

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#7 MELBON 23N-8HZ (2499' FNL & 1185' FWL, SEC.17)  
Field: WELD COUNTY (KERR MCGEE) Well: MELBON 23N-8HZ  
Facility: SEC.17-T2N-R65W Wellbore: MELBON 23N-8HZ PWB

Plot reference wellpath is MELBON 23N-8HZ (PERMIT REV-2.1) PWP

True vertical depths are referenced to Rig on SLOT#7 MELBON 23N-8HZ (2499' FNL & 1185' FWL) (RT)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to Rig on SLOT#7 MELBON 23N-8HZ (2499' FNL & 1185' FWL) (RT)	North Reference: True north
Rig on SLOT#7 MELBON 23N-8HZ (2499' FNL & 1185' FWL) (RT) to Mean Sea Level: 4966 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#7 MELBON 23N-8HZ (2499' FNL & 1185' FWL, SEC.17)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wjlg02 on 11/29/2012

## Location Information

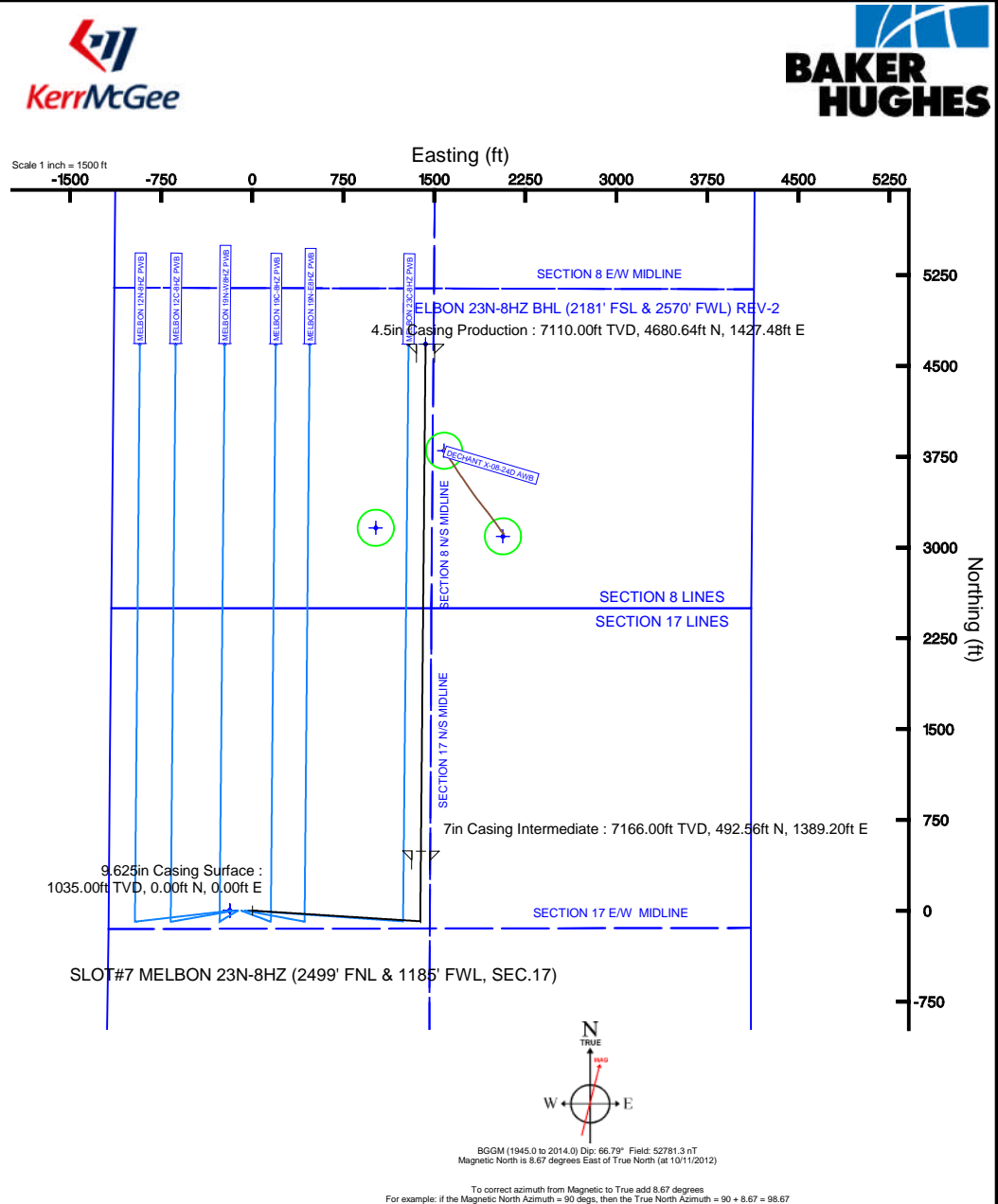
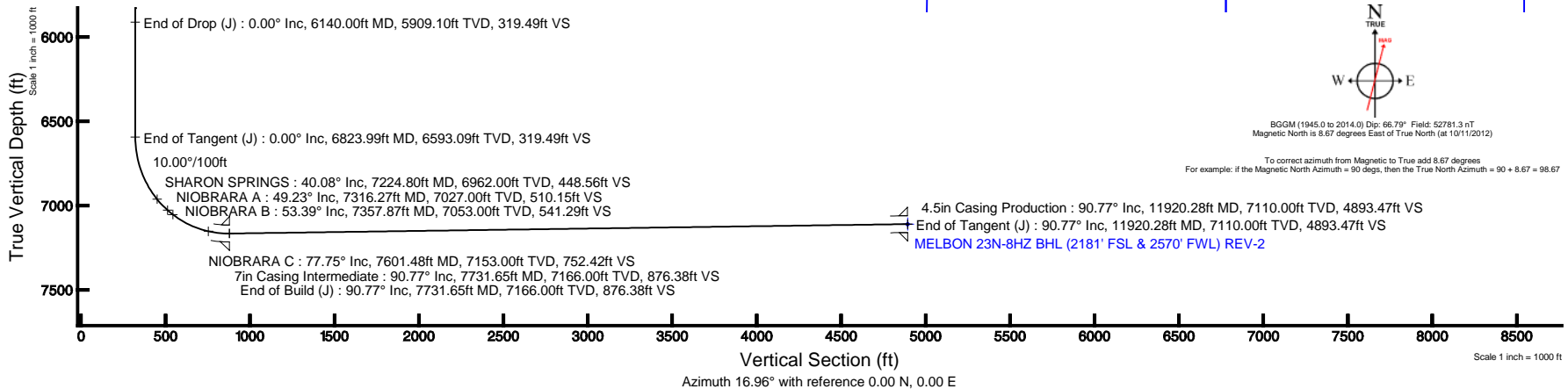
Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.17-T2N-R65W			3225409.555	1294541.361	40°08'20.759"N	104°41'37.526"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#7 MELBON 23N-8HZ (2499' FNL & 1185' FWL, SEC.17)	0.41	179.95	3225589.486	1294543.983	40°08'20.759"N	104°41'35.189"W
Rig on SLOT#7 MELBON 23N-8HZ (2499' FNL & 1185' FWL) (RT) to Mud line (At Slot: SLOT#7 MELBON 23N-8HZ (2499' FNL & 1185' FWL, SEC.17))					4966ft	
Mean Sea Level to Mud line (At Slot: SLOT#7 MELBON 23N-8HZ (2499' FNL & 1185' FWL, SEC.17))					0ft	
Rig on SLOT#7 MELBON 23N-8HZ (2499' FNL & 1185' FWL) (RT) to Mean Sea Level					4966ft	

## 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	93.640	17.00	0.00	0.00	0.00	0.00
End of Tangent	1200.00	0.000	93.640	1200.00	0.00	0.00	0.00	0.00
End of Build (J)	2237.50	20.750	93.640	2214.97	-11.80	185.45	2.00	42.81
End of Tangent (J)	5102.50	20.750	93.640	4894.13	-76.24	1198.45	0.00	276.68
End of Drop (J)	6140.00	0.000	0.524	5909.10	-88.04	1383.89	2.00	319.49
End of Tangent (J)	6823.99	0.000	0.524	6593.09	-88.04	1383.89	0.00	319.49
End of Build (J)	7731.65	90.766	0.524	7166.00	492.56	1389.20	10.00	876.38
End of Tangent (J)	11920.28	90.766	0.524	7110.00	4680.64	1427.48	0.00	4893.47

## Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
DECHANT X-08-15 (NOBLE)		0.00	3093.06	2065.40	3227626.57	1297855.58	40°08'51.324"N	104°41'08.592"W
FIELDS X8-14 (NOBLE)		0.00	3162.92	1017.05	3226577.67	1297715.90	40°08'52.015"N	104°41'22.092"W
SECTION 17 E/W MDLINE		0.00	-0.10	-185.31	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W
SECTION 17 LINES		0.00	-0.10	-185.31	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W
SECTION 17 N/S MDLINE		0.00	-0.10	-185.31	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W
SECTION 8 E/W MDLINE		0.00	-0.10	-185.31	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W
SECTION 8 LINES		0.00	-0.10	-185.31	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W
SECTION 8 N/S MDLINE		0.00	-0.10	-185.31	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W
MELBON 23N-8HZ BHL (2181' FSL & 2570' FWL) REV-2	11920.28	7110.00	4680.64	1427.48	3226974.26	1299237.23	40°09'07.013"N	104°41'16.886"W
MELBON 23N-8HZ BHL ON PLAT (2181' FSL & 2590' FWL) REV-1	7110.00	4680.64	1447.48	3226994.26	1299237.41	40°09'07.013"N	104°41'16.548"W	
DECHANT X-08-34D (NOBLE)		7120.00	3800.26	1580.63	3227135.40	1298358.32	40°08'56.313"N	104°41'14.834"W



4.5in Casing Production : 90.77° Inc, 11920.28ft MD, 7110.00ft TVD, 4893.47ft VS

End of Tangent (J) : 90.77° Inc, 11920.28ft MD, 7110.00ft TVD, 4893.47ft VS

MELBON 23N-8HZ BHL (2181' FSL & 2570' FWL) REV-2





# Planned Wellpath Report

MELBON 23N-8HZ (PERMIT REV-2.1) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#7 MELBON 23N-8HZ (2499' FNL & 1185' FWL, SEC.17)
Area	COLORADO	Well	MELBON 23N-8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MELBON 23N-8HZ PWB
Facility	SEC.17-T2N-R65W		

## 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	93.640	0.00	0.00	0.00	0.00	40°08'20.759"N	104°41'35.189"W	0.00	
17.00	0.000	93.640	17.00	0.00	0.00	0.00	40°08'20.759"N	104°41'35.189"W	0.00	Tie On
117.00†	0.000	93.640	117.00	0.00	0.00	0.00	40°08'20.759"N	104°41'35.189"W	0.00	
217.00†	0.000	93.640	217.00	0.00	0.00	0.00	40°08'20.759"N	104°41'35.189"W	0.00	
317.00†	0.000	93.640	317.00	0.00	0.00	0.00	40°08'20.759"N	104°41'35.189"W	0.00	
417.00†	0.000	93.640	417.00	0.00	0.00	0.00	40°08'20.759"N	104°41'35.189"W	0.00	
517.00†	0.000	93.640	517.00	0.00	0.00	0.00	40°08'20.759"N	104°41'35.189"W	0.00	
617.00†	0.000	93.640	617.00	0.00	0.00	0.00	40°08'20.759"N	104°41'35.189"W	0.00	
717.00†	0.000	93.640	717.00	0.00	0.00	0.00	40°08'20.759"N	104°41'35.189"W	0.00	
817.00†	0.000	93.640	817.00	0.00	0.00	0.00	40°08'20.759"N	104°41'35.189"W	0.00	
917.00†	0.000	93.640	917.00	0.00	0.00	0.00	40°08'20.759"N	104°41'35.189"W	0.00	
1017.00†	0.000	93.640	1017.00	0.00	0.00	0.00	40°08'20.759"N	104°41'35.189"W	0.00	
1117.00†	0.000	93.640	1117.00	0.00	0.00	0.00	40°08'20.759"N	104°41'35.189"W	0.00	
1200.00	0.000	93.640	1200.00	0.00	0.00	0.00	40°08'20.759"N	104°41'35.189"W	0.00	End of Tangent
1217.00†	0.340	93.640	1217.00	0.01	0.00	0.05	40°08'20.759"N	104°41'35.188"W	2.00	
1317.00†	2.340	93.640	1316.97	0.55	-0.15	2.38	40°08'20.758"N	104°41'35.158"W	2.00	
1417.00†	4.340	93.640	1416.79	1.89	-0.52	8.20	40°08'20.754"N	104°41'35.083"W	2.00	
1517.00†	6.340	93.640	1516.35	4.04	-1.11	17.49	40°08'20.748"N	104°41'34.964"W	2.00	
1617.00†	8.340	93.640	1615.53	6.98	-1.92	30.23	40°08'20.740"N	104°41'34.800"W	2.00	
1717.00†	10.340	93.640	1714.20	10.72	-2.95	46.43	40°08'20.730"N	104°41'34.591"W	2.00	
1817.00†	12.340	93.640	1812.24	15.25	-4.20	66.05	40°08'20.717"N	104°41'34.339"W	2.00	
1917.00†	14.340	93.640	1909.54	20.56	-5.67	89.08	40°08'20.703"N	104°41'34.042"W	2.00	
2017.00†	16.340	93.640	2005.97	26.66	-7.35	115.48	40°08'20.686"N	104°41'33.702"W	2.00	
2117.00†	18.340	93.640	2101.42	33.53	-9.24	145.22	40°08'20.668"N	104°41'33.319"W	2.00	
2217.00†	20.340	93.640	2195.77	41.16	-11.34	178.27	40°08'20.647"N	104°41'32.894"W	2.00	
2237.50	20.750	93.640	2214.97	42.81	-11.80	185.45	40°08'20.642"N	104°41'32.801"W	2.00	End of Build (J)
2317.00†	20.750	93.640	2289.31	49.30	-13.59	213.56	40°08'20.625"N	104°41'32.439"W	0.00	
2417.00†	20.750	93.640	2382.83	57.47	-15.83	248.92	40°08'20.603"N	104°41'31.984"W	0.00	
2517.00†	20.750	93.640	2476.34	65.63	-18.08	284.27	40°08'20.580"N	104°41'31.529"W	0.00	
2617.00†	20.750	93.640	2569.85	73.79	-20.33	319.63	40°08'20.558"N	104°41'31.073"W	0.00	
2717.00†	20.750	93.640	2663.37	81.95	-22.58	354.99	40°08'20.536"N	104°41'30.618"W	0.00	
2817.00†	20.750	93.640	2756.88	90.12	-24.83	390.35	40°08'20.514"N	104°41'30.163"W	0.00	
2917.00†	20.750	93.640	2850.39	98.28	-27.08	425.70	40°08'20.491"N	104°41'29.708"W	0.00	
3017.00†	20.750	93.640	2943.91	106.44	-29.33	461.06	40°08'20.469"N	104°41'29.252"W	0.00	
3117.00†	20.750	93.640	3037.42	114.60	-31.58	496.42	40°08'20.447"N	104°41'28.797"W	0.00	
3217.00†	20.750	93.640	3130.93	122.77	-33.83	531.78	40°08'20.425"N	104°41'28.342"W	0.00	
3317.00†	20.750	93.640	3224.45	130.93	-36.08	567.13	40°08'20.402"N	104°41'27.887"W	0.00	
3417.00†	20.750	93.640	3317.96	139.09	-38.33	602.49	40°08'20.380"N	104°41'27.431"W	0.00	
3517.00†	20.750	93.640	3411.47	147.26	-40.58	637.85	40°08'20.358"N	104°41'26.976"W	0.00	
3617.00†	20.750	93.640	3504.99	155.42	-42.83	673.21	40°08'20.336"N	104°41'26.521"W	0.00	
3717.00†	20.750	93.640	3598.50	163.58	-45.08	708.57	40°08'20.313"N	104°41'26.066"W	0.00	
3817.00†	20.750	93.640	3692.02	171.74	-47.33	743.92	40°08'20.291"N	104°41'25.610"W	0.00	
3917.00†	20.750	93.640	3785.53	179.91	-49.57	779.28	40°08'20.269"N	104°41'25.155"W	0.00	
4017.00†	20.750	93.640	3879.04	188.07	-51.82	814.64	40°08'20.247"N	104°41'24.700"W	0.00	
4117.00†	20.750	93.640	3972.56	196.23	-54.07	850.00	40°08'20.225"N	104°41'24.245"W	0.00	



# Planned Wellpath Report

MELBON 23N-8HZ (PERMIT REV-2.1) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#7 MELBON 23N-8HZ (2499' FNL & 1185' FWL, SEC.17)
Area	COLORADO	Well	MELBON 23N-8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MELBON 23N-8HZ PWB
Facility	SEC.17-T2N-R65W		

## 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
4135.65†	20.750	93.640	3990.00	197.75	-54.49	856.59	40°08'20.220"N	104°41'24.160"W	0.00	PARKMAN
4217.00†	20.750	93.640	4066.07	204.39	-56.32	885.35	40°08'20.202"N	104°41'23.789"W	0.00	
4317.00†	20.750	93.640	4159.58	212.56	-58.57	920.71	40°08'20.180"N	104°41'23.334"W	0.00	
4417.00†	20.750	93.640	4253.10	220.72	-60.82	956.07	40°08'20.158"N	104°41'22.879"W	0.00	
4517.00†	20.750	93.640	4346.61	228.88	-63.07	991.43	40°08'20.136"N	104°41'22.424"W	0.00	
4617.00†	20.750	93.640	4440.12	237.05	-65.32	1026.78	40°08'20.113"N	104°41'21.968"W	0.00	
4717.00†	20.750	93.640	4533.64	245.21	-67.57	1062.14	40°08'20.091"N	104°41'21.513"W	0.00	
4770.86†	20.750	93.640	4584.00	249.60	-68.78	1081.18	40°08'20.079"N	104°41'21.268"W	0.00	SUSSEX
4817.00†	20.750	93.640	4627.15	253.37	-69.82	1097.50	40°08'20.069"N	104°41'21.058"W	0.00	
4917.00†	20.750	93.640	4720.66	261.53	-72.07	1132.86	40°08'20.047"N	104°41'20.603"W	0.00	
5017.00†	20.750	93.640	4814.18	269.70	-74.32	1168.21	40°08'20.024"N	104°41'20.147"W	0.00	
5102.50	20.750	93.640	4894.13	276.68	-76.24	1198.45	40°08'20.005"N	104°41'19.758"W	0.00	End of Tangent (J)
5117.00†	20.460	93.640	4907.70	277.85	-76.56	1203.54	40°08'20.002"N	104°41'19.693"W	2.00	
5217.00†	18.460	93.640	5001.99	285.53	-78.68	1236.78	40°08'19.981"N	104°41'19.264"W	2.00	
5317.00†	16.460	93.640	5097.37	292.44	-80.58	1266.73	40°08'19.962"N	104°41'18.879"W	2.00	
5417.00†	14.460	93.640	5193.75	298.58	-82.28	1293.33	40°08'19.946"N	104°41'18.536"W	2.00	
5517.00†	12.460	93.640	5291.00	303.94	-83.75	1316.56	40°08'19.931"N	104°41'18.237"W	2.00	
5617.00†	10.460	93.640	5389.00	308.52	-85.01	1336.38	40°08'19.919"N	104°41'17.982"W	2.00	
5717.00†	8.460	93.640	5487.64	312.31	-86.06	1352.78	40°08'19.908"N	104°41'17.771"W	2.00	
5817.00†	6.460	93.640	5586.78	315.30	-86.88	1365.74	40°08'19.900"N	104°41'17.604"W	2.00	
5917.00†	4.460	93.640	5686.33	317.49	-87.49	1375.24	40°08'19.894"N	104°41'17.482"W	2.00	
6017.00†	2.460	93.640	5786.14	318.88	-87.87	1381.26	40°08'19.890"N	104°41'17.404"W	2.00	
6117.00†	0.460	93.640	5886.10	319.47	-88.03	1383.80	40°08'19.889"N	104°41'17.372"W	2.00	
6140.00	0.000	0.524	5909.10	319.49	-88.04	1383.89	40°08'19.889"N	104°41'17.370"W	2.00	End of Drop (J)
6217.00†	0.000	0.524	5986.10	319.49	-88.04	1383.89	40°08'19.889"N	104°41'17.370"W	0.00	
6317.00†	0.000	0.524	6086.10	319.49	-88.04	1383.89	40°08'19.889"N	104°41'17.370"W	0.00	
6417.00†	0.000	0.524	6186.10	319.49	-88.04	1383.89	40°08'19.889"N	104°41'17.370"W	0.00	
6517.00†	0.000	0.524	6286.10	319.49	-88.04	1383.89	40°08'19.889"N	104°41'17.370"W	0.00	
6617.00†	0.000	0.524	6386.10	319.49	-88.04	1383.89	40°08'19.889"N	104°41'17.370"W	0.00	
6717.00†	0.000	0.524	6486.10	319.49	-88.04	1383.89	40°08'19.889"N	104°41'17.370"W	0.00	
6817.00†	0.000	0.524	6586.10	319.49	-88.04	1383.89	40°08'19.889"N	104°41'17.370"W	0.00	
6823.99	0.000	0.524	6593.09	319.49	-88.04	1383.89	40°08'19.889"N	104°41'17.370"W	0.00	End of Tangent (J)
6917.00†	9.301	0.524	6685.69	326.71	-80.50	1383.96	40°08'19.963"N	104°41'17.369"W	10.00	
7017.00†	19.301	0.524	6782.47	350.38	-55.84	1384.19	40°08'20.207"N	104°41'17.367"W	10.00	
7117.00†	29.301	0.524	6873.49	389.80	-14.74	1384.56	40°08'20.613"N	104°41'17.362"W	10.00	
7217.00†	39.301	0.524	6956.00	443.78	41.54	1385.08	40°08'21.169"N	104°41'17.355"W	10.00	
7224.80†	40.081	0.524	6962.00	448.56	46.52	1385.12	40°08'21.218"N	104°41'17.354"W	10.00	SHARON SPRINGS
7316.27†	49.228	0.524	7027.00	510.15	110.74	1385.71	40°08'21.853"N	104°41'17.347"W	10.00	NIOBRARA A
7317.00†	49.301	0.524	7027.48	510.68	111.29	1385.72	40°08'21.858"N	104°41'17.347"W	10.00	
7357.87†	53.388	0.524	7053.00	541.29	143.20	1386.01	40°08'22.174"N	104°41'17.343"W	10.00	NIOBRARA B
7417.00†	59.301	0.524	7085.75	588.47	192.40	1386.46	40°08'22.660"N	104°41'17.337"W	10.00	
7517.00†	69.301	0.524	7129.06	674.79	282.39	1387.28	40°08'23.549"N	104°41'17.326"W	10.00	
7601.48†	77.749	0.524	7153.00	752.42	363.32	1388.02	40°08'24.349"N	104°41'17.317"W	10.00	NIOBRARA C
7617.00†	79.301	0.524	7156.09	767.01	378.53	1388.16	40°08'24.499"N	104°41'17.315"W	10.00	
7717.00†	89.301	0.524	7166.01	862.33	477.91	1389.07	40°08'25.481"N	104°41'17.303"W	10.00	



# Planned Wellpath Report

MELBON 23N-8HZ (PERMIT REV-2.1) PWP  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#7 MELBON 23N-8HZ (2499' FNL & 1185' FWL, SEC.17)
Area	COLORADO	Well	MELBON 23N-8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MELBON 23N-8HZ PWB
Facility	SEC.17-T2N-R65W		

## 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
7731.65	90.766	0.524	7166.00	876.38	492.56	1389.20	40°08'25.626"N	104°41'17.302"W	10.00	End of Build (J)
7817.00†	90.766	0.524	7164.86	958.23	577.89	1389.98	40°08'26.469"N	104°41'17.291"W	0.00	
7917.00†	90.766	0.524	7163.52	1054.14	677.88	1390.89	40°08'27.457"N	104°41'17.280"W	0.00	
8017.00†	90.766	0.524	7162.18	1150.04	777.87	1391.81	40°08'28.446"N	104°41'17.268"W	0.00	
8117.00†	90.766	0.524	7160.85	1245.95	877.86	1392.72	40°08'29.434"N	104°41'17.256"W	0.00	
8217.00†	90.766	0.524	7159.51	1341.85	977.84	1393.64	40°08'30.422"N	104°41'17.244"W	0.00	
8317.00†	90.766	0.524	7158.17	1437.76	1077.83	1394.55	40°08'31.410"N	104°41'17.232"W	0.00	
8417.00†	90.766	0.524	7156.83	1533.66	1177.82	1395.46	40°08'32.398"N	104°41'17.220"W	0.00	
8517.00†	90.766	0.524	7155.50	1629.57	1277.80	1396.38	40°08'33.386"N	104°41'17.209"W	0.00	
8617.00†	90.766	0.524	7154.16	1725.47	1377.79	1397.29	40°08'34.374"N	104°41'17.197"W	0.00	
8717.00†	90.766	0.524	7152.82	1821.38	1477.78	1398.21	40°08'35.362"N	104°41'17.185"W	0.00	
8817.00†	90.766	0.524	7151.49	1917.28	1577.76	1399.12	40°08'36.350"N	104°41'17.173"W	0.00	
8917.00†	90.766	0.524	7150.15	2013.18	1677.75	1400.03	40°08'37.338"N	104°41'17.161"W	0.00	
9017.00†	90.766	0.524	7148.81	2109.09	1777.74	1400.95	40°08'38.326"N	104°41'17.149"W	0.00	
9117.00†	90.766	0.524	7147.48	2204.99	1877.72	1401.86	40°08'39.314"N	104°41'17.138"W	0.00	
9217.00†	90.766	0.524	7146.14	2300.90	1977.71	1402.78	40°08'40.303"N	104°41'17.126"W	0.00	
9317.00†	90.766	0.524	7144.80	2396.80	2077.70	1403.69	40°08'41.291"N	104°41'17.114"W	0.00	
9417.00†	90.766	0.524	7143.47	2492.71	2177.69	1404.60	40°08'42.279"N	104°41'17.102"W	0.00	
9517.00†	90.766	0.524	7142.13	2588.61	2277.67	1405.52	40°08'43.267"N	104°41'17.090"W	0.00	
9617.00†	90.766	0.524	7140.79	2684.52	2377.66	1406.43	40°08'44.255"N	104°41'17.078"W	0.00	
9717.00†	90.766	0.524	7139.46	2780.42	2477.65	1407.34	40°08'45.243"N	104°41'17.067"W	0.00	
9817.00†	90.766	0.524	7138.12	2876.33	2577.63	1408.26	40°08'46.231"N	104°41'17.055"W	0.00	
9917.00†	90.766	0.524	7136.78	2972.23	2677.62	1409.17	40°08'47.219"N	104°41'17.043"W	0.00	
10017.00†	90.766	0.524	7135.44	3068.14	2777.61	1410.09	40°08'48.207"N	104°41'17.031"W	0.00	
10117.00†	90.766	0.524	7134.11	3164.04	2877.59	1411.00	40°08'49.195"N	104°41'17.019"W	0.00	
10217.00†	90.766	0.524	7132.77	3259.95	2977.58	1411.91	40°08'50.183"N	104°41'17.007"W	0.00	
10317.00†	90.766	0.524	7131.43	3355.85	3077.57	1412.83	40°08'51.171"N	104°41'16.995"W	0.00	
10417.00†	90.766	0.524	7130.10	3451.76	3177.55	1413.74	40°08'52.159"N	104°41'16.984"W	0.00	
10517.00†	90.766	0.524	7128.76	3547.66	3277.54	1414.66	40°08'53.148"N	104°41'16.972"W	0.00	
10617.00†	90.766	0.524	7127.42	3643.56	3377.53	1415.57	40°08'54.136"N	104°41'16.960"W	0.00	
10717.00†	90.766	0.524	7126.09	3739.47	3477.51	1416.48	40°08'55.124"N	104°41'16.948"W	0.00	
10817.00†	90.766	0.524	7124.75	3835.37	3577.50	1417.40	40°08'56.112"N	104°41'16.936"W	0.00	
10917.00†	90.766	0.524	7123.41	3931.28	3677.49	1418.31	40°08'57.100"N	104°41'16.924"W	0.00	
11017.00†	90.766	0.524	7122.08	4027.18	3777.48	1419.23	40°08'58.088"N	104°41'16.913"W	0.00	
11117.00†	90.766	0.524	7120.74	4123.09	3877.46	1420.14	40°08'59.076"N	104°41'16.901"W	0.00	
11217.00†	90.766	0.524	7119.40	4218.99	3977.45	1421.05	40°09'00.064"N	104°41'16.889"W	0.00	
11317.00†	90.766	0.524	7118.07	4314.90	4077.44	1421.97	40°09'01.052"N	104°41'16.877"W	0.00	
11417.00†	90.766	0.524	7116.73	4410.80	4177.42	1422.88	40°09'02.040"N	104°41'16.865"W	0.00	
11517.00†	90.766	0.524	7115.39	4506.71	4277.41	1423.79	40°09'03.028"N	104°41'16.853"W	0.00	
11617.00†	90.766	0.524	7114.05	4602.61	4377.40	1424.71	40°09'04.016"N	104°41'16.841"W	0.00	
11717.00†	90.766	0.524	7112.72	4698.52	4477.38	1425.62	40°09'05.004"N	104°41'16.830"W	0.00	
11817.00†	90.766	0.524	7111.38	4794.42	4577.37	1426.54	40°09'05.993"N	104°41'16.818"W	0.00	
11917.00†	90.766	0.524	7110.04	4890.33	4677.36	1427.45	40°09'06.981"N	104°41'16.806"W	0.00	
11920.28	90.766	0.524	7110.00†	4893.47	4680.64	1427.48	40°09'07.013"N	104°41'16.806"W	0.00	End of Tangent (J)



# Planned Wellpath Report

MELBON 23N-8HZ (PERMIT REV-2.1) PWP  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#7 MELBON 23N-8HZ (2499' FNL & 1185' FWL, SEC.17)
Area	COLORADO	Well	MELBON 23N-8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MELBON 23N-8HZ PWB
Facility	SEC.17-T2N-R65W		

## HOLE & CASING SECTIONS - Ref Wellbore: MELBON 23N-8HZ PWB Ref Wellpath: MELBON 23N-8HZ (PERMIT REV-2.1) 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	1035.00	1018.00	17.00	1035.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	1035.00	1018.00	17.00	1035.00	0.00	0.00	0.00	0.00
8.75in Open Hole	1035.00	7731.65	6696.65	1035.00	7166.00	0.00	0.00	492.56	1389.20
7in Casing Intermediate	17.00	7731.65	7714.65	17.00	7166.00	0.00	0.00	492.56	1389.20
6.125in Open Hole	7731.65	11920.28	4188.63	7166.00	7110.00	492.56	1389.20	4680.64	1427.48
4.5in Casing Production	17.00	11920.28	11903.28	17.00	7110.00	0.00	0.00	4680.64	1427.48

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
DECHANT X-08-15 (NOBLE)		0.00	3093.06	2065.40	3227626.57	1297655.58	40°08'51.324"N	104°41'08.592"W	circle
FIELDS X8-14 (NOBLE)		0.00	3162.92	1017.05	3226577.67	1297715.90	40°08'52.015"N	104°41'22.092"W	circle
SECTION 17 E/W MIDLINE		0.00	-0.10	-185.31	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W	polygon
SECTION 17 LINES		0.00	-0.10	-185.31	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W	polygon
SECTION 17 N/S MIDLINE		0.00	-0.10	-185.31	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W	polygon
SECTION 8 E/W MIDLINE		0.00	-0.10	-185.31	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W	polygon
SECTION 8 LINES		0.00	-0.10	-185.31	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W	polygon
SECTION 8 N/S MIDLINE		0.00	-0.10	-185.31	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W	polygon
1) MELBON 23N-8HZ BHL (2181' FSL & 2570' FWL) REV-2	11920.28	7110.00	4680.64	1427.48	3226974.26	1299237.23	40°09'07.013"N	104°41'16.806"W	point
MELBON 23N-8HZ BHL ON PLAT (2181' FSL & 2590' FWL) REV-1		7110.00	4680.64	1447.48	3226994.26	1299237.41	40°09'07.013"N	104°41'16.548"W	point
DECHANT X-08-24D (NOBLE)		7120.00	3800.26	1580.63	3227135.40	1298358.32	40°08'58.313"N	104°41'14.834"W	circle



# Planned Wellpath Report

MELBON 23N-8HZ (PERMIT REV-2.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#7 MELBON 23N-8HZ (2499' FNL & 1185' FWL, SEC.17)
Area	COLORADO	Well	MELBON 23N-8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MELBON 23N-8HZ PWB
Facility	SEC.17-T2N-R65W		

SURVEY PROGRAM - Ref Wellbore: MELBON 23N-8HZ PWB Ref Wellpath: MELBON 23N-8HZ (PERMIT REV-2.1) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	7731.65	NaviTrak (Standard)		MELBON 23N-8HZ PWB
7731.65	11920.28	OnTrak (Standard)		MELBON 23N-8HZ PWB



# Planned Wellpath Report

MELBON 23N-8HZ (PERMIT REV-2.1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#7 MELBON 23N-8HZ (2499' FNL & 1185' FWL, SEC.17)
Area	COLORADO	Well	MELBON 23N-8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MELBON 23N-8HZ PWB
Facility	SEC.17-T2N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
4135.65	20.750	93.640	3990.00	PARKMAN
4770.86	20.750	93.640	4584.00	SUSSEX
7224.80	40.081	0.524	6962.00	SHARON SPRINGS
7316.27	49.228	0.524	7027.00	NIOBRARA A
7357.87	53.388	0.524	7053.00	NIOBRARA B
7601.48	77.749	0.524	7153.00	NIOBRARA C