

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#03 MILLENSIFER FED 37N-W30HZ (472'FNL & 2039'FEL, SEC.30)  
 Field: WELD COUNTY (KERR MCGEE) Well: MILLENSIFER FED 37N-W30HZ  
 Facility: SEC.30-T3N-R66W Wellbore: MILLENSIFER FED 37N-W30HZ PWB

Plot reference wellpath is MILLENSIFER FED 37N-W30HZ (PERMIT) PWP

True vertical depths are referenced to Rig on SLOT#02 MILLENSIFER FED 37N-W30HZ (472'FNL & 2040'FEL, SEC.30) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to Rig on SLOT#02 MILLENSIFER FED 37N-W30HZ (472'FNL & 2040'FEL, SEC.30) (RKB)	North Reference: True north
Rig on SLOT#02 MILLENSIFER FED 37N-W30HZ (472'FNL & 2040'FEL, SEC.30) (RKB) to Mean Sea Level: 4844 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#03 MILLENSIFER FED 37N-W30HZ (472'FNL & 2039'FEL, SEC.30)): 0 feet	Depth are in feet
Coordinates are in feet referenced to Slot	Created by: wjlgf02 on 8/23/2012

## Location Information

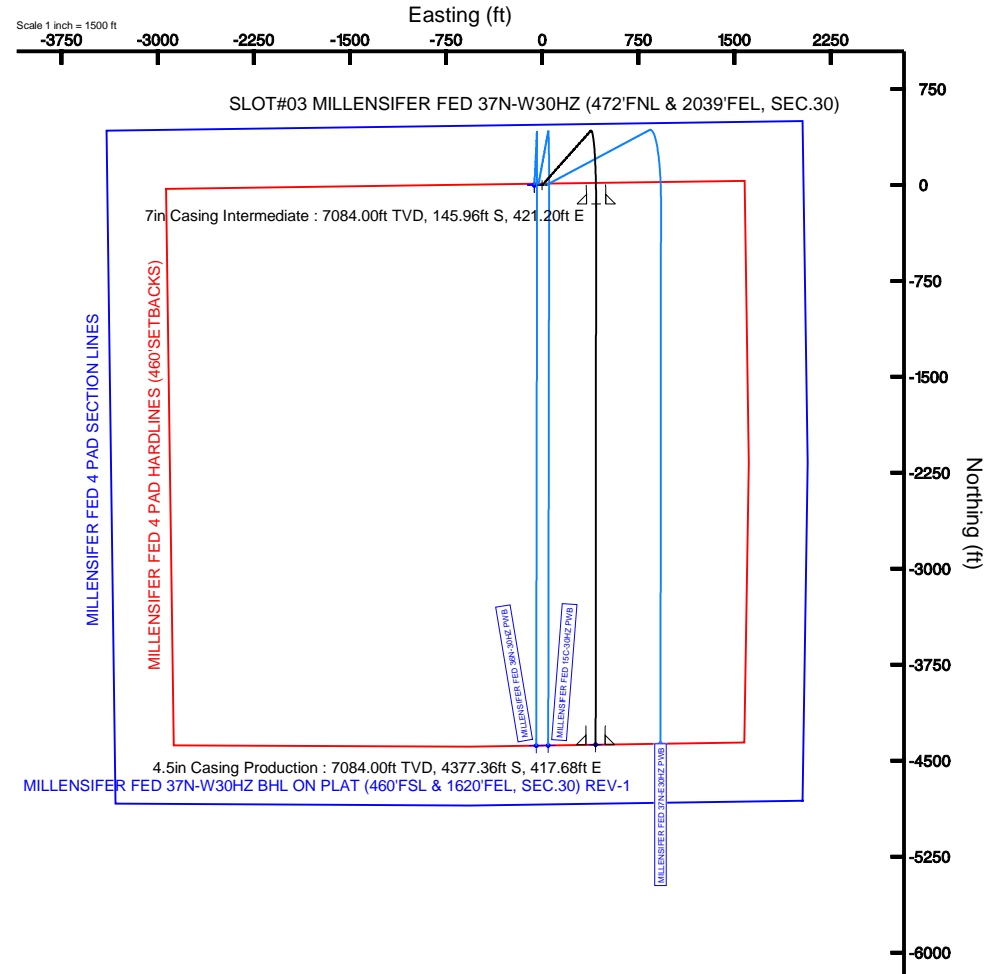
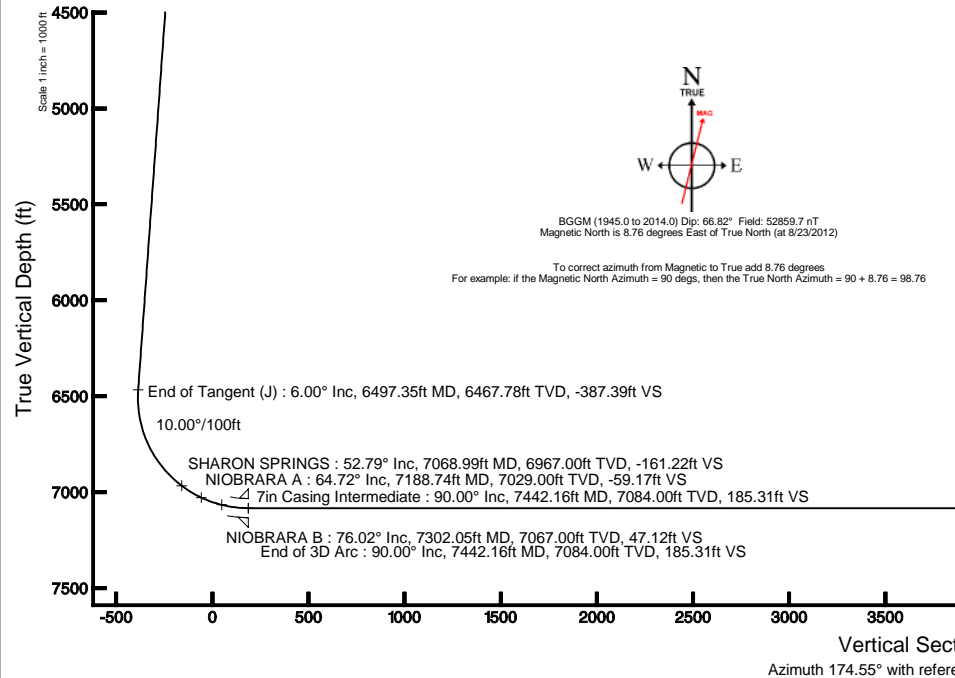
Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SEC.30-T3N-R66W		3190547.453	1317021.496	40°12'05.792"N	104°49'04.163"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#03 MILLENSIFER FED 37N-W30HZ (472'FNL & 2039'FEL, SEC.30)	0.00	-29.87	3190517.581	1317021.287	40°12'05.792"N	104°49'04.548"W
Rig on SLOT#02 MILLENSIFER FED 37N-W30HZ (472'FNL & 2040'FEL, SEC.30) (RKB) to Mud line (At Slot: SLOT#03 MILLENSIFER FED 37N-W30HZ (472'FNL & 2039'FEL, SEC.30))						4844ft
Mean Sea Level to Mud line (At Slot: SLOT#03 MILLENSIFER FED 37N-W30HZ (472'FNL & 2039'FEL, SEC.30))						0ft
Rig on SLOT#02 MILLENSIFER FED 37N-W30HZ (472'FNL & 2040'FEL, SEC.30) (RKB) to Mean Sea Level						4844ft

## Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	16.00	0.000	41.680	16.00	0.00	0.00	0.00	0.00
End of Tangent	900.00	0.000	41.680	900.00	0.00	0.00	0.00	0.00
End of Build (J)	1200.00	6.000	41.680	1199.45	11.72	10.44	2.00	-10.68
End of Tangent (J)	6497.35	6.000	41.680	6467.78	425.28	378.65	0.00	-387.39
End of 3D Arc	7442.16	90.000	180.048	7084.00	-145.96	421.20	10.00	185.31
End of 3D Arc	11673.55	90.000	180.048	7084.00	-4377.36	417.68	0.00	4397.24

## Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
MILLENSIFER FED 4 PAD SECTION LINES		1.00	0.40	60.06	3190457.53	1317021.21	40°12'05.796"N	104°49'05.322"W
MILLENSIFER FED 37N-W30HZ BHL ON PLAT (460'FSL & 1620'FEL, SEC.30) REV-1	11673.55	7084.00	-4377.36	417.68	3190668.90	1312647.45	40°11'22.536"N	104°48'59.168"W
MILLENSIFER FED 4 PAD HARDLINES (460'SETBACKS)		7301.00	0.40	60.06	3190457.53	1317021.21	40°12'05.796"N	104°49'05.322"W



4.5in Casing Production : 90.00° Inc, 11673.55ft MD, 7084.00ft TVD, 4397.24ft VS  
 End of 3D Arc : 90.00° Inc, 11673.55ft MD, 7084.00ft TVD, 4397.24ft VS  
 MILLENSIFER FED 37N-W30HZ BHL ON PLAT (460'FSL & 1620'FEL, SEC.30) REV-1



**Planned Wellpath Report**  
 MILLENSIFER FED 37N-W30HZ (PERMIT) PWP  
 Page 1 of 6

**REFERENCE WELLPATH IDENTIFICATION**

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 MILLENSIFER FED 37N-W30HZ (472'FNL & 2039'FEL, SEC.30)
Area	COLORADO	Well	MILLENSIFER FED 37N-W30HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MILLENSIFER FED 37N-W30HZ PWB
Facility	SEC.30-T3N-R66W		

**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	0.999957	Report Generated	8/23/2012 at 12:53:10
Convergence at slot	0.44° East	Database/Source file	WellArchitectDB/MILLENSIFER_FED_37N-W30HZ_PWB.xml

**WELLPATH LOCATION**

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	-29.87	3190517.58	1317021.27	40°12'05.792"N	104°49'04.548"W
Facility Reference Pt			3190547.45	1317021.50	40°12'05.792"N	104°49'04.163"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#02 MILLENSIFER FED 37N-W30HZ (472'FNL & 2040'FEL, SEC.30) (RKB) to Facility Vertical
Horizontal Reference Pt	Slot	Rig on SLOT#02 MILLENSIFER FED 37N-W30HZ (472'FNL & 2040'FEL, SEC.30) (RKB) to Mean Sea Level
Vertical Reference Pt	Rig on SLOT#02 MILLENSIFER FED 37N-W30HZ (472'FNL & 2040'FEL, SEC.30) (RKB)	Rig on SLOT#02 MILLENSIFER FED 37N-W30HZ (472'FNL & 2040'FEL, SEC.30) (RKB) to Mud Line at Slot
MD Reference Pt	Rig on SLOT#02 MILLENSIFER FED 37N-W30HZ (472'FNL & 2040'FEL, SEC.30) (RKB)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth



**Planned Wellpath Report**  
 MILLENSIFER FED 37N-W30HZ (PERMIT) PWP  
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**REFERENCE WELLPATH IDENTIFICATION**

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 MILLENSIFER FED 37N-W30HZ (472'FNL & 2039'FEL, SEC.30)
Area	COLORADO	Well	MILLENSIFER FED 37N-W30HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MILLENSIFER FED 37N-W30HZ PWB
Facility	SEC.30-T3N-R66W		

**WELLPATH DATA (129 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	41.680	0.00	0.00	0.00	0.00	40°12'05.792"N	104°49'04.548"W	0.00	
16.00	0.000	41.680	16.00	0.00	0.00	0.00	40°12'05.792"N	104°49'04.548"W	0.00	Tie On
116.00†	0.000	41.680	116.00	0.00	0.00	0.00	40°12'05.792"N	104°49'04.548"W	0.00	
216.00†	0.000	41.680	216.00	0.00	0.00	0.00	40°12'05.792"N	104°49'04.548"W	0.00	
316.00†	0.000	41.680	316.00	0.00	0.00	0.00	40°12'05.792"N	104°49'04.548"W	0.00	
416.00†	0.000	41.680	416.00	0.00	0.00	0.00	40°12'05.792"N	104°49'04.548"W	0.00	
516.00†	0.000	41.680	516.00	0.00	0.00	0.00	40°12'05.792"N	104°49'04.548"W	0.00	
616.00†	0.000	41.680	616.00	0.00	0.00	0.00	40°12'05.792"N	104°49'04.548"W	0.00	
706.00†	0.000	41.680	706.00	0.00	0.00	0.00	40°12'05.792"N	104°49'04.548"W	0.00	FOX HILLS
716.00†	0.000	41.680	716.00	0.00	0.00	0.00	40°12'05.792"N	104°49'04.548"W	0.00	
816.00†	0.000	41.680	816.00	0.00	0.00	0.00	40°12'05.792"N	104°49'04.548"W	0.00	
900.00	0.000	41.680	900.00	0.00	0.00	0.00	40°12'05.792"N	104°49'04.548"W	0.00	End of Tangent
916.00†	0.320	41.680	916.00	-0.03	0.03	0.03	40°12'05.792"N	104°49'04.548"W	2.00	
1016.00†	2.320	41.680	1015.97	-1.60	1.75	1.56	40°12'05.809"N	104°49'04.528"W	2.00	
1116.00†	4.320	41.680	1115.80	-5.54	6.08	5.41	40°12'05.852"N	104°49'04.478"W	2.00	
1200.00	6.000	41.680	1199.45	-10.68	11.72	10.44	40°12'05.908"N	104°49'04.414"W	2.00	End of Build (J)
1216.00†	6.000	41.680	1215.36	-11.81	12.97	11.55	40°12'05.920"N	104°49'04.399"W	0.00	
1316.00†	6.000	41.680	1314.82	-18.93	20.78	18.50	40°12'05.997"N	104°49'04.310"W	0.00	
1416.00†	6.000	41.680	1414.27	-26.04	28.58	25.45	40°12'06.074"N	104°49'04.220"W	0.00	
1516.00†	6.000	41.680	1513.72	-33.15	36.39	32.40	40°12'06.152"N	104°49'04.130"W	0.00	
1616.00†	6.000	41.680	1613.17	-40.26	44.20	39.35	40°12'06.229"N	104°49'04.041"W	0.00	
1716.00†	6.000	41.680	1712.63	-47.37	52.00	46.30	40°12'06.306"N	104°49'03.951"W	0.00	
1816.00†	6.000	41.680	1812.08	-54.48	59.81	53.25	40°12'06.383"N	104°49'03.862"W	0.00	
1916.00†	6.000	41.680	1911.53	-61.59	67.62	60.20	40°12'06.460"N	104°49'03.772"W	0.00	
2016.00†	6.000	41.680	2010.98	-68.71	75.43	67.15	40°12'06.537"N	104°49'03.683"W	0.00	
2116.00†	6.000	41.680	2110.43	-75.82	83.23	74.11	40°12'06.615"N	104°49'03.593"W	0.00	
2216.00†	6.000	41.680	2209.89	-82.93	91.04	81.06	40°12'06.692"N	104°49'03.503"W	0.00	
2316.00†	6.000	41.680	2309.34	-90.04	98.85	88.01	40°12'06.769"N	104°49'03.414"W	0.00	
2416.00†	6.000	41.680	2408.79	-97.15	106.65	94.96	40°12'06.846"N	104°49'03.324"W	0.00	
2516.00†	6.000	41.680	2508.24	-104.26	114.46	101.91	40°12'06.923"N	104°49'03.235"W	0.00	
2616.00†	6.000	41.680	2607.69	-111.37	122.27	108.86	40°12'07.000"N	104°49'03.145"W	0.00	
2716.00†	6.000	41.680	2707.15	-118.49	130.07	115.81	40°12'07.077"N	104°49'03.055"W	0.00	
2816.00†	6.000	41.680	2806.60	-125.60	137.88	122.76	40°12'07.155"N	104°49'02.966"W	0.00	
2916.00†	6.000	41.680	2906.05	-132.71	145.69	129.71	40°12'07.232"N	104°49'02.876"W	0.00	
3016.00†	6.000	41.680	3005.50	-139.82	153.49	136.66	40°12'07.309"N	104°49'02.787"W	0.00	
3116.00†	6.000	41.680	3104.96	-146.93	161.30	143.61	40°12'07.386"N	104°49'02.697"W	0.00	
3216.00†	6.000	41.680	3204.41	-154.04	169.11	150.56	40°12'07.463"N	104°49'02.608"W	0.00	
3316.00†	6.000	41.680	3303.86	-161.15	176.92	157.52	40°12'07.540"N	104°49'02.518"W	0.00	
3356.36†	6.000	41.680	3344.00	-164.02	180.07	160.32	40°12'07.571"N	104°49'02.482"W	0.00	PARKMAN
3416.00†	6.000	41.680	3403.31	-168.26	184.72	164.47	40°12'07.617"N	104°49'02.428"W	0.00	
3516.00†	6.000	41.680	3502.76	-175.38	192.53	171.42	40°12'07.695"N	104°49'02.339"W	0.00	
3616.00†	6.000	41.680	3602.22	-182.49	200.34	178.37	40°12'07.772"N	104°49'02.249"W	0.00	
3716.00†	6.000	41.680	3701.67	-189.60	208.14	185.32	40°12'07.849"N	104°49'02.160"W	0.00	
3816.00†	6.000	41.680	3801.12	-196.71	215.95	192.27	40°12'07.926"N	104°49'02.070"W	0.00	
3916.00†	6.000	41.680	3900.57	-203.82	223.76	199.22	40°12'08.003"N	104°49'01.981"W	0.00	



# Planned Wellpath Report

MILLENSIFER FED 37N-W30HZ (PERMIT) PWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 MILLENSIFER FED 37N-W30HZ (472'FNL & 2039'FEL, SEC.30)
Area	COLORADO	Well	MILLENSIFER FED 37N-W30HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MILLENSIFER FED 37N-W30HZ PWB
Facility	SEC.30-T3N-R66W		

WELLPATH DATA (129 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4016.00†	6.000	41.680	4000.03	-210.93	231.56	206.17	40°12'08.080"N	104°49'01.891"W	0.00	
4116.00†	6.000	41.680	4099.48	-218.04	239.37	213.12	40°12'08.157"N	104°49'01.801"W	0.00	
4216.00†	6.000	41.680	4198.93	-225.16	247.18	220.07	40°12'08.235"N	104°49'01.712"W	0.00	
4265.34†	6.000	41.680	4248.00	-228.66	251.03	223.50	40°12'08.273"N	104°49'01.668"W	0.00	SUSSEX
4316.00†	6.000	41.680	4298.38	-232.27	254.98	227.02	40°12'08.312"N	104°49'01.622"W	0.00	
4416.00†	6.000	41.680	4397.83	-239.38	262.79	233.97	40°12'08.389"N	104°49'01.533"W	0.00	
4516.00†	6.000	41.680	4497.29	-246.49	270.60	240.93	40°12'08.466"N	104°49'01.443"W	0.00	
4616.00†	6.000	41.680	4596.74	-253.60	278.41	247.88	40°12'08.543"N	104°49'01.353"W	0.00	
4716.00†	6.000	41.680	4696.19	-260.71	286.21	254.83	40°12'08.620"N	104°49'01.264"W	0.00	
4816.00†	6.000	41.680	4795.64	-267.82	294.02	261.78	40°12'08.697"N	104°49'01.174"W	0.00	
4916.00†	6.000	41.680	4895.10	-274.94	301.83	268.73	40°12'08.775"N	104°49'01.085"W	0.00	
5016.00†	6.000	41.680	4994.55	-282.05	309.63	275.68	40°12'08.852"N	104°49'00.995"W	0.00	
5116.00†	6.000	41.680	5094.00	-289.16	317.44	282.63	40°12'08.929"N	104°49'00.906"W	0.00	
5216.00†	6.000	41.680	5193.45	-296.27	325.25	289.58	40°12'09.006"N	104°49'00.816"W	0.00	
5316.00†	6.000	41.680	5292.90	-303.38	333.05	296.53	40°12'09.083"N	104°49'00.726"W	0.00	
5416.00†	6.000	41.680	5392.36	-310.49	340.86	303.48	40°12'09.160"N	104°49'00.637"W	0.00	
5516.00†	6.000	41.680	5491.81	-317.60	348.67	310.43	40°12'09.238"N	104°49'00.547"W	0.00	
5616.00†	6.000	41.680	5591.26	-324.72	356.47	317.38	40°12'09.315"N	104°49'00.458"W	0.00	
5716.00†	6.000	41.680	5690.71	-331.83	364.28	324.34	40°12'09.392"N	104°49'00.368"W	0.00	
5816.00†	6.000	41.680	5790.17	-338.94	372.09	331.29	40°12'09.469"N	104°49'00.278"W	0.00	
5916.00†	6.000	41.680	5889.62	-346.05	379.90	338.24	40°12'09.546"N	104°49'00.189"W	0.00	
6016.00†	6.000	41.680	5989.07	-353.16	387.70	345.19	40°12'09.623"N	104°49'00.099"W	0.00	
6116.00†	6.000	41.680	6088.52	-360.27	395.51	352.14	40°12'09.700"N	104°49'00.010"W	0.00	
6216.00†	6.000	41.680	6187.97	-367.38	403.32	359.09	40°12'09.778"N	104°48'59.920"W	0.00	
6316.00†	6.000	41.680	6287.43	-374.49	411.12	366.04	40°12'09.855"N	104°48'59.831"W	0.00	
6416.00†	6.000	41.680	6386.88	-381.61	418.93	372.99	40°12'09.932"N	104°48'59.741"W	0.00	
6497.35	6.000	41.680	6467.78	-387.39	425.28	378.65	40°12'09.995"N	104°48'59.668"W	0.00	End of Tangent (J)
6516.00†	4.773	56.787	6486.35	-388.42	426.43	379.94	40°12'10.006"N	104°48'59.651"W	10.00	
6616.00†	8.390	151.790	6585.90	-383.61	422.27	386.89	40°12'09.965"N	104°48'59.562"W	10.00	
6716.00†	17.823	167.504	6683.21	-361.64	400.85	393.67	40°12'09.753"N	104°48'59.474"W	10.00	
6816.00†	27.652	172.389	6775.33	-323.17	362.81	400.07	40°12'09.377"N	104°48'59.392"W	10.00	
6916.00†	37.566	174.839	6859.47	-269.36	309.31	405.90	40°12'08.849"N	104°48'59.317"W	10.00	
7016.00†	47.512	176.381	6933.06	-201.85	241.99	410.98	40°12'08.183"N	104°48'59.251"W	10.00	
7068.99†	52.789	177.008	6967.00	-161.22	201.39	413.32	40°12'07.782"N	104°48'59.221"W	10.00	SHARON SPRINGS
7116.00†	57.473	177.495	6993.87	-122.70	162.87	415.16	40°12'07.401"N	104°48'59.198"W	10.00	
7188.74†	64.724	178.158	7029.00	-59.17	99.28	417.56	40°12'06.773"N	104°48'59.167"W	10.00	NIOBRARA A
7216.00†	67.442	178.385	7040.05	-34.30	74.37	418.31	40°12'06.527"N	104°48'59.157"W	10.00	
7302.05†	76.024	179.052	7067.00	47.12	-7.25	420.13	40°12'05.720"N	104°48'59.134"W	10.00	NIOBRARA B
7316.00†	77.415	179.154	7070.20	60.65	-20.82	420.34	40°12'05.586"N	104°48'59.131"W	10.00	
7416.00†	87.390	179.865	7083.41	159.28	-119.81	421.18	40°12'04.608"N	104°48'59.120"W	10.00	
7442.16	90.000	180.048	7084.00	185.31	-145.96	421.20	40°12'04.350"N	104°48'59.120"W	0.00	End of 3D Arc
7516.00†	90.000	180.048	7084.00	258.81	-219.80	421.14	40°12'03.620"N	104°48'59.121"W	10.00	
7616.00†	90.000	180.048	7084.00	358.35	-319.80	421.06	40°12'02.632"N	104°48'59.122"W	0.00	
7716.00†	90.000	180.048	7084.00	457.89	-419.80	420.97	40°12'01.643"N	104°48'59.123"W	0.00	
7816.00†	90.000	180.048	7084.00	557.43	-519.80	420.89	40°12'00.655"N	104°48'59.124"W	0.00	

**REFERENCE WELLPATH IDENTIFICATION**

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 MILLENSIFER FED 37N-W30HZ (472'FNL & 2039'FEL, SEC.30)
Area	COLORADO	Well	MILLENSIFER FED 37N-W30HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MILLENSIFER FED 37N-W30HZ PWB
Facility	SEC.30-T3N-R66W		

**WELLPATH DATA (129 stations) † = interpolated/extrapolated station**

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7916.00†	90.000	180.048	7084.00	656.97	-619.80	420.81	40°11'59.667"N	104°48'59.125"W	0.00	
8016.00†	90.000	180.048	7084.00	756.51	-719.80	420.72	40°11'58.679"N	104°48'59.126"W	0.00	
8116.00†	90.000	180.048	7084.00	856.05	-819.80	420.64	40°11'57.691"N	104°48'59.127"W	0.00	
8216.00†	90.000	180.048	7084.00	955.59	-919.80	420.56	40°11'56.703"N	104°48'59.128"W	0.00	
8316.00†	90.000	180.048	7084.00	1055.13	-1019.80	420.48	40°11'55.714"N	104°48'59.129"W	0.00	
8416.00†	90.000	180.048	7084.00	1154.67	-1119.80	420.39	40°11'54.726"N	104°48'59.130"W	0.00	
8516.00†	90.000	180.048	7084.00	1254.21	-1219.80	420.31	40°11'53.738"N	104°48'59.131"W	0.00	
8616.00†	90.000	180.048	7084.00	1353.75	-1319.80	420.23	40°11'52.750"N	104°48'59.133"W	0.00	
8716.00†	90.000	180.048	7084.00	1453.29	-1419.80	420.14	40°11'51.762"N	104°48'59.134"W	0.00	
8816.00†	90.000	180.048	7084.00	1552.83	-1519.80	420.06	40°11'50.773"N	104°48'59.135"W	0.00	
8916.00†	90.000	180.048	7084.00	1652.37	-1619.80	419.98	40°11'49.785"N	104°48'59.136"W	0.00	
9016.00†	90.000	180.048	7084.00	1751.91	-1719.80	419.89	40°11'48.797"N	104°48'59.137"W	0.00	
9116.00†	90.000	180.048	7084.00	1851.45	-1819.80	419.81	40°11'47.809"N	104°48'59.138"W	0.00	
9216.00†	90.000	180.048	7084.00	1950.99	-1919.80	419.73	40°11'46.821"N	104°48'59.139"W	0.00	
9316.00†	90.000	180.048	7084.00	2050.53	-2019.80	419.64	40°11'45.832"N	104°48'59.140"W	0.00	
9416.00†	90.000	180.048	7084.00	2150.07	-2119.80	419.56	40°11'44.844"N	104°48'59.141"W	0.00	
9516.00†	90.000	180.048	7084.00	2249.61	-2219.80	419.48	40°11'43.856"N	104°48'59.142"W	0.00	
9616.00†	90.000	180.048	7084.00	2349.15	-2319.80	419.40	40°11'42.868"N	104°48'59.143"W	0.00	
9716.00†	90.000	180.048	7084.00	2448.69	-2419.80	419.31	40°11'41.880"N	104°48'59.145"W	0.00	
9816.00†	90.000	180.048	7084.00	2548.23	-2519.80	419.23	40°11'40.891"N	104°48'59.146"W	0.00	
9916.00†	90.000	180.048	7084.00	2647.77	-2619.80	419.15	40°11'39.903"N	104°48'59.147"W	0.00	
10016.00†	90.000	180.048	7084.00	2747.31	-2719.80	419.06	40°11'38.915"N	104°48'59.148"W	0.00	
10116.00†	90.000	180.048	7084.00	2846.85	-2819.80	418.98	40°11'37.927"N	104°48'59.149"W	0.00	
10216.00†	90.000	180.048	7084.00	2946.39	-2919.80	418.90	40°11'36.939"N	104°48'59.150"W	0.00	
10316.00†	90.000	180.048	7084.00	3045.93	-3019.80	418.81	40°11'35.950"N	104°48'59.151"W	0.00	
10416.00†	90.000	180.048	7084.00	3145.47	-3119.80	418.73	40°11'34.962"N	104°48'59.152"W	0.00	
10516.00†	90.000	180.048	7084.00	3245.01	-3219.80	418.65	40°11'33.974"N	104°48'59.153"W	0.00	
10616.00†	90.000	180.048	7084.00	3344.55	-3319.80	418.56	40°11'32.986"N	104°48'59.154"W	0.00	
10716.00†	90.000	180.048	7084.00	3444.09	-3419.80	418.48	40°11'31.998"N	104°48'59.156"W	0.00	
10816.00†	90.000	180.048	7084.00	3543.63	-3519.80	418.40	40°11'31.009"N	104°48'59.157"W	0.00	
10916.00†	90.000	180.048	7084.00	3643.17	-3619.80	418.31	40°11'30.021"N	104°48'59.158"W	0.00	
11016.00†	90.000	180.048	7084.00	3742.71	-3719.80	418.23	40°11'29.033"N	104°48'59.159"W	0.00	
11116.00†	90.000	180.048	7084.00	3842.25	-3819.80	418.15	40°11'28.045"N	104°48'59.160"W	0.00	
11216.00†	90.000	180.048	7084.00	3941.79	-3919.80	418.06	40°11'27.057"N	104°48'59.161"W	0.00	
11316.00†	90.000	180.048	7084.00	4041.33	-4019.80	417.98	40°11'26.068"N	104°48'59.162"W	0.00	
11416.00†	90.000	180.048	7084.00	4140.87	-4119.80	417.90	40°11'25.080"N	104°48'59.163"W	0.00	
11516.00†	90.000	180.048	7084.00	4240.41	-4219.80	417.82	40°11'24.092"N	104°48'59.164"W	0.00	
11616.00†	90.000	180.048	7084.00	4339.95	-4319.80	417.73	40°11'23.104"N	104°48'59.165"W	0.00	
11673.55	90.000	180.048	7084.00 <sup>1</sup>	4397.24	-4377.36	417.68	40°11'22.535"N	104°48'59.166"W	0.00	End of 3D Arc



# Planned Wellpath Report

MILLENSIFER FED 37N-W30HZ (PERMIT) PWP  
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**REFERENCE WELLPATH IDENTIFICATION**

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 MILLENSIFER FED 37N-W30HZ (472'FNL & 2039'FEL, SEC.30)
Area	COLORADO	Well	MILLENSIFER FED 37N-W30HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MILLENSIFER FED 37N-W30HZ PWB
Facility	SEC.30-T3N-R66W		

**HOLE & CASING SECTIONS - Ref Wellbore: MILLENSIFER FED 37N-W30HZ PWB Ref Wellpath: MILLENSIFER FED 37N-W30HZ (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	16.00	700.00	684.00	16.00	700.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	16.00	700.00	684.00	16.00	700.00	0.00	0.00	0.00	0.00
8.75in Open Hole	700.00	7442.16	6742.16	700.00	7084.00	0.00	0.00	-145.96	421.20
7in Casing Intermediate	16.00	7442.16	7426.16	16.00	7084.00	0.00	0.00	-145.96	421.20
6.125in Open Hole	7442.16	11673.55	4231.39	7084.00	7084.00	-145.96	421.20	-4377.36	417.68
4.5in Casing Production	16.00	11673.55	11657.55	16.00	7084.00	0.00	0.00	-4377.36	417.68

**TARGETS**

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
MILLENSIFER FED 4 PAD SECTION LINES		1.00	0.40	-60.06	3190457.53	1317021.21	40°12'05.796"N	104°49'05.322"W	polygon
1) MILLENSIFER FED 37N-W30HZ BHL ON PLAT (460'FSL & 1620'FEL, SEC.30) REV-1	11673.55	7084.00	-4377.36	417.68	3190968.90	1312647.45	40°11'22.535"N	104°48'59.166"W	point
MILLENSIFER FED 4 PAD HARDLINES (460'SETBACKS)		7301.00	0.40	-60.06	3190457.53	1317021.21	40°12'05.796"N	104°49'05.322"W	polygon

**SURVEY PROGRAM - Ref Wellbore: MILLENSIFER FED 37N-W30HZ PWB Ref Wellpath: MILLENSIFER FED 37N-W30HZ (PERMIT) PWP**

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	7442.16	NaviTrak (Standard)		MILLENSIFER FED 37N-W30HZ PWB
7442.16	11673.55	OnTrak (Standard)		MILLENSIFER FED 37N-W30HZ PWB



**Planned Wellpath Report**  
 MILLENSIFER FED 37N-W30HZ (PERMIT) PWP  
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**REFERENCE WELLPATH IDENTIFICATION**

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 MILLENSIFER FED 37N-W30HZ (472'FNL & 2039'FEL, SEC.30)
Area	COLORADO	Well	MILLENSIFER FED 37N-W30HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MILLENSIFER FED 37N-W30HZ PWB
Facility	SEC.30-T3N-R66W		

**WELLPATH COMMENTS**

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
706.00	0.000	41.680	706.00	FOX HILLS
3356.36	6.000	41.680	3344.00	PARKMAN
4265.34	6.000	41.680	4248.00	SUSSEX
7068.99	52.789	177.008	6967.00	SHARON SPRINGS
7188.74	64.724	178.158	7029.00	NIOBRARA A
7302.05	76.024	179.052	7067.00	NIOBRARA B