

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08)
Field: WELD COUNTY (KERR MCGEE) Well: NICHOLS 26C-5HZ
Facility: SEC.08-T2N-R65W Wellbore: NICHOLS 26C-5HZ PWB

Plot reference wellpath is NICHOLS 26C-5HZ (PERMIT) PWB

True vertical depths are referenced to Rig on SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to Rig on SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08) (RKB)	North Reference: True north
Rig on SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08) (RKB) to Mean Sea Level: 4910 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wlsjef02 on 6/5/2012

Location Information

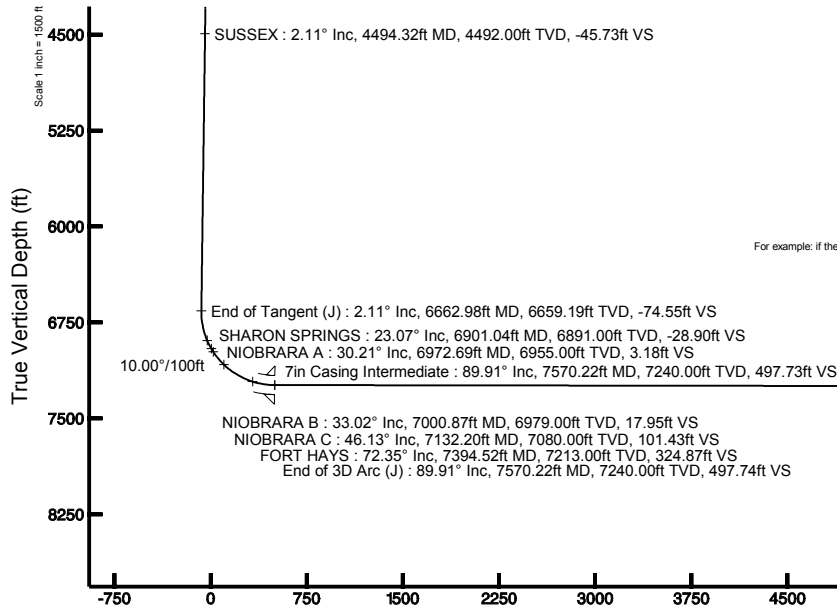
Facility Name				Grid East (US ft)	Latitude	Longitude
SEC.08-T2N-R65W				3197771.840	1268891.290	40°04'09.600"N 104°47'36.000"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08)	30768.51	31999.05	3229123.430	1299909.390	40°09'13.460"N 104°40'49.048"W	
Rig on SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08) (RKB) to Mud line (At Slot: SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08))				4910ft		
Mean Sea Level to Mud line (At Slot: SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08))				0ft		
Rig on SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'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	113.400	17.00	0.00	0.00	0.00	0.00
End of Tangent	1000.00	0.000	113.400	1000.00	0.00	0.00	0.00	0.00
End of Build (J)	1105.50	2.110	113.400	1105.48	-0.77	1.78	2.00	-0.70
End of Tangent (J)	6662.98	2.110	113.400	6659.19	-82.03	189.57	0.00	-74.55
End of 3D Arc (J)	7570.22	89.906	0.564	7240.00	489.70	214.89	10.00	497.74
End of Tangent (J)	14242.63	89.906	0.564	7251.00	7161.78	280.62	0.00	7167.27

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	18.67	-1573.47	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W
NICHOLS SECTION 8 LINES		-18.00	18.67	-1573.47	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W
NICHOLS HARDLINES (460' SETBACKS)		7182.00	18.67	-1573.47	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W
NICHOLS 26C-5HZ BHL ON PLAT (460'FNL & 339'FEL, SEC.05) REV-1	14242.63	7251.00	7161.78	280.62	3226037.82	1307073.14	40°10'24.233"N	104°40'45.433"W

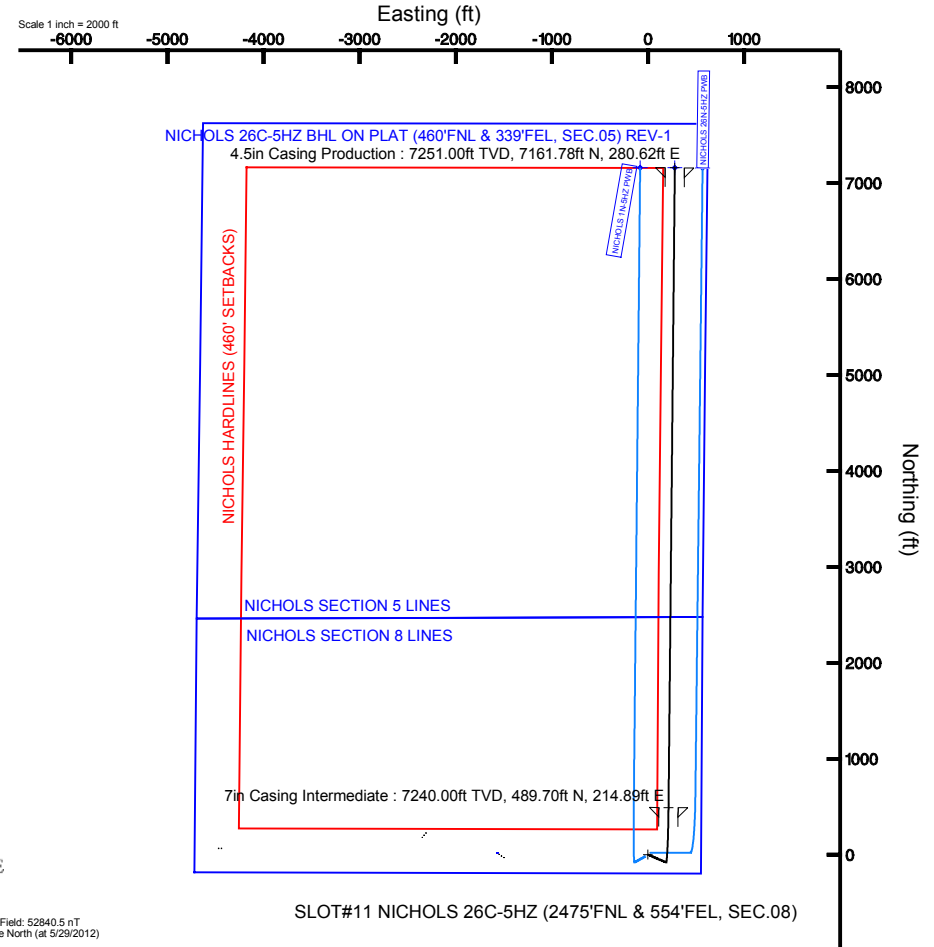


BGGM (1945.0 to 2013.0) Dip: 66.73° Field: 52840.5 nT
Magnetic North is 8.72 degrees East of True North (at 5/29/2012)

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 2.24° with reference 0.00 N, 0.00 E





Planned Wellpath Report

NICHOLS 26C-5HZ (PERMIT) PWP

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**REFERENCE WELLPATH IDENTIFICATION**

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08)
Area	COLORADO	Well	NICHOLS 26C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 26C-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 19:18:35
Convergence at slot	0.53° East	Database/Source file	WellArchitectDB/NICHOLS_26C-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	30768.51	31599.05	3229123.43	1299909.39	40°09'13.460"N	104°40'49.048"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#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08) (RKB) to Facility Vertical Datum
Horizontal Reference Pt	Slot	Rig on SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08) (RKB) to Mean Sea Level
Vertical Reference Pt	Rig on SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08) (RKB)	Rig on SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08) (RKB) to Mud Line at Slot (SLOT#11 NICHOLS 26C-5
MD Reference Pt	Rig on SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08) (RKB)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth



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NICHOLS 26C-5HZ (PERMIT) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08)
Area	COLORADO	Well	NICHOLS 26C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 26C-5HZ PWB
Facility	SEC.08-T2N-R6SW		

WELLPATH DATA (155 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	113.400	0.00	0.00	0.00	0.00	40°09'13.460"N	104°40'49.048"W	0.00	
17.00	0.000	113.400	17.00	0.00	0.00	0.00	40°09'13.460"N	104°40'49.048"W	0.00	Tie On
117.00†	0.000	113.400	117.00	0.00	0.00	0.00	40°09'13.460"N	104°40'49.048"W	0.00	
217.00†	0.000	113.400	217.00	0.00	0.00	0.00	40°09'13.460"N	104°40'49.048"W	0.00	
317.00†	0.000	113.400	317.00	0.00	0.00	0.00	40°09'13.460"N	104°40'49.048"W	0.00	
417.00†	0.000	113.400	417.00	0.00	0.00	0.00	40°09'13.460"N	104°40'49.048"W	0.00	
517.00†	0.000	113.400	517.00	0.00	0.00	0.00	40°09'13.460"N	104°40'49.048"W	0.00	
617.00†	0.000	113.400	617.00	0.00	0.00	0.00	40°09'13.460"N	104°40'49.048"W	0.00	
717.00†	0.000	113.400	717.00	0.00	0.00	0.00	40°09'13.460"N	104°40'49.048"W	0.00	
817.00†	0.000	113.400	817.00	0.00	0.00	0.00	40°09'13.460"N	104°40'49.048"W	0.00	
917.00†	0.000	113.400	917.00	0.00	0.00	0.00	40°09'13.460"N	104°40'49.048"W	0.00	
1000.00	0.000	113.400	1000.00	0.00	0.00	0.00	40°09'13.460"N	104°40'49.048"W	0.00	End of Tangent
1017.00†	0.340	113.400	1017.00	-0.02	-0.02	0.05	40°09'13.460"N	104°40'49.047"W	2.00	
1105.50	2.110	113.400	1105.48	-0.70	-0.77	1.78	40°09'13.452"N	104°40'49.025"W	2.00	End of Build (J)
1117.00†	2.110	113.400	1116.97	-0.85	-0.94	2.17	40°09'13.451"N	104°40'49.020"W	0.00	
1217.00†	2.110	113.400	1216.90	-2.18	-2.40	5.55	40°09'13.436"N	104°40'48.977"W	0.00	
1317.00†	2.110	113.400	1316.83	-3.51	-3.86	8.93	40°09'13.422"N	104°40'48.933"W	0.00	
1417.00†	2.110	113.400	1416.76	-4.84	-5.33	12.31	40°09'13.407"N	104°40'48.889"W	0.00	
1517.00†	2.110	113.400	1516.70	-6.17	-6.79	15.69	40°09'13.393"N	104°40'48.846"W	0.00	
1617.00†	2.110	113.400	1616.63	-7.50	-8.25	19.07	40°09'13.378"N	104°40'48.802"W	0.00	
1717.00†	2.110	113.400	1716.56	-8.83	-9.71	22.45	40°09'13.364"N	104°40'48.759"W	0.00	
1817.00†	2.110	113.400	1816.49	-10.16	-11.18	25.82	40°09'13.350"N	104°40'48.715"W	0.00	
1917.00†	2.110	113.400	1916.43	-11.48	-12.64	29.20	40°09'13.335"N	104°40'48.672"W	0.00	
2017.00†	2.110	113.400	2016.36	-12.81	-14.10	32.58	40°09'13.321"N	104°40'48.628"W	0.00	
2117.00†	2.110	113.400	2116.29	-14.14	-15.56	35.96	40°09'13.306"N	104°40'48.585"W	0.00	
2217.00†	2.110	113.400	2216.22	-15.47	-17.02	39.34	40°09'13.292"N	104°40'48.541"W	0.00	
2317.00†	2.110	113.400	2316.15	-16.80	-18.49	42.72	40°09'13.277"N	104°40'48.498"W	0.00	
2417.00†	2.110	113.400	2416.09	-18.13	-19.95	46.10	40°09'13.263"N	104°40'48.454"W	0.00	
2517.00†	2.110	113.400	2516.02	-19.46	-21.41	49.48	40°09'13.248"N	104°40'48.411"W	0.00	
2617.00†	2.110	113.400	2615.95	-20.79	-22.87	52.86	40°09'13.234"N	104°40'48.367"W	0.00	
2717.00†	2.110	113.400	2715.88	-22.11	-24.34	56.24	40°09'13.220"N	104°40'48.324"W	0.00	
2817.00†	2.110	113.400	2815.82	-23.44	-25.80	59.61	40°09'13.205"N	104°40'48.280"W	0.00	
2917.00†	2.110	113.400	2915.75	-24.77	-27.26	62.99	40°09'13.191"N	104°40'48.237"W	0.00	
3017.00†	2.110	113.400	3015.68	-26.10	-28.72	66.37	40°09'13.176"N	104°40'48.193"W	0.00	
3117.00†	2.110	113.400	3115.61	-27.43	-30.18	69.75	40°09'13.162"N	104°40'48.150"W	0.00	
3217.00†	2.110	113.400	3215.54	-28.76	-31.65	73.13	40°09'13.147"N	104°40'48.106"W	0.00	
3317.00†	2.110	113.400	3315.48	-30.09	-33.11	76.51	40°09'13.133"N	104°40'48.063"W	0.00	
3417.00†	2.110	113.400	3415.41	-31.42	-34.57	79.89	40°09'13.118"N	104°40'48.019"W	0.00	
3517.00†	2.110	113.400	3515.34	-32.75	-36.03	83.27	40°09'13.104"N	104°40'47.976"W	0.00	
3617.00†	2.110	113.400	3615.27	-34.07	-37.50	86.65	40°09'13.089"N	104°40'47.932"W	0.00	
3717.00†	2.110	113.400	3715.21	-35.40	-38.96	90.03	40°09'13.075"N	104°40'47.889"W	0.00	
3817.00†	2.110	113.400	3815.14	-36.73	-40.42	93.40	40°09'13.061"N	104°40'47.845"W	0.00	
3917.00†	2.110	113.400	3915.07	-38.06	-41.88	96.78	40°09'13.046"N	104°40'47.802"W	0.00	
4017.00†	2.110	113.400	4015.00	-39.39	-43.34	100.16	40°09'13.032"N	104°40'47.758"W	0.00	
4117.00†	2.110	113.400	4114.93	-40.72	-44.81	103.54	40°09'13.017"N	104°40'47.715"W	0.00	



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NICHOLS 26C-5HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08)
Area	COLORADO	Well	NICHOLS 26C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 26C-5HZ PWB
Facility	SEC.08-T2N-R65W		

WELLPATH DATA (155 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4217.00†	2.110	113.400	4214.87	-42.05	-46.27	106.92	40°09'13.003"N	104°40'47.671"W	0.00	
4317.00†	2.110	113.400	4314.80	-43.38	-47.73	110.30	40°09'12.988"N	104°40'47.628"W	0.00	
4417.00†	2.110	113.400	4414.73	-44.70	-49.19	113.68	40°09'12.974"N	104°40'47.584"W	0.00	
4494.32†	2.110	113.400	4492.00	-45.73	-50.32	116.29	40°09'12.963"N	104°40'47.550"W	0.00	SUSSEX
4517.00†	2.110	113.400	4514.66	-46.03	-50.66	117.06	40°09'12.959"N	104°40'47.540"W	0.00	
4617.00†	2.110	113.400	4614.60	-47.36	-52.12	120.44	40°09'12.945"N	104°40'47.497"W	0.00	
4717.00†	2.110	113.400	4714.53	-48.69	-53.58	123.82	40°09'12.931"N	104°40'47.453"W	0.00	
4817.00†	2.110	113.400	4814.46	-50.02	-55.04	127.19	40°09'12.916"N	104°40'47.410"W	0.00	
4917.00†	2.110	113.400	4914.39	-51.35	-56.50	130.57	40°09'12.902"N	104°40'47.366"W	0.00	
5017.00†	2.110	113.400	5014.32	-52.68	-57.97	133.95	40°09'12.887"N	104°40'47.323"W	0.00	
5117.00†	2.110	113.400	5114.26	-54.01	-59.43	137.33	40°09'12.873"N	104°40'47.279"W	0.00	
5217.00†	2.110	113.400	5214.19	-55.33	-60.89	140.71	40°09'12.858"N	104°40'47.236"W	0.00	
5317.00†	2.110	113.400	5314.12	-56.66	-62.35	144.09	40°09'12.844"N	104°40'47.192"W	0.00	
5417.00†	2.110	113.400	5414.05	-57.99	-63.82	147.47	40°09'12.829"N	104°40'47.149"W	0.00	
5517.00†	2.110	113.400	5513.99	-59.32	-65.28	150.85	40°09'12.815"N	104°40'47.105"W	0.00	
5617.00†	2.110	113.400	5613.92	-60.65	-66.74	154.23	40°09'12.800"N	104°40'47.062"W	0.00	
5717.00†	2.110	113.400	5713.85	-61.98	-68.20	157.61	40°09'12.786"N	104°40'47.018"W	0.00	
5817.00†	2.110	113.400	5813.78	-63.31	-69.66	160.98	40°09'12.772"N	104°40'46.975"W	0.00	
5917.00†	2.110	113.400	5913.71	-64.64	-71.13	164.36	40°09'12.757"N	104°40'46.931"W	0.00	
6017.00†	2.110	113.400	6013.65	-65.97	-72.59	167.74	40°09'12.743"N	104°40'46.888"W	0.00	
6117.00†	2.110	113.400	6113.58	-67.29	-74.05	171.12	40°09'12.728"N	104°40'46.844"W	0.00	
6217.00†	2.110	113.400	6213.51	-68.62	-75.51	174.50	40°09'12.714"N	104°40'46.801"W	0.00	
6317.00†	2.110	113.400	6313.44	-69.95	-76.98	177.88	40°09'12.699"N	104°40'46.757"W	0.00	
6417.00†	2.110	113.400	6413.37	-71.28	-78.44	181.26	40°09'12.685"N	104°40'46.714"W	0.00	
6517.00†	2.110	113.400	6513.31	-72.61	-79.90	184.64	40°09'12.670"N	104°40'46.670"W	0.00	
6617.00†	2.110	113.400	6613.24	-73.94	-81.36	188.02	40°09'12.656"N	104°40'46.627"W	0.00	
6662.98	2.110	113.400	6659.19	-74.55	-82.03	189.57	40°09'12.649"N	104°40'46.607"W	0.00	End of Tangent (J)
6717.00†	4.978	23.505	6713.13	-72.72	-80.28	191.42	40°09'12.667"N	104°40'46.583"W	10.00	
6817.00†	14.709	7.993	6811.55	-56.00	-63.69	194.92	40°09'12.831"N	104°40'46.538"W	10.00	
6901.04†	23.065	5.135	6891.00	-28.90	-36.67	197.89	40°09'13.098"N	104°40'46.500"W	10.00	SHARON SPRINGS
6917.00†	24.655	4.804	6905.59	-22.45	-30.24	198.44	40°09'13.161"N	104°40'46.492"W	10.00	
6972.69†	30.209	3.905	6955.00	3.18	-4.67	200.37	40°09'13.414"N	104°40'46.467"W	10.00	NIOBRARA A
7000.87†	33.021	3.556	6979.00	17.95	10.07	201.33	40°09'13.560"N	104°40'46.455"W	10.00	NIOBRARA B
7017.00†	34.631	3.379	6992.40	26.92	19.03	201.87	40°09'13.648"N	104°40'46.448"W	10.00	
7117.00†	44.617	2.533	7069.32	90.61	82.64	205.11	40°09'14.277"N	104°40'46.406"W	10.00	
7132.20†	46.135	2.431	7080.00	101.43	93.45	205.58	40°09'14.383"N	104°40'46.400"W	10.00	NIOBRARA C
7217.00†	54.607	1.944	7134.04	166.68	158.65	208.05	40°09'15.028"N	104°40'46.369"W	10.00	
7317.00†	64.599	1.485	7184.57	252.82	244.76	210.61	40°09'15.879"N	104°40'46.336"W	10.00	
7394.52†	72.346	1.180	7213.00	324.87	316.80	212.28	40°09'16.591"N	104°40'46.314"W	10.00	FORT HAYS
7417.00†	74.592	1.097	7219.39	346.41	338.34	212.71	40°09'16.804"N	104°40'46.309"W	10.00	
7517.00†	84.586	0.746	7237.44	444.62	436.56	214.28	40°09'17.774"N	104°40'46.288"W	10.00	
7570.22	89.906	0.564	7240.00	497.74	489.70	214.89	40°09'18.299"N	104°40'46.280"W	10.00	End of 3D Arc (J)
7617.00†	89.906	0.564	7240.08	544.49	536.47	215.35	40°09'18.761"N	104°40'46.275"W	0.00	
7717.00†	89.906	0.564	7240.24	644.45	636.47	216.34	40°09'19.750"N	104°40'46.262"W	0.00	
7817.00†	89.906	0.564	7240.41	744.41	736.46	217.32	40°09'20.738"N	104°40'46.249"W	0.00	



Planned Wellpath Report

NICHOLS 26C-5HZ (PERMIT) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08)
Area	COLORADO	Well	NICHOLS 26C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 26C-5HZ PWB
Facility	SEC.08-T2N-R65W		

WELLPATH DATA (155 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7917.00†	89.906	0.564	7240.57	844.36	836.46	218.31	40°09'21.726"N	104°40'46.236"W	0.00	
8017.00†	89.906	0.564	7240.73	944.32	936.45	219.29	40°09'22.714"N	104°40'46.224"W	0.00	
8117.00†	89.906	0.564	7240.90	1044.28	1036.45	220.28	40°09'23.702"N	104°40'46.211"W	0.00	
8217.00†	89.906	0.564	7241.06	1144.24	1136.44	221.26	40°09'24.690"N	104°40'46.198"W	0.00	
8317.00†	89.906	0.564	7241.23	1244.19	1236.44	222.25	40°09'25.679"N	104°40'46.186"W	0.00	
8417.00†	89.906	0.564	7241.39	1344.15	1336.43	223.23	40°09'26.667"N	104°40'46.173"W	0.00	
8517.00†	89.906	0.564	7241.56	1444.11	1436.43	224.22	40°09'27.655"N	104°40'46.160"W	0.00	
8617.00†	89.906	0.564	7241.72	1544.06	1536.42	225.20	40°09'28.643"N	104°40'46.148"W	0.00	
8717.00†	89.906	0.564	7241.89	1644.02	1636.42	226.19	40°09'29.631"N	104°40'46.135"W	0.00	
8817.00†	89.906	0.564	7242.05	1743.98	1736.41	227.17	40°09'30.619"N	104°40'46.122"W	0.00	
8917.00†	89.906	0.564	7242.22	1843.93	1836.41	228.16	40°09'31.607"N	104°40'46.109"W	0.00	
9017.00†	89.906	0.564	7242.38	1943.89	1936.40	229.14	40°09'32.596"N	104°40'46.097"W	0.00	
9117.00†	89.906	0.564	7242.55	2043.85	2036.40	230.13	40°09'33.584"N	104°40'46.084"W	0.00	
9217.00†	89.906	0.564	7242.71	2143.80	2136.39	231.11	40°09'34.572"N	104°40'46.071"W	0.00	
9317.00†	89.906	0.564	7242.88	2243.76	2236.39	232.10	40°09'35.560"N	104°40'46.059"W	0.00	
9417.00†	89.906	0.564	7243.04	2343.72	2336.38	233.08	40°09'36.548"N	104°40'46.046"W	0.00	
9517.00†	89.906	0.564	7243.21	2443.68	2436.38	234.07	40°09'37.536"N	104°40'46.033"W	0.00	
9617.00†	89.906	0.564	7243.37	2543.63	2536.37	235.05	40°09'38.525"N	104°40'46.021"W	0.00	
9717.00†	89.906	0.564	7243.54	2643.59	2636.37	236.04	40°09'39.513"N	104°40'46.008"W	0.00	
9817.00†	89.906	0.564	7243.70	2743.55	2736.36	237.02	40°09'40.501"N	104°40'45.995"W	0.00	
9917.00†	89.906	0.564	7243.87	2843.50	2836.36	238.01	40°09'41.489"N	104°40'45.982"W	0.00	
10017.00†	89.906	0.564	7244.03	2943.46	2936.35	238.99	40°09'42.477"N	104°40'45.970"W	0.00	
10117.00†	89.906	0.564	7244.20	3043.42	3036.35	239.98	40°09'43.465"N	104°40'45.957"W	0.00	
10217.00†	89.906	0.564	7244.36	3143.37	3136.34	240.96	40°09'44.454"N	104°40'45.944"W	0.00	
10317.00†	89.906	0.564	7244.53	3243.33	3236.34	241.95	40°09'45.442"N	104°40'45.932"W	0.00	
10417.00†	89.906	0.564	7244.69	3343.29	3336.33	242.93	40°09'46.430"N	104°40'45.919"W	0.00	
10517.00†	89.906	0.564	7244.86	3443.24	3436.33	243.92	40°09'47.418"N	104°40'45.906"W	0.00	
10617.00†	89.906	0.564	7245.02	3543.20	3536.32	244.90	40°09'48.406"N	104°40'45.894"W	0.00	
10717.00†	89.906	0.564	7245.19	3643.16	3636.32	245.89	40°09'49.394"N	104°40'45.881"W	0.00	
10817.00†	89.906	0.564	7245.35	3743.12	3736.31	246.87	40°09'50.382"N	104°40'45.868"W	0.00	
10917.00†	89.906	0.564	7245.52	3843.07	3836.31	247.86	40°09'51.371"N	104°40'45.855"W	0.00	
11017.00†	89.906	0.564	7245.68	3943.03	3936.30	248.84	40°09'52.359"N	104°40'45.843"W	0.00	
11117.00†	89.906	0.564	7245.85	4042.99	4036.30	249.83	40°09'53.347"N	104°40'45.830"W	0.00	
11217.00†	89.906	0.564	7246.01	4142.94	4136.29	250.81	40°09'54.335"N	104°40'45.817"W	0.00	
11317.00†	89.906	0.564	7246.18	4242.90	4236.29	251.80	40°09'55.323"N	104°40'45.805"W	0.00	
11417.00†	89.906	0.564	7246.34	4342.86	4336.28	252.78	40°09'56.311"N	104°40'45.792"W	0.00	
11517.00†	89.906	0.564	7246.51	4442.81	4436.28	253.77	40°09'57.300"N	104°40'45.779"W	0.00	
11617.00†	89.906	0.564	7246.67	4542.77	4536.27	254.75	40°09'58.288"N	104°40'45.767"W	0.00	
11717.00†	89.906	0.564	7246.84	4642.73	4636.27	255.74	40°09'59.276"N	104°40'45.754"W	0.00	
11817.00†	89.906	0.564	7247.00	4742.68	4736.26	256.72	40°10'00.264"N	104°40'45.741"W	0.00	
11917.00†	89.906	0.564	7247.17	4842.64	4836.26	257.71	40°10'01.252"N	104°40'45.728"W	0.00	
12017.00†	89.906	0.564	7247.33	4942.60	4936.25	258.69	40°10'02.240"N	104°40'45.716"W	0.00	
12117.00†	89.906	0.564	7247.50	5042.56	5036.25	259.68	40°10'03.228"N	104°40'45.703"W	0.00	
12217.00†	89.906	0.564	7247.66	5142.51	5136.24	260.66	40°10'04.217"N	104°40'45.690"W	0.00	
12317.00†	89.906	0.564	7247.82	5242.47	5236.24	261.65	40°10'05.205"N	104°40'45.678"W	0.00	



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NICHOLS 26C-5HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08)
Area	COLORADO	Well	NICHOLS 26C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 26C-5HZ PWB
Facility	SEC.08-T2N-R6SW		

WELLPATH DATA (155 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12417.00†	89.906	0.564	7247.99	5342.43	5336.23	262.63	40°10'06.193"N	104°40'45.665"W	0.00	
12517.00†	89.906	0.564	7248.15	5442.38	5436.23	263.62	40°10'07.181"N	104°40'45.652"W	0.00	
12617.00†	89.906	0.564	7248.32	5542.34	5536.22	264.60	40°10'08.169"N	104°40'45.640"W	0.00	
12717.00†	89.906	0.564	7248.48	5642.30	5636.22	265.59	40°10'09.157"N	104°40'45.627"W	0.00	
12817.00†	89.906	0.564	7248.65	5742.25	5736.21	266.57	40°10'10.146"N	104°40'45.614"W	0.00	
12917.00†	89.906	0.564	7248.81	5842.21	5836.21	267.56	40°10'11.134"N	104°40'45.601"W	0.00	
13017.00†	89.906	0.564	7248.98	5942.17	5936.20	268.54	40°10'12.122"N	104°40'45.589"W	0.00	
13117.00†	89.906	0.564	7249.14	6042.12	6036.20	269.53	40°10'13.110"N	104°40'45.576"W	0.00	
13217.00†	89.906	0.564	7249.31	6142.08	6136.19	270.51	40°10'14.098"N	104°40'45.563"W	0.00	
13317.00†	89.906	0.564	7249.47	6242.04	6236.19	271.50	40°10'15.086"N	104°40'45.551"W	0.00	
13417.00†	89.906	0.564	7249.64	6341.99	6336.18	272.49	40°10'16.074"N	104°40'45.538"W	0.00	
13517.00†	89.906	0.564	7249.80	6441.95	6436.18	273.47	40°10'17.063"N	104°40'45.525"W	0.00	
13617.00†	89.906	0.564	7249.97	6541.91	6536.17	274.46	40°10'18.051"N	104°40'45.512"W	0.00	
13717.00†	89.906	0.564	7250.13	6641.87	6636.17	275.44	40°10'19.039"N	104°40'45.500"W	0.00	
13817.00†	89.906	0.564	7250.30	6741.82	6736.16	276.43	40°10'20.027"N	104°40'45.487"W	0.00	
13917.00†	89.906	0.564	7250.46	6841.78	6836.16	277.41	40°10'21.015"N	104°40'45.474"W	0.00	
14017.00†	89.906	0.564	7250.63	6941.74	6936.15	278.40	40°10'22.003"N	104°40'45.462"W	0.00	
14117.00†	89.906	0.564	7250.79	7041.69	7036.15	279.38	40°10'22.992"N	104°40'45.449"W	0.00	
14217.00†	89.906	0.564	7250.96	7141.65	7136.14	280.37	40°10'23.980"N	104°40'45.436"W	0.00	
14242.63	89.906	0.564	7251.00 ¹	7167.27	7161.78	280.62	40°10'24.233"N	104°40'45.433"W	0.00	End of Tangent (J)

HOLE & CASING SECTIONS - Ref Wellbore: NICHOLS 26C-5HZ PWB Ref Wellpath: NICHOLS 26C-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	7570.22	6745.22	825.00	7240.00	0.00	0.00	489.70	214.89
7in Casing Intermediate	17.00	7570.22	7553.22	17.00	7240.00	0.00	0.00	489.70	214.89
6.125in Open Hole	7570.22	14242.63	6672.41	7240.00	7251.00	489.70	214.89	7161.78	280.62
4.5in Casing Production	17.00	14242.63	14225.63	17.00	7251.00	0.00	0.00	7161.78	280.62



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NICHOLS 26C-5HZ (PERMIT) PWP

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**REFERENCE WELLPATH IDENTIFICATION**

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08)
Area	COLORADO	Well	NICHOLS 26C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 26C-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	18.67	-1573.47	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W	polygon
NICHOLS SECTION 8 LINES		-18.00	18.67	-1573.47	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W	polygon
NICHOLS HARDLINES (460' SETBACKS)		7182.00	18.67	-1573.47	3227549.93	1299913.51	40°09'13.644"N	104°41'09.312"W	polygon
1) NICHOLS 26C-5HZ BHL ON PLAT (460'FNL & 339'FEL, SEC.05) REV-1	14242.63	7251.00	7161.78	280.62	3229337.82	1307073.14	40°10'24.233"N	104°40'45.433"W	point

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

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	14242.63	NaviTrak (Standard)		NICHOLS 26C-5HZ PWB



Planned Wellpath Report
NICHOLS 26C-5HZ (PERMIT) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 NICHOLS 26C-5HZ (2475'FNL & 554'FEL, SEC.08)
Area	COLORADO	Well	NICHOLS 26C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NICHOLS 26C-5HZ PWB
Facility	SEC.08-T2N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
4494.32	2.110	113.400	4492.00	SUSSEX
6901.04	23.065	5.135	6891.00	SHARON SPRINGS
6972.69	30.209	3.905	6955.00	NIOBRARA A
7000.87	33.021	3.556	6979.00	NIOBRARA B
7132.20	46.135	2.431	7080.00	NIOBRARA C
7394.52	72.346	1.180	7213.00	FORT HAYS