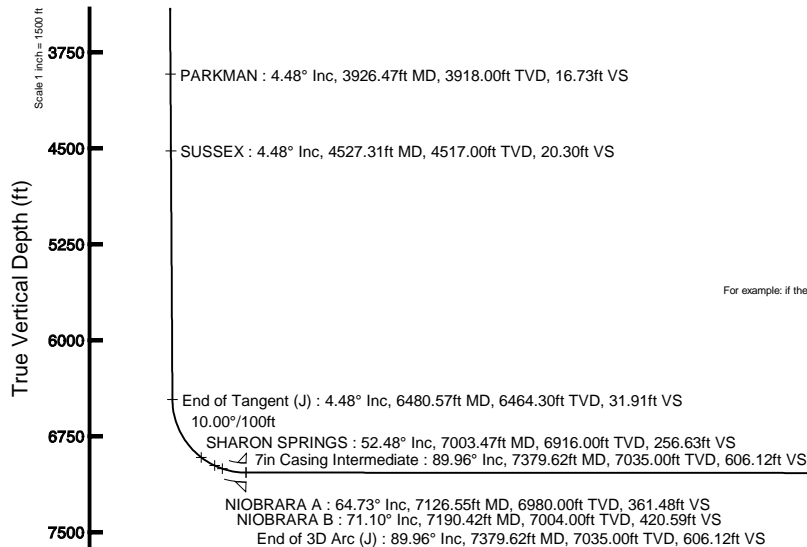
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.08-T2N-R65W	3197771.840	1268891.290	40°04'09.600"N	104°47'36.000"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08)	30786.45	31623.10	3229147.333	1299927.522
Rig on SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08) (RKB) to Mud line (At Slot: SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08))				4910ft
Mean Sea Level to Mud line (At Slot: SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08))				0ft
Rig on SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08) (RKB) to Mean Sea Level				4910ft

## 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	90.000	17.00	0.00	0.00	0.00	0.00
End of Tangent	1000.00	0.000	90.000	1000.00	0.00	0.00	0.00	0.00
End of Build (J)	1223.85	4.477	90.000	1223.62	0.00	8.74	2.00	0.67
End of Tangent (J)	6480.57	4.477	90.000	6464.30	0.00	419.07	0.00	31.91
End of 3D Arc (J)	7379.62	89.956	0.656	7035.00	571.97	470.27	10.00	606.12
End of Tangent (J)	13951.55	89.956	0.656	7040.00	7143.47	545.48	0.00	7164.26

## Targets

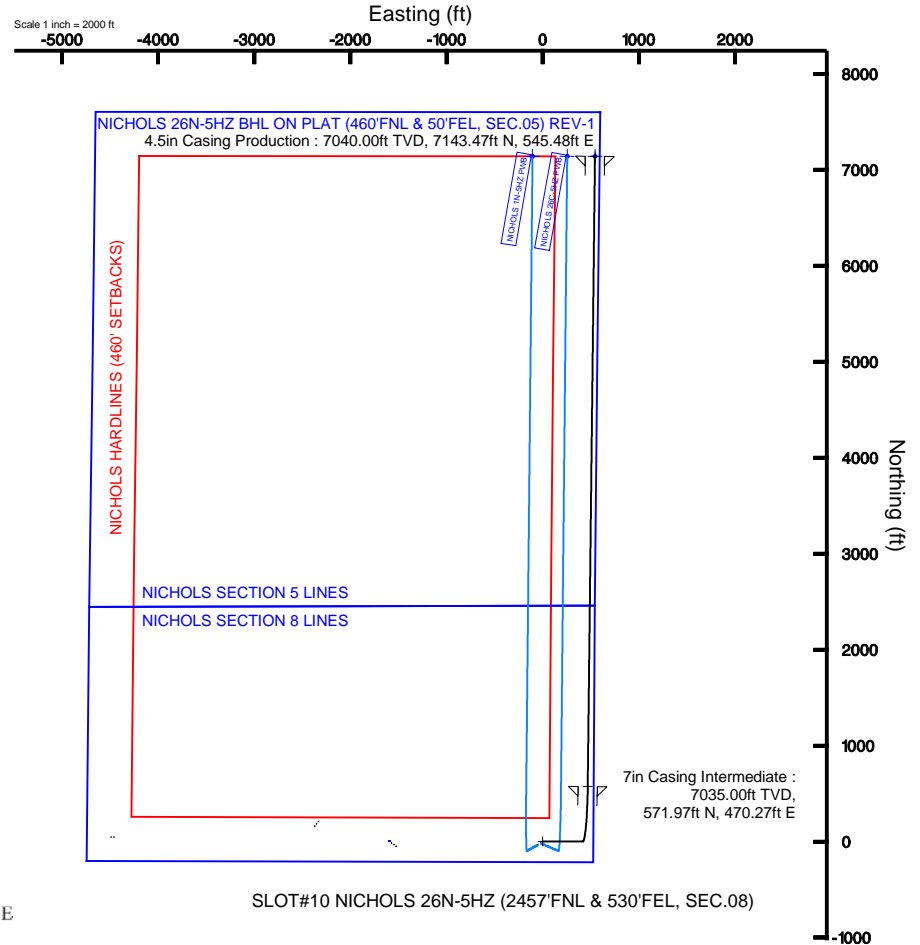
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
NICHOLS SECTION 5 LINES		-18.00	0.76	-1597.54	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W
NICHOLS SECTION 8 LINES		-18.00	0.76	-1597.54	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W
NICHOLS 26N-5HZ BHL ON PLAT (460'FNL & 50'FEL, SEC.05) REV-1	13951.55	7040.00	7143.47	545.48	3229626.73	1307075.41	40°10'24.229"N	104°40'41.711"W
NICHOLS HARDLINES (460' SETBACKS)		7182.00	0.76	-1597.54	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W



BGGM (1945.0 to 2013.0) Dip: 66.73° Field: 52840.5 nT  
Magnetic North is 8.72 degrees East of True North (at 5/29/2012)

To correct azimuth from Magnetic to True add 8.72 degrees  
For example: if the Magnetic North Azimuth = 90 degs, then the True North Azimuth = 90 + 8.72 = 98.72

Vertical Section (ft)  
Azimuth 4.37° with reference 0.00 N, 0.00 E



4.5in Casing Production : 89.96° Inc, 13951.55ft MD, 7040.00ft TVD, 7164.26ft VS  
End of Tangent (J) : 89.96° Inc, 13951.55ft MD, 7040.00ft TVD, 7164.26ft VS  
NICHOLS 26N-5HZ BHL ON PLAT (460'FNL & 50'FEL, SEC.05) REV-1

Scale 1 inch = 1500 ft



# Planned Wellpath Report

NICHOLS 26N-5HZ (PERMIT) PWP

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**REFERENCE WELLPATH IDENTIFICATION**

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08)
Area	COLORADO	Well	NICHOLS 26N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 26N-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 19:02:07
Convergence at slot	0.53° East	Database/Source file	WellArchitectDB/NICHOLS_26N-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	30786.45	31623.10	3229147.33	1299927.52	40°09'13.637"N	104°40'48.738"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#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08) (RKB) to Facility Vertical Datum
Horizontal Reference Pt	Slot	Rig on SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08) (RKB) to Mean Sea Level
Vertical Reference Pt	Rig on SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08) (RKB)	Rig on SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08) (RKB) to Mud Line at Slot (SLOT#10 NICHOLS 26N-5
MD Reference Pt	Rig on SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08) (RKB)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth



# Planned Wellpath Report

NICHOLS 26N-5HZ (PERMIT) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08)
Area	COLORADO	Well	NICHOLS 26N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 26N-5HZ PWB
Facility	SEC.08-T2N-R6SW		

## WELLPATH DATA (151 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	90.000	0.00	0.00	0.00	0.00	40°09'13.637"N	104°40'48.738"W	0.00	
17.00	0.000	90.000	17.00	0.00	0.00	0.00	40°09'13.637"N	104°40'48.738"W	0.00	Tie On
117.00†	0.000	90.000	117.00	0.00	0.00	0.00	40°09'13.637"N	104°40'48.738"W	0.00	
217.00†	0.000	90.000	217.00	0.00	0.00	0.00	40°09'13.637"N	104°40'48.738"W	0.00	
317.00†	0.000	90.000	317.00	0.00	0.00	0.00	40°09'13.637"N	104°40'48.738"W	0.00	
417.00†	0.000	90.000	417.00	0.00	0.00	0.00	40°09'13.637"N	104°40'48.738"W	0.00	
517.00†	0.000	90.000	517.00	0.00	0.00	0.00	40°09'13.637"N	104°40'48.738"W	0.00	
617.00†	0.000	90.000	617.00	0.00	0.00	0.00	40°09'13.637"N	104°40'48.738"W	0.00	
717.00†	0.000	90.000	717.00	0.00	0.00	0.00	40°09'13.637"N	104°40'48.738"W	0.00	
817.00†	0.000	90.000	817.00	0.00	0.00	0.00	40°09'13.637"N	104°40'48.738"W	0.00	
917.00†	0.000	90.000	917.00	0.00	0.00	0.00	40°09'13.637"N	104°40'48.738"W	0.00	
1000.00	0.000	90.000	1000.00	0.00	0.00	0.00	40°09'13.637"N	104°40'48.738"W	0.00	End of Tangent
1017.00†	0.340	90.000	1017.00	0.00	0.00	0.05	40°09'13.637"N	104°40'48.737"W	2.00	
1117.00†	2.340	90.000	1116.97	0.18	0.00	2.39	40°09'13.637"N	104°40'48.707"W	2.00	
1217.00†	4.340	90.000	1216.79	0.63	0.00	8.21	40°09'13.637"N	104°40'48.632"W	2.00	
1223.85	4.477	90.000	1223.62	0.67	0.00	8.74	40°09'13.637"N	104°40'48.625"W	2.00	End of Build (J)
1317.00†	4.477	90.000	1316.49	1.22	0.00	16.01	40°09'13.637"N	104°40'48.532"W	0.00	
1417.00†	4.477	90.000	1416.18	1.81	0.00	23.82	40°09'13.637"N	104°40'48.431"W	0.00	
1517.00†	4.477	90.000	1515.88	2.41	0.00	31.62	40°09'13.637"N	104°40'48.331"W	0.00	
1617.00†	4.477	90.000	1615.57	3.00	0.00	39.43	40°09'13.637"N	104°40'48.230"W	0.00	
1717.00†	4.477	90.000	1715.27	3.60	0.00	47.24	40°09'13.637"N	104°40'48.130"W	0.00	
1817.00†	4.477	90.000	1814.96	4.19	0.00	55.04	40°09'13.637"N	104°40'48.029"W	0.00	
1917.00†	4.477	90.000	1914.66	4.79	0.00	62.85	40°09'13.637"N	104°40'47.929"W	0.00	
2017.00†	4.477	90.000	2014.35	5.38	0.00	70.65	40°09'13.637"N	104°40'47.828"W	0.00	
2117.00†	4.477	90.000	2114.05	5.97	0.00	78.46	40°09'13.637"N	104°40'47.728"W	0.00	
2217.00†	4.477	90.000	2213.74	6.57	0.00	86.27	40°09'13.637"N	104°40'47.627"W	0.00	
2317.00†	4.477	90.000	2313.44	7.16	0.00	94.07	40°09'13.637"N	104°40'47.526"W	0.00	
2417.00†	4.477	90.000	2413.13	7.76	0.00	101.88	40°09'13.637"N	104°40'47.426"W	0.00	
2517.00†	4.477	90.000	2512.83	8.35	0.00	109.68	40°09'13.637"N	104°40'47.325"W	0.00	
2617.00†	4.477	90.000	2612.52	8.95	0.00	117.49	40°09'13.637"N	104°40'47.225"W	0.00	
2717.00†	4.477	90.000	2712.22	9.54	0.00	125.29	40°09'13.637"N	104°40'47.124"W	0.00	
2817.00†	4.477	90.000	2811.91	10.13	0.00	133.10	40°09'13.637"N	104°40'47.024"W	0.00	
2917.00†	4.477	90.000	2911.61	10.73	0.00	140.91	40°09'13.637"N	104°40'46.923"W	0.00	
3017.00†	4.477	90.000	3011.30	11.32	0.00	148.71	40°09'13.637"N	104°40'46.823"W	0.00	
3117.00†	4.477	90.000	3111.00	11.92	0.00	156.52	40°09'13.637"N	104°40'46.722"W	0.00	
3217.00†	4.477	90.000	3210.69	12.51	0.00	164.32	40°09'13.637"N	104°40'46.622"W	0.00	
3317.00†	4.477	90.000	3310.39	13.11	0.00	172.13	40°09'13.637"N	104°40'46.521"W	0.00	
3417.00†	4.477	90.000	3410.08	13.70	0.00	179.94	40°09'13.637"N	104°40'46.421"W	0.00	
3517.00†	4.477	90.000	3509.78	14.29	0.00	187.74	40°09'13.637"N	104°40'46.320"W	0.00	
3617.00†	4.477	90.000	3609.47	14.89	0.00	195.55	40°09'13.637"N	104°40'46.220"W	0.00	
3717.00†	4.477	90.000	3709.17	15.48	0.00	203.35	40°09'13.637"N	104°40'46.119"W	0.00	
3817.00†	4.477	90.000	3808.86	16.08	0.00	211.16	40°09'13.637"N	104°40'46.019"W	0.00	
3917.00†	4.477	90.000	3908.55	16.67	0.00	218.97	40°09'13.637"N	104°40'45.918"W	0.00	
3926.47†	4.477	90.000	3918.00	16.73	0.00	219.71	40°09'13.637"N	104°40'45.909"W	0.00	PARKMAN
4017.00†	4.477	90.000	4008.25	17.27	0.00	226.77	40°09'13.637"N	104°40'45.818"W	0.00	



# Planned Wellpath Report

NICHOLS 26N-5HZ (PERMIT) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 NICHOLS 26N-5HZ (2457°FNL & 530°FEL, SEC.08)
Area	COLORADO	Well	NICHOLS 26N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 26N-5HZ PWB
Facility	SEC.08-T2N-R65W		

## WELLPATH DATA (151 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4117.00†	4.477	90.000	4107.94	17.86	0.00	234.58	40°09'13.637"N	104°40'45.717"W	0.00	
4217.00†	4.477	90.000	4207.64	18.45	0.00	242.38	40°09'13.637"N	104°40'45.616"W	0.00	
4317.00†	4.477	90.000	4307.33	19.05	0.00	250.19	40°09'13.637"N	104°40'45.516"W	0.00	
4417.00†	4.477	90.000	4407.03	19.64	0.00	257.99	40°09'13.637"N	104°40'45.415"W	0.00	
4517.00†	4.477	90.000	4506.72	20.24	0.00	265.80	40°09'13.637"N	104°40'45.315"W	0.00	
4527.31†	4.477	90.000	4517.00	20.30	0.00	266.61	40°09'13.637"N	104°40'45.305"W	0.00	SUSSEX
4617.00†	4.477	90.000	4606.42	20.83	0.00	273.61	40°09'13.637"N	104°40'45.214"W	0.00	
4717.00†	4.477	90.000	4706.11	21.43	0.00	281.41	40°09'13.637"N	104°40'45.114"W	0.00	
4817.00†	4.477	90.000	4805.81	22.02	0.00	289.22	40°09'13.637"N	104°40'45.013"W	0.00	
4917.00†	4.477	90.000	4905.50	22.62	0.00	297.02	40°09'13.637"N	104°40'44.913"W	0.00	
5017.00†	4.477	90.000	5005.20	23.21	0.00	304.83	40°09'13.637"N	104°40'44.812"W	0.00	
5117.00†	4.477	90.000	5104.89	23.80	0.00	312.64	40°09'13.637"N	104°40'44.712"W	0.00	
5217.00†	4.477	90.000	5204.59	24.40	0.00	320.44	40°09'13.637"N	104°40'44.611"W	0.00	
5317.00†	4.477	90.000	5304.28	24.99	0.00	328.25	40°09'13.637"N	104°40'44.511"W	0.00	
5417.00†	4.477	90.000	5403.98	25.59	0.00	336.05	40°09'13.637"N	104°40'44.410"W	0.00	
5517.00†	4.477	90.000	5503.67	26.18	0.00	343.86	40°09'13.637"N	104°40'44.310"W	0.00	
5617.00†	4.477	90.000	5603.37	26.78	0.00	351.67	40°09'13.637"N	104°40'44.209"W	0.00	
5717.00†	4.477	90.000	5703.06	27.37	0.00	359.47	40°09'13.637"N	104°40'44.109"W	0.00	
5817.00†	4.477	90.000	5802.76	27.96	0.00	367.28	40°09'13.637"N	104°40'44.008"W	0.00	
5917.00†	4.477	90.000	5902.45	28.56	0.00	375.08	40°09'13.637"N	104°40'43.907"W	0.00	
6017.00†	4.477	90.000	6002.15	29.15	0.00	382.89	40°09'13.637"N	104°40'43.807"W	0.00	
6117.00†	4.477	90.000	6101.84	29.75	0.00	390.70	40°09'13.637"N	104°40'43.706"W	0.00	
6217.00†	4.477	90.000	6201.54	30.34	0.00	398.50	40°09'13.637"N	104°40'43.606"W	0.00	
6317.00†	4.477	90.000	6301.23	30.94	0.00	406.31	40°09'13.637"N	104°40'43.505"W	0.00	
6417.00†	4.477	90.000	6400.93	31.53	0.00	414.11	40°09'13.637"N	104°40'43.405"W	0.00	
6480.57	4.477	90.000	6464.30	31.91	0.00	419.07	40°09'13.637"N	104°40'43.341"W	0.00	End of Tangent (J)
6517.00†	5.802	51.057	6500.60	33.28	1.16	421.93	40°09'13.648"N	104°40'43.304"W	10.00	
6617.00†	14.394	18.414	6599.02	48.84	16.17	429.81	40°09'13.797"N	104°40'43.203"W	10.00	
6717.00†	24.089	10.738	6693.34	81.27	48.09	437.56	40°09'14.112"N	104°40'43.103"W	10.00	
6817.00†	33.955	7.329	6780.68	129.56	95.96	444.94	40°09'14.585"N	104°40'43.008"W	10.00	
6917.00†	43.877	5.323	6858.39	192.26	158.32	451.73	40°09'15.202"N	104°40'42.920"W	10.00	
7003.47†	52.476	4.099	6916.00	256.63	222.49	456.97	40°09'15.836"N	104°40'42.853"W	10.00	SHARON SPRINGS
7017.00†	53.822	3.935	6924.11	267.46	233.28	457.73	40°09'15.942"N	104°40'42.843"W	10.00	
7117.00†	63.780	2.862	6975.85	352.87	318.57	462.75	40°09'16.785"N	104°40'42.778"W	10.00	
7126.55†	64.732	2.770	6980.00	361.48	327.16	463.18	40°09'16.870"N	104°40'42.773"W	10.00	NIOBRARA A
7190.42†	71.096	2.189	7004.00	420.59	386.25	465.73	40°09'17.454"N	104°40'42.740"W	10.00	NIOBRARA B
7217.00†	73.745	1.960	7012.03	445.91	411.57	466.65	40°09'17.704"N	104°40'42.728"W	10.00	
7317.00†	83.713	1.146	7031.55	543.74	509.49	469.29	40°09'18.672"N	104°40'42.694"W	10.00	
7379.62	89.956	0.656	7035.00	606.12	571.97	470.27	40°09'19.289"N	104°40'42.681"W	10.00	End of 3D Arc (J)
7417.00†	89.956	0.656	7035.03	643.42	609.35	470.70	40°09'19.659"N	104°40'42.676"W	0.00	
7517.00†	89.956	0.656	7035.11	743.21	709.34	471.84	40°09'20.647"N	104°40'42.661"W	0.00	
7617.00†	89.956	0.656	7035.19	843.00	809.34	472.99	40°09'21.635"N	104°40'42.646"W	0.00	
7717.00†	89.956	0.656	7035.26	942.79	909.33	474.13	40°09'22.623"N	104°40'42.632"W	0.00	
7817.00†	89.956	0.656	7035.34	1042.58	1009.32	475.28	40°09'23.611"N	104°40'42.617"W	0.00	
7917.00†	89.956	0.656	7035.41	1142.37	1109.32	476.42	40°09'24.599"N	104°40'42.602"W	0.00	



# Planned Wellpath Report

NICHOLS 26N-5HZ (PERMIT) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08)
Area	COLORADO	Well	NICHOLS 26N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 26N-5HZ PWB
Facility	SEC.08-T2N-R65W		

## WELLPATH DATA (151 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8017.00†	89.956	0.656	7035.49	1242.16	1209.31	477.57	40°09'25.587"N	104°40'42.587"W	0.00	
8117.00†	89.956	0.656	7035.57	1341.95	1309.30	478.71	40°09'26.576"N	104°40'42.573"W	0.00	
8217.00†	89.956	0.656	7035.64	1441.74	1409.30	479.85	40°09'27.564"N	104°40'42.558"W	0.00	
8317.00†	89.956	0.656	7035.72	1541.53	1509.29	481.00	40°09'28.552"N	104°40'42.543"W	0.00	
8417.00†	89.956	0.656	7035.79	1641.32	1609.28	482.14	40°09'29.540"N	104°40'42.528"W	0.00	
8517.00†	89.956	0.656	7035.87	1741.11	1709.28	483.29	40°09'30.528"N	104°40'42.514"W	0.00	
8617.00†	89.956	0.656	7035.95	1840.90	1809.27	484.43	40°09'31.516"N	104°40'42.499"W	0.00	
8717.00†	89.956	0.656	7036.02	1940.69	1909.26	485.58	40°09'32.504"N	104°40'42.484"W	0.00	
8817.00†	89.956	0.656	7036.10	2040.48	2009.26	486.72	40°09'33.493"N	104°40'42.469"W	0.00	
8917.00†	89.956	0.656	7036.17	2140.27	2109.25	487.86	40°09'34.481"N	104°40'42.454"W	0.00	
9017.00†	89.956	0.656	7036.25	2240.06	2209.24	489.01	40°09'35.469"N	104°40'42.440"W	0.00	
9117.00†	89.956	0.656	7036.33	2339.85	2309.24	490.15	40°09'36.457"N	104°40'42.425"W	0.00	
9217.00†	89.956	0.656	7036.40	2439.64	2409.23	491.30	40°09'37.445"N	104°40'42.410"W	0.00	
9317.00†	89.956	0.656	7036.48	2539.43	2509.22	492.44	40°09'38.433"N	104°40'42.395"W	0.00	
9417.00†	89.956	0.656	7036.55	2639.22	2609.22	493.59	40°09'39.421"N	104°40'42.381"W	0.00	
9517.00†	89.956	0.656	7036.63	2739.01	2709.21	494.73	40°09'40.410"N	104°40'42.366"W	0.00	
9617.00†	89.956	0.656	7036.71	2838.80	2809.20	495.88	40°09'41.398"N	104°40'42.351"W	0.00	
9717.00†	89.956	0.656	7036.78	2938.59	2909.20	497.02	40°09'42.386"N	104°40'42.336"W	0.00	
9817.00†	89.956	0.656	7036.86	3038.39	3009.19	498.16	40°09'43.374"N	104°40'42.322"W	0.00	
9917.00†	89.956	0.656	7036.93	3138.18	3109.18	499.31	40°09'44.362"N	104°40'42.307"W	0.00	
10017.00†	89.956	0.656	7037.01	3237.97	3209.18	500.45	40°09'45.350"N	104°40'42.292"W	0.00	
10117.00†	89.956	0.656	7037.09	3337.76	3309.17	501.60	40°09'46.338"N	104°40'42.277"W	0.00	
10217.00†	89.956	0.656	7037.16	3437.55	3409.16	502.74	40°09'47.326"N	104°40'42.263"W	0.00	
10317.00†	89.956	0.656	7037.24	3537.34	3509.16	503.89	40°09'48.315"N	104°40'42.248"W	0.00	
10417.00†	89.956	0.656	7037.31	3637.13	3609.15	505.03	40°09'49.303"N	104°40'42.233"W	0.00	
10517.00†	89.956	0.656	7037.39	3736.92	3709.14	506.17	40°09'50.291"N	104°40'42.218"W	0.00	
10617.00†	89.956	0.656	7037.47	3836.71	3809.14	507.32	40°09'51.279"N	104°40'42.203"W	0.00	
10717.00†	89.956	0.656	7037.54	3936.50	3909.13	508.46	40°09'52.267"N	104°40'42.189"W	0.00	
10817.00†	89.956	0.656	7037.62	4036.29	4009.12	509.61	40°09'53.255"N	104°40'42.174"W	0.00	
10917.00†	89.956	0.656	7037.69	4136.08	4109.12	510.75	40°09'54.243"N	104°40'42.159"W	0.00	
11017.00†	89.956	0.656	7037.77	4235.87	4209.11	511.90	40°09'55.232"N	104°40'42.144"W	0.00	
11117.00†	89.956	0.656	7037.85	4335.66	4309.11	513.04	40°09'56.220"N	104°40'42.130"W	0.00	
11217.00†	89.956	0.656	7037.92	4435.45	4409.10	514.18	40°09'57.208"N	104°40'42.115"W	0.00	
11317.00†	89.956	0.656	7038.00	4535.24	4509.09	515.33	40°09'58.196"N	104°40'42.100"W	0.00	
11417.00†	89.956	0.656	7038.07	4635.03	4609.09	516.47	40°09'59.184"N	104°40'42.085"W	0.00	
11517.00†	89.956	0.656	7038.15	4734.82	4709.08	517.62	40°10'00.172"N	104°40'42.071"W	0.00	
11617.00†	89.956	0.656	7038.23	4834.61	4809.07	518.76	40°10'01.160"N	104°40'42.056"W	0.00	
11717.00†	89.956	0.656	7038.30	4934.40	4909.07	519.91	40°10'02.149"N	104°40'42.041"W	0.00	
11817.00†	89.956	0.656	7038.38	5034.19	5009.06	521.05	40°10'03.137"N	104°40'42.026"W	0.00	
11917.00†	89.956	0.656	7038.45	5133.98	5109.05	522.20	40°10'04.125"N	104°40'42.011"W	0.00	
12017.00†	89.956	0.656	7038.53	5233.77	5209.05	523.34	40°10'05.113"N	104°40'41.997"W	0.00	
12117.00†	89.956	0.656	7038.61	5333.56	5309.04	524.48	40°10'06.101"N	104°40'41.982"W	0.00	
12217.00†	89.956	0.656	7038.68	5433.35	5409.03	525.63	40°10'07.089"N	104°40'41.967"W	0.00	
12317.00†	89.956	0.656	7038.76	5533.14	5509.03	526.77	40°10'08.077"N	104°40'41.952"W	0.00	
12417.00†	89.956	0.656	7038.83	5632.93	5609.02	527.92	40°10'09.066"N	104°40'41.938"W	0.00	



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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08)
Area	COLORADO	Well	NICHOLS 26N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 26N-5HZ PWB
Facility	SEC.08-T2N-R65W		

## WELLPATH DATA (151 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12517.00†	89.956	0.656	7038.91	5732.72	5709.01	529.06	40°10'10.054"N	104°40'41.923"W	0.00	
12617.00†	89.956	0.656	7038.99	5832.51	5809.01	530.21	40°10'11.042"N	104°40'41.908"W	0.00	
12717.00†	89.956	0.656	7039.06	5932.30	5909.00	531.35	40°10'12.030"N	104°40'41.893"W	0.00	
12817.00†	89.956	0.656	7039.14	6032.09	6008.99	532.49	40°10'13.018"N	104°40'41.879"W	0.00	
12917.00†	89.956	0.656	7039.21	6131.88	6108.99	533.64	40°10'14.006"N	104°40'41.864"W	0.00	
13017.00†	89.956	0.656	7039.29	6231.67	6208.98	534.78	40°10'14.994"N	104°40'41.849"W	0.00	
13117.00†	89.956	0.656	7039.37	6331.46	6308.97	535.93	40°10'15.983"N	104°40'41.834"W	0.00	
13217.00†	89.956	0.656	7039.44	6431.26	6408.97	537.07	40°10'16.971"N	104°40'41.819"W	0.00	
13317.00†	89.956	0.656	7039.52	6531.05	6508.96	538.22	40°10'17.959"N	104°40'41.805"W	0.00	
13417.00†	89.956	0.656	7039.59	6630.84	6608.95	539.36	40°10'18.947"N	104°40'41.790"W	0.00	
13517.00†	89.956	0.656	7039.67	6730.63	6708.95	540.50	40°10'19.935"N	104°40'41.775"W	0.00	
13617.00†	89.956	0.656	7039.75	6830.42	6808.94	541.65	40°10'20.923"N	104°40'41.760"W	0.00	
13717.00†	89.956	0.656	7039.82	6930.21	6908.93	542.79	40°10'21.911"N	104°40'41.746"W	0.00	
13817.00†	89.956	0.656	7039.90	7030.00	7008.93	543.94	40°10'22.899"N	104°40'41.731"W	0.00	
13917.00†	89.956	0.656	7039.97	7129.79	7108.92	545.08	40°10'23.888"N	104°40'41.716"W	0.00	
13951.55	89.956	0.656	7040.00 <sup>1</sup>	7164.26	7143.47	545.48	40°10'24.229"N	104°40'41.711"W	0.00	End of Tangent (J)

## HOLE & CASING SECTIONS - Ref Wellbore: NICHOLS 26N-5HZ PWB Ref Wellpath: NICHOLS 26N-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	7379.62	6554.62	825.00	7035.00	0.00	0.00	571.97	470.27
7in Casing Intermediate	17.00	7379.62	7362.62	17.00	7035.00	0.00	0.00	571.97	470.27
6.125in Open Hole	7379.62	13951.55	6571.93	7035.00	7040.00	571.97	470.27	7143.47	545.48
4.5in Casing Production	17.00	13951.55	13934.55	17.00	7040.00	0.00	0.00	7143.47	545.48

**Planned Wellpath Report**

NICHOLS 26N-5HZ (PERMIT) PWP

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**REFERENCE WELLPATH IDENTIFICATION**

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08)
Area	COLORADO	Well	NICHOLS 26N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 26N-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	0.76	-1597.54	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W	polygon
NICHOLS SECTION 8 LINES		-18.00	0.76	-1597.54	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W	polygon
1) NICHOLS 26N-5HZ BHL ON PLAT (460'FNL & 50'FEL, SEC.05) REV-1	13951.55	7040.00	7143.47	545.48	3229626.73	1307075.41	40°10'24.229"N	104°40'41.711"W	point
NICHOLS HARDLINES (460' SETBACKS)		7182.00	0.76	-1597.54	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W	polygon

**SURVEY PROGRAM - Ref Wellbore: NICHOLS 26N-5HZ PWB Ref Wellpath: NICHOLS 26N-5HZ (PERMIT) PWP**

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	13951.55	NaviTrak (Standard)		NICHOLS 26N-5HZ PWB



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NICHOLS 26N-5HZ (PERMIT) PWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 NICHOLS 26N-5HZ (2457'FNL & 530'FEL, SEC.08)
Area	COLORADO	Well	NICHOLS 26N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 26N-5HZ PWB
Facility	SEC.08-T2N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
3926.47	4.477	90.000	3918.00	PARKMAN
4527.31	4.477	90.000	4517.00	SUSSEX
7003.47	52.476	4.099	6916.00	SHARON SPRINGS
7126.55	64.732	2.770	6980.00	NIOBRARA A
7190.42	71.096	2.189	7004.00	NIOBRARA B