





Planned Wellpath Report

WISHBONE 3N-W24HZ (PERMIT) PWP
Page 1 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 WISHBONE 3N-W24HZ (320'FSL & 2000'FWL, SEC.24)
Area	COLORADO	Well	WISHBONE 3N-W24HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WISHBONE 3N-W24HZ PWB
Facility	SEC.24-T2N-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	0.99996	Report Generated	2/25/2013 at 10:26:11
Convergence at slot	0.50° East	Database/Source file	WellArchitectDB\WISHBONE_3N-W24HZ_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	9.26	1582.77	3215953.29	1286557.17	40°07'02.680"N	104°43'40.159"W
Facility Reference Pt			3214370.72	1286534.23	40°07'02.589"N	104°44'00.532"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#18 WISHBONE 3N-W24HZ (320'FSL & 2000'FWL, SEC.24) (RKB) to Facility Vertical Datum
Horizontal Reference Pt	Slot	Rig on SLOT#18 WISHBONE 3N-W24HZ (320'FSL & 2000'FWL, SEC.24) (RKB) to Mean Sea Level
Vertical Reference Pt	Rig on SLOT#18 WISHBONE 3N-W24HZ (320'FSL & 2000'FWL, SEC.24) (RKB)	Rig on SLOT#18 WISHBONE 3N-W24HZ (320'FSL & 2000'FWL, SEC.24) (RKB) to Mud Line at Slot (SLOT#18 WISHE
MD Reference Pt	Rig on SLOT#18 WISHBONE 3N-W24HZ (320'FSL & 2000'FWL, SEC.24) (RKB)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth



Planned Wellpath Report

WISHBONE 3N-W24HZ (PERMIT) PWP
Page 2 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 WISHBONE 3N-W24HZ (320'FSL & 2000'FWL, SEC.24)
Area	COLORADO	Well	WISHBONE 3N-W24HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WISHBONE 3N-W24HZ PWB
Facility	SEC.24-T2N-R66W		

WELLPATH DATA (134 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	144.300	0.00	0.00	0.00	0.00	40°07'02.680"N	104°43'40.159"W	0.00	
17.00	0.000	144.300	17.00	0.00	0.00	0.00	40°07'02.680"N	104°43'40.159"W	0.00	TIE-ON
117.00†	0.000	144.300	117.00	0.00	0.00	0.00	40°07'02.680"N	104°43'40.159"W	0.00	
217.00†	0.000	144.300	217.00	0.00	0.00	0.00	40°07'02.680"N	104°43'40.159"W	0.00	
317.00†	0.000	144.300	317.00	0.00	0.00	0.00	40°07'02.680"N	104°43'40.159"W	0.00	
417.00†	0.000	144.300	417.00	0.00	0.00	0.00	40°07'02.680"N	104°43'40.159"W	0.00	
517.00†	0.000	144.300	517.00	0.00	0.00	0.00	40°07'02.680"N	104°43'40.159"W	0.00	
617.00†	0.000	144.300	617.00	0.00	0.00	0.00	40°07'02.680"N	104°43'40.159"W	0.00	
717.00†	0.000	144.300	717.00	0.00	0.00	0.00	40°07'02.680"N	104°43'40.159"W	0.00	
817.00†	0.000	144.300	817.00	0.00	0.00	0.00	40°07'02.680"N	104°43'40.159"W	0.00	
917.00†	0.000	144.300	917.00	0.00	0.00	0.00	40°07'02.680"N	104°43'40.159"W	0.00	
1017.00†	0.000	144.300	1017.00	0.00	0.00	0.00	40°07'02.680"N	104°43'40.159"W	0.00	
1021.00†	0.000	144.300	1021.00	0.00	0.00	0.00	40°07'02.680"N	104°43'40.159"W	0.00	FOX HILLS
1117.00†	0.000	144.300	1117.00	0.00	0.00	0.00	40°07'02.680"N	104°43'40.159"W	0.00	
1217.00†	0.000	144.300	1217.00	0.00	0.00	0.00	40°07'02.680"N	104°43'40.159"W	0.00	
1300.00	0.000	144.300	1300.00	0.00	0.00	0.00	40°07'02.680"N	104°43'40.159"W	0.00	BEGIN NUDGE
1317.00†	0.340	144.300	1317.00	-0.04	-0.04	0.03	40°07'02.680"N	104°43'40.159"W	2.00	
1417.00†	2.340	144.300	1416.97	-1.93	-1.94	1.39	40°07'02.661"N	104°43'40.141"W	2.00	
1517.00†	4.340	144.300	1516.79	-6.64	-6.67	4.79	40°07'02.614"N	104°43'40.097"W	2.00	
1617.00†	6.340	144.300	1616.35	-14.17	-14.23	10.22	40°07'02.539"N	104°43'40.027"W	2.00	
1717.00†	8.340	144.300	1715.53	-24.50	-24.60	17.68	40°07'02.437"N	104°43'39.931"W	2.00	
1800.00	10.000	144.300	1797.47	-35.20	-35.34	25.40	40°07'02.331"N	104°43'39.832"W	2.00	END NUDGE
1817.00†	10.000	144.300	1814.21	-37.58	-37.74	27.12	40°07'02.307"N	104°43'39.810"W	0.00	
1917.00†	10.000	144.300	1912.69	-51.63	-51.84	37.25	40°07'02.168"N	104°43'39.679"W	0.00	
2017.00†	10.000	144.300	2011.17	-65.67	-65.94	47.39	40°07'02.028"N	104°43'39.549"W	0.00	
2117.00†	10.000	144.300	2109.65	-79.71	-80.05	57.52	40°07'01.889"N	104°43'39.419"W	0.00	
2217.00†	10.000	144.300	2208.13	-93.75	-94.15	67.65	40°07'01.750"N	104°43'39.288"W	0.00	
2317.00†	10.000	144.300	2306.61	-107.80	-108.25	77.79	40°07'01.610"N	104°43'39.158"W	0.00	
2417.00†	10.000	144.300	2405.09	-121.84	-122.35	87.92	40°07'01.471"N	104°43'39.027"W	0.00	
2517.00†	10.000	144.300	2503.57	-135.88	-136.45	98.05	40°07'01.332"N	104°43'38.897"W	0.00	
2617.00†	10.000	144.300	2602.05	-149.92	-150.55	108.18	40°07'01.192"N	104°43'38.766"W	0.00	
2717.00†	10.000	144.300	2700.53	-163.97	-164.66	118.32	40°07'01.053"N	104°43'38.636"W	0.00	
2817.00†	10.000	144.300	2799.01	-178.01	-178.76	128.45	40°07'00.913"N	104°43'38.506"W	0.00	
2917.00†	10.000	144.300	2897.50	-192.05	-192.86	138.58	40°07'00.774"N	104°43'38.375"W	0.00	
3017.00†	10.000	144.300	2995.98	-206.09	-206.96	148.72	40°07'00.635"N	104°43'38.245"W	0.00	
3117.00†	10.000	144.300	3094.46	-220.14	-221.06	158.85	40°07'00.495"N	104°43'38.114"W	0.00	
3132.78	10.000	144.300	3110.00	-222.35	-223.29	160.45	40°07'00.473"N	104°43'38.094"W	0.00	BEGIN DROP
3217.00†	8.316	144.300	3193.14	-233.19	-234.17	168.27	40°07'00.366"N	104°43'37.993"W	2.00	
3317.00†	6.316	144.300	3292.32	-243.49	-244.51	175.70	40°07'00.264"N	104°43'37.897"W	2.00	
3417.00†	4.316	144.300	3391.89	-250.98	-252.04	181.11	40°07'00.189"N	104°43'37.828"W	2.00	
3517.00†	2.316	144.300	3491.71	-255.66	-256.73	184.48	40°07'00.143"N	104°43'37.784"W	2.00	
3617.00†	0.316	144.300	3591.68	-257.51	-258.60	185.82	40°07'00.125"N	104°43'37.767"W	2.00	
3632.78	0.000	0.333	3607.47	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	2.00	END DROP
3717.00†	0.000	0.333	3691.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
3817.00†	0.000	0.333	3791.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 WISHBONE 3N-W24HZ (320'FSL & 2000'FWL, SEC.24)
Area	COLORADO	Well	WISHBONE 3N-W24HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WISHBONE 3N-W24HZ PWB
Facility	SEC.24-T2N-R66W		

WELLPATH DATA (134 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3917.00†	0.000	0.333	3891.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
4017.00†	0.000	0.333	3991.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
4117.00†	0.000	0.333	4091.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
4217.00†	0.000	0.333	4191.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
4265.32†	0.000	0.333	4240.00	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	PARKMAN
4317.00†	0.000	0.333	4291.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
4417.00†	0.000	0.333	4391.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
4517.00†	0.000	0.333	4491.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
4617.00†	0.000	0.333	4591.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
4659.32†	0.000	0.333	4634.00	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	SUSSEX
4717.00†	0.000	0.333	4691.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
4817.00†	0.000	0.333	4791.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
4917.00†	0.000	0.333	4891.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
5017.00†	0.000	0.333	4991.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
5117.00†	0.000	0.333	5091.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
5217.00†	0.000	0.333	5191.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
5317.00†	0.000	0.333	5291.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
5417.00†	0.000	0.333	5391.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
5517.00†	0.000	0.333	5491.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
5617.00†	0.000	0.333	5591.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
5717.00†	0.000	0.333	5691.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
5817.00†	0.000	0.333	5791.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
5917.00†	0.000	0.333	5891.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
6017.00†	0.000	0.333	5991.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
6117.00†	0.000	0.333	6091.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
6217.00†	0.000	0.333	6191.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
6317.00†	0.000	0.333	6291.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
6417.00†	0.000	0.333	6391.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
6517.00†	0.000	0.333	6491.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
6617.00†	0.000	0.333	6591.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
6717.00†	0.000	0.333	6691.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
6817.00†	0.000	0.333	6791.68	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	
6823.36	0.000	0.333	6798.05	-257.55	-258.63	185.85	40°07'00.124"N	104°43'37.767"W	0.00	KOP, BUILD @ 10°/100'
6917.00†	9.364	0.333	6891.27	-249.91	-251.00	185.89	40°07'00.200"N	104°43'37.766"W	10.00	
7017.00†	19.364	0.333	6988.02	-225.14	-226.22	186.03	40°07'00.444"N	104°43'37.764"W	10.00	
7117.00†	29.364	0.333	7079.00	-183.94	-185.02	186.27	40°07'00.852"N	104°43'37.761"W	10.00	
7217.00†	39.364	0.333	7161.44	-127.56	-128.65	186.60	40°07'01.409"N	104°43'37.757"W	10.00	
7317.00†	49.364	0.333	7232.84	-57.73	-58.82	187.01	40°07'02.099"N	104°43'37.752"W	10.00	
7324.99†	50.163	0.333	7238.00	-51.63	-52.72	187.04	40°07'02.159"N	104°43'37.751"W	10.00	SHARON SPRINGS
7417.00†	59.364	0.333	7291.03	23.44	22.35	187.48	40°07'02.901"N	104°43'37.746"W	10.00	
7433.02†	60.966	0.333	7299.00	37.34	36.25	187.56	40°07'03.038"N	104°43'37.745"W	10.00	NIOBRARA A
7517.00†	69.364	0.333	7334.24	113.48	112.39	188.00	40°07'03.791"N	104°43'37.739"W	10.00	
7540.28†	71.692	0.333	7342.00	135.43	134.34	188.13	40°07'04.008"N	104°43'37.737"W	10.00	NIOBRARA B
7617.00†	79.364	0.333	7361.16	209.66	208.56	188.56	40°07'04.741"N	104°43'37.732"W	10.00	
7717.00†	89.364	0.333	7370.97	309.05	307.95	189.14	40°07'05.723"N	104°43'37.724"W	10.00	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 WISHBONE 3N-W24HZ (320'FSL & 2000'FWL, SEC.24)
Area	COLORADO	Well	WISHBONE 3N-W24HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WISHBONE 3N-W24HZ PWB
Facility	SEC.24-T2N-R66W		

WELLPATH DATA (134 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7720.64	89.728	0.333	7371.00	312.69	311.59	189.16	40°07'05.759"N	104°43'37.724"W	10.00	LANDING POINT
7817.00†	89.728	0.333	7371.45	409.05	407.95	189.72	40°07'06.711"N	104°43'37.717"W	0.00	
7917.00†	89.728	0.333	7371.93	509.04	507.95	190.30	40°07'07.700"N	104°43'37.709"W	0.00	
8017.00†	89.728	0.333	7372.41	609.04	607.94	190.88	40°07'08.688"N	104°43'37.702"W	0.00	
8117.00†	89.728	0.333	7372.88	709.04	707.94	191.46	40°07'09.676"N	104°43'37.694"W	0.00	
8217.00†	89.728	0.333	7373.36	809.04	807.94	192.04	40°07'10.664"N	104°43'37.687"W	0.00	
8317.00†	89.728	0.333	7373.83	909.04	907.94	192.62	40°07'11.652"N	104°43'37.680"W	0.00	
8417.00†	89.728	0.333	7374.31	1009.04	1007.93	193.20	40°07'12.641"N	104°43'37.672"W	0.00	
8517.00†	89.728	0.333	7374.78	1109.04	1107.93	193.79	40°07'13.629"N	104°43'37.665"W	0.00	
8617.00†	89.728	0.333	7375.26	1209.04	1207.93	194.37	40°07'14.617"N	104°43'37.657"W	0.00	
8717.00†	89.728	0.333	7375.73	1309.04	1307.92	194.95	40°07'15.605"N	104°43'37.650"W	0.00	
8817.00†	89.728	0.333	7376.21	1409.03	1407.92	195.53	40°07'16.593"N	104°43'37.642"W	0.00	
8917.00†	89.728	0.333	7376.68	1509.03	1507.92	196.11	40°07'17.581"N	104°43'37.635"W	0.00	
9017.00†	89.728	0.333	7377.16	1609.03	1607.92	196.69	40°07'18.570"N	104°43'37.627"W	0.00	
9117.00†	89.728	0.333	7377.63	1709.03	1707.91	197.27	40°07'19.558"N	104°43'37.620"W	0.00	
9217.00†	89.728	0.333	7378.11	1809.03	1807.91	197.85	40°07'20.546"N	104°43'37.612"W	0.00	
9317.00†	89.728	0.333	7378.58	1909.03	1907.91	198.43	40°07'21.534"N	104°43'37.605"W	0.00	
9417.00†	89.728	0.333	7379.06	2009.03	2007.91	199.01	40°07'22.522"N	104°43'37.597"W	0.00	
9517.00†	89.728	0.333	7379.54	2109.03	2107.90	199.60	40°07'23.511"N	104°43'37.590"W	0.00	
9617.00†	89.728	0.333	7380.01	2209.03	2207.90	200.18	40°07'24.499"N	104°43'37.582"W	0.00	
9717.00†	89.728	0.333	7380.49	2309.02	2307.90	200.76	40°07'25.487"N	104°43'37.575"W	0.00	
9817.00†	89.728	0.333	7380.96	2409.02	2407.89	201.34	40°07'26.475"N	104°43'37.567"W	0.00	
9917.00†	89.728	0.333	7381.44	2509.02	2507.89	201.92	40°07'27.463"N	104°43'37.560"W	0.00	
10017.00†	89.728	0.333	7381.91	2609.02	2607.89	202.50	40°07'28.451"N	104°43'37.552"W	0.00	
10117.00†	89.728	0.333	7382.39	2709.02	2707.89	203.08	40°07'29.440"N	104°43'37.545"W	0.00	
10217.00†	89.728	0.333	7382.86	2809.02	2807.88	203.66	40°07'30.428"N	104°43'37.537"W	0.00	
10317.00†	89.728	0.333	7383.34	2909.02	2907.88	204.24	40°07'31.416"N	104°43'37.530"W	0.00	
10417.00†	89.728	0.333	7383.81	3009.02	3007.88	204.82	40°07'32.404"N	104°43'37.522"W	0.00	
10517.00†	89.728	0.333	7384.29	3109.02	3107.87	205.41	40°07'33.392"N	104°43'37.515"W	0.00	
10617.00†	89.728	0.333	7384.76	3209.01	3207.87	205.99	40°07'34.381"N	104°43'37.507"W	0.00	
10717.00†	89.728	0.333	7385.24	3309.01	3307.87	206.57	40°07'35.369"N	104°43'37.500"W	0.00	
10817.00†	89.728	0.333	7385.71	3409.01	3407.87	207.15	40°07'36.357"N	104°43'37.492"W	0.00	
10917.00†	89.728	0.333	7386.19	3509.01	3507.86	207.73	40°07'37.345"N	104°43'37.485"W	0.00	
11017.00†	89.728	0.333	7386.67	3609.01	3607.86	208.31	40°07'38.333"N	104°43'37.477"W	0.00	
11117.00†	89.728	0.333	7387.14	3709.01	3707.86	208.89	40°07'39.321"N	104°43'37.470"W	0.00	
11217.00†	89.728	0.333	7387.62	3809.01	3807.85	209.47	40°07'40.310"N	104°43'37.462"W	0.00	
11317.00†	89.728	0.333	7388.09	3909.01	3907.85	210.05	40°07'41.298"N	104°43'37.455"W	0.00	
11417.00†	89.728	0.333	7388.57	4009.01	4007.85	210.63	40°07'42.286"N	104°43'37.447"W	0.00	
11517.00†	89.728	0.333	7389.04	4109.00	4107.85	211.21	40°07'43.274"N	104°43'37.440"W	0.00	
11617.00†	89.728	0.333	7389.52	4209.00	4207.84	211.80	40°07'44.262"N	104°43'37.432"W	0.00	
11717.00†	89.728	0.333	7389.99	4309.00	4307.84	212.38	40°07'45.251"N	104°43'37.425"W	0.00	
11817.00†	89.728	0.333	7390.47	4409.00	4407.84	212.96	40°07'46.239"N	104°43'37.417"W	0.00	
11917.00†	89.728	0.333	7390.94	4509.00	4507.83	213.54	40°07'47.227"N	104°43'37.410"W	0.00	
11928.95	89.728	0.333	7391.00 [†]	4520.95	4519.78	213.61	40°07'47.345"N	104°43'37.409"W	0.00	TOTAL DEPTH



Planned Wellpath Report

WISHBONE 3N-W24HZ (PERMIT) PWP
Page 5 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 WISHBONE 3N-W24HZ (320'FSL & 2000'FWL, SEC.24)
Area	COLORADO	Well	WISHBONE 3N-W24HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WISHBONE 3N-W24HZ PWB
Facility	SEC.24-T2N-R66W		

HOLE & CASING SECTIONS - Ref Wellbore: WISHBONE 3N-W24HZ PWB Ref Wellpath: WISHBONE 3N-W24HZ (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	1000.00	983.00	17.00	1000.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	1000.00	983.00	17.00	1000.00	0.00	0.00	0.00	0.00
8.75in Open Hole	1000.00	7720.64	6720.64	1000.00	7371.00	0.00	0.00	311.59	189.16
7in Casing Intermediate	17.00	7720.64	7703.64	17.00	7371.00	0.00	0.00	311.59	189.16
6.125in Open Hole	7720.64	11928.95	4208.31	7371.00	7391.00	311.59	189.16	4519.78	213.61
4.5in Casing Production	17.00	11928.95	11911.95	17.00	7391.00	0.00	0.00	4519.78	213.61

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.24 SECTION LINES		24.00	-9.06	-1582.77	3214370.72	1286534.33	40°07'02.590"N	104°44'00.532"W	polygon
HELGOth HEIRS #2 150' RADIUS		41.00	527.99	2856.05	3218804.51	1287109.98	40°07'07.896"N	104°43'03.396"W	circle
HELGOth HEIRS UNIT #1 150' RADIUS		41.00	327.50	-1330.73	3214619.81	1286873.05	40°07'05.916"N	104°43'57.288"W	circle
WARNER #1 150' RADIUS		41.00	3868.48	1994.37	3217913.81	1290442.71	40°07'40.908"N	104°43'14.484"W	circle
WARNER #2 150' RADIUS		41.00	4316.52	-1305.35	3214610.45	1290861.97	40°07'45.336"N	104°43'56.964"W	circle
1) WISHBONE 3N-W24HZ BHL ON PLAT (460'FNL & 2188'FWL, SEC.24)	11928.95	7391.00	4519.78	213.61	3216127.52	1291078.45	40°07'47.345"N	104°43'37.409"W	point
SEC. 24 HARDLINES (460' SETBACKS)		7624.00	-9.06	-1582.77	3214370.72	1286534.33	40°07'02.590"N	104°44'00.532"W	polygon

SURVEY PROGRAM - Ref Wellbore: WISHBONE 3N-W24HZ PWB Ref Wellpath: WISHBONE 3N-W24HZ (PERMIT) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	7720.64	NaviTrak (MagCorr)		WISHBONE 3N-W24HZ PWB
7720.64	11928.95	OnTrak (MagCorr)		WISHBONE 3N-W24HZ PWB



Planned Wellpath Report

WISHBONE 3N-W24HZ (PERMIT) PWP
Page 6 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 WISHBONE 3N-W24HZ (320'FSL & 2000'FWL, SEC.24)
Area	COLORADO	Well	WISHBONE 3N-W24HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WISHBONE 3N-W24HZ PWB
Facility	SEC.24-T2N-R66W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1021.00	0.000	144.300	1021.00	FOX HILLS
4265.32	0.000	0.333	4240.00	PARKMAN
4659.32	0.000	0.333	4634.00	SUSSEX
7324.99	50.163	0.333	7238.00	SHARON SPRINGS
7433.02	60.966	0.333	7299.00	NIOBRARA A
7540.28	71.692	0.333	7342.00	NIOBRARA B