

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL, SEC.17)  
Field: WELD COUNTY (KERR MCGEE) Well: MELBON 19N-E8HZ  
Facility: SEC.17-T2N-R65W Wellbore: MELBON 19N-E8HZ PWB

Plot reference wellpath is MELBON 19N-E8HZ (PERMIT) PWP

True vertical depths are referenced to Rig on SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL) (RT)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to Rig on SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL) (RT)	North Reference: True north
Rig on SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL) (RT) to Mean Sea Level: 4966 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL, SEC.17)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wlljg02 on 1/11/2013

## Location Information

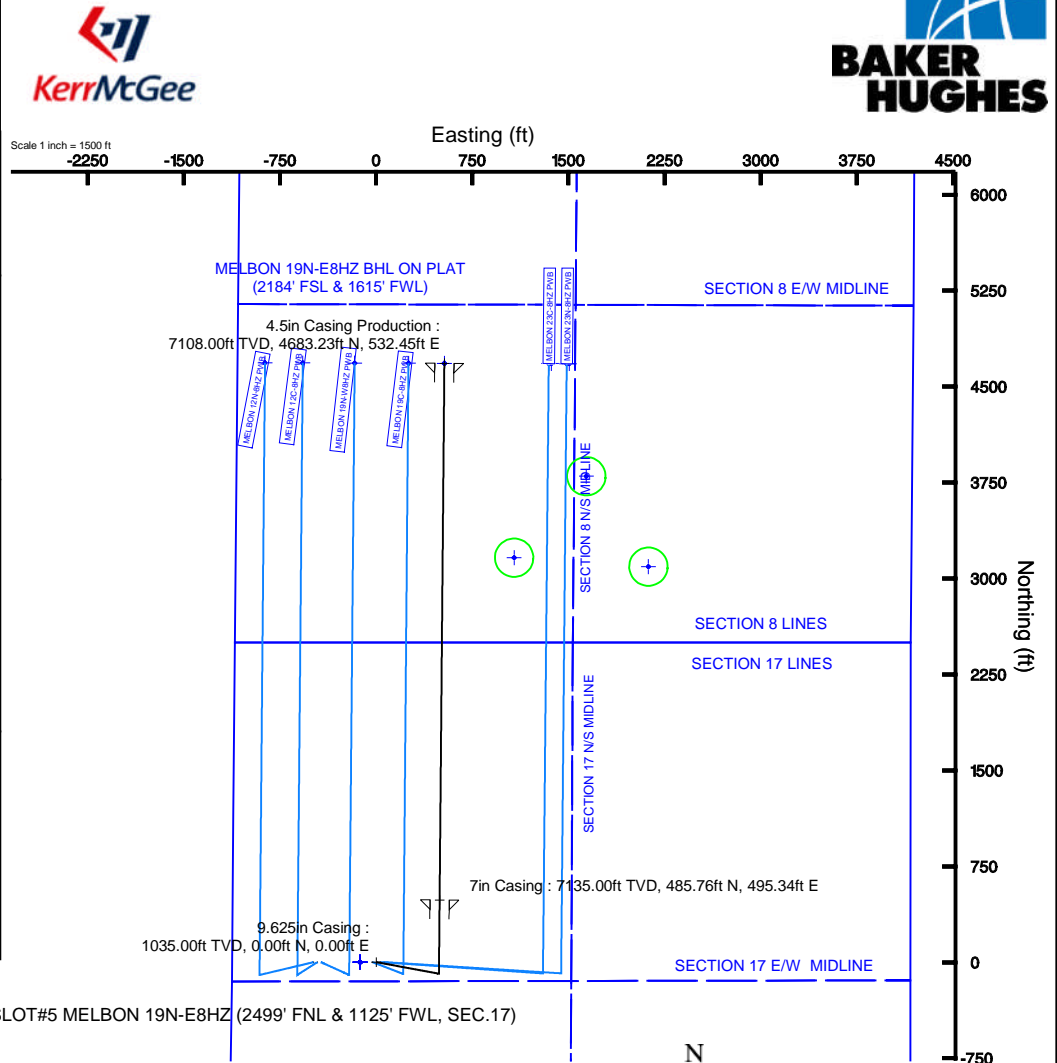
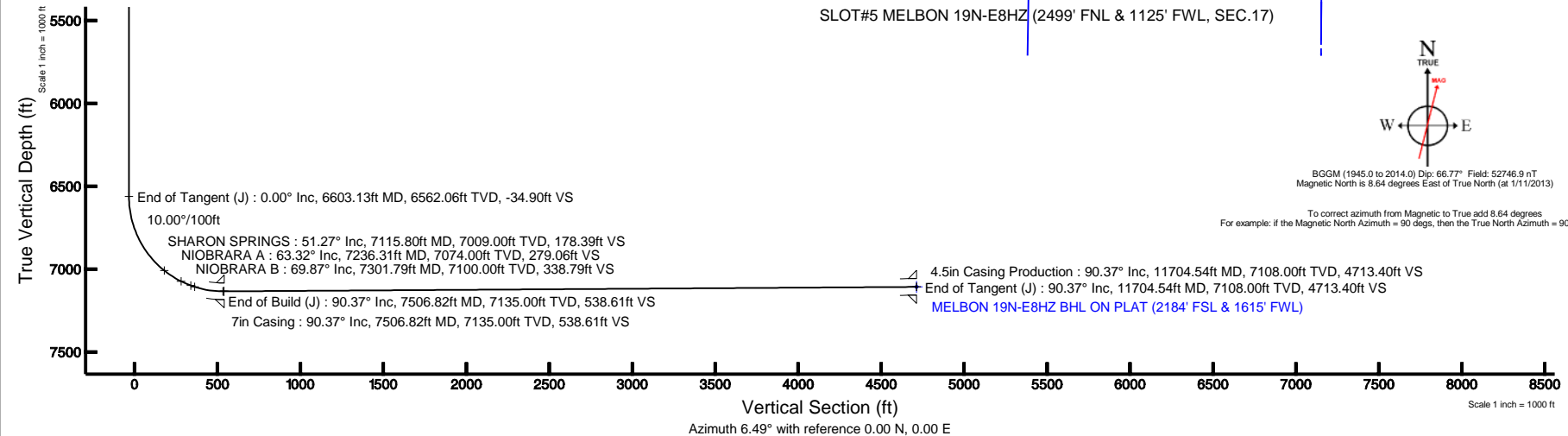
Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.17-T2N-R65W				3225409.555	1294541.951	40°08'20.755"N	104°41'37.508"W
Slot	Local N (ft)	Local E (ft)		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL, SEC.17)	0.30	119.91		3225529.457	1294543.346	40°08'20.758"N	104°41'35.962"W
Rig on SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL) (RT) to Mud line (At Slot: SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL, SEC.17))						4966ft	
Mean Sea Level to Mud line (At Slot: SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL, SEC.17))						0ft	
Rig on SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' 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	100.500	17.00	0.00	0.00	0.00	0.00
End of Tangent	1400.00	0.000	100.500	1400.00	0.00	0.00	0.00	0.00
End of Build (J)	1900.00	10.000	100.500	1897.47	-7.93	42.79	2.00	-3.05
End of Tangent (J)	4270.00	10.000	100.500	4231.46	-82.93	447.45	0.00	-31.85
End of Drop (J)	4770.00	0.000	0.507	4728.93	-90.86	490.24	2.00	-34.90
End of Tangent (J)	6603.13	0.000	0.507	6562.06	-90.86	490.24	0.00	-34.90
End of Build (J)	7506.82	90.369	0.507	7135.00	485.76	495.34	10.00	538.61
End of Tangent (J)	11704.54	90.369	0.507	7108.00	4683.23	532.45	0.00	4713.40

## Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SECTION 17 E/W MIDLINE		0.00	0.00	-125.27	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W
SECTION 17 LINES		0.00	0.00	-125.27	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W
SECTION 17 N/S MIDLINE		0.00	0.00	-125.27	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W
SECTION 8 E/W MIDLINE		0.00	0.00	-125.27	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W
SECTION 8 LINES		0.00	0.00	-125.27	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W
SECTION 8 N/S MIDLINE		0.00	0.00	-125.27	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W
MELBON 19N-E8HZ BHL ON PLAT (2184' FSL & 1615' FWL)	11704.54	7108.00	4683.23	532.45	3226019.26	1299231.03	40°09'07.038"N	104°41'29.105"W



BGGM (1945.0 to 2014.0) Dip: 66.77° Field: 52746.9 nT  
Magnetic North is 8.64 degrees East of True North (at 1/11/2013)

To correct azimuth from Magnetic to True add 8.64 degrees  
For example: if the Magnetic North Azimuth = 90 degrees, then the True North Azimuth = 90 + 8.64 = 98.64



# Planned Wellpath Report

MELBON 19N-E8HZ (PERMIT) PWP  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL, SEC.17)
Area	COLORADO	Well	MELBON 19N-E8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MELBON 19N-E8HZ PWB
Facility	SEC.17-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	0.999959	Report Generated	1/11/2013 at 10:48:51
Convergence at slot	0.52° East	Database/Source file	WellArchitectDB/MELBON_19N-E8HZ_PWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.30	119.91	3225529.46	1294543.35	40°08'20.758"N	104°41'35.962"W
Facility Reference Pt			3225409.56	1294541.95	40°08'20.755"N	104°41'37.506"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#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL) (RT) to Facility Vertical Datum
Horizontal Reference Pt	Slot	Rig on SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL) (RT) to Mean Sea Level
Vertical Reference Pt	Rig on SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL) (RT)	Rig on SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL) (RT) to Mud Line at Slot (SLOT#5 MELBON 19N-E8HZ (2499' FNL
MD Reference Pt	Rig on SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL) (RT)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL, SEC.17)
Area	COLORADO	Well	MELBON 19N-E8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MELBON 19N-E8HZ PWB
Facility	SEC.17-T2N-R65W		

## WELLPATH DATA (133 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	100.500	0.00	0.00	0.00	0.00	40°08'20.758"N	104°41'35.962"W	0.00	
17.00	0.000	100.500	17.00	0.00	0.00	0.00	40°08'20.758"N	104°41'35.962"W	0.00	Tie On
117.00†	0.000	100.500	117.00	0.00	0.00	0.00	40°08'20.758"N	104°41'35.962"W	0.00	
217.00†	0.000	100.500	217.00	0.00	0.00	0.00	40°08'20.758"N	104°41'35.962"W	0.00	
317.00†	0.000	100.500	317.00	0.00	0.00	0.00	40°08'20.758"N	104°41'35.962"W	0.00	
417.00†	0.000	100.500	417.00	0.00	0.00	0.00	40°08'20.758"N	104°41'35.962"W	0.00	
517.00†	0.000	100.500	517.00	0.00	0.00	0.00	40°08'20.758"N	104°41'35.962"W	0.00	
617.00†	0.000	100.500	617.00	0.00	0.00	0.00	40°08'20.758"N	104°41'35.962"W	0.00	
717.00†	0.000	100.500	717.00	0.00	0.00	0.00	40°08'20.758"N	104°41'35.962"W	0.00	
817.00†	0.000	100.500	817.00	0.00	0.00	0.00	40°08'20.758"N	104°41'35.962"W	0.00	
917.00†	0.000	100.500	917.00	0.00	0.00	0.00	40°08'20.758"N	104°41'35.962"W	0.00	
1017.00†	0.000	100.500	1017.00	0.00	0.00	0.00	40°08'20.758"N	104°41'35.962"W	0.00	
1117.00†	0.000	100.500	1117.00	0.00	0.00	0.00	40°08'20.758"N	104°41'35.962"W	0.00	
1217.00†	0.000	100.500	1217.00	0.00	0.00	0.00	40°08'20.758"N	104°41'35.962"W	0.00	
1317.00†	0.000	100.500	1317.00	0.00	0.00	0.00	40°08'20.758"N	104°41'35.962"W	0.00	
1400.00	0.000	100.500	1400.00	0.00	0.00	0.00	40°08'20.758"N	104°41'35.962"W	0.00	End of Tangent
1417.00†	0.340	100.500	1417.00	0.00	-0.01	0.05	40°08'20.758"N	104°41'35.961"W	2.00	
1517.00†	2.340	100.500	1516.97	-0.17	-0.44	2.35	40°08'20.754"N	104°41'35.932"W	2.00	
1617.00†	4.340	100.500	1616.79	-0.57	-1.50	8.08	40°08'20.743"N	104°41'35.858"W	2.00	
1717.00†	6.340	100.500	1716.35	-1.23	-3.19	17.23	40°08'20.726"N	104°41'35.740"W	2.00	
1817.00†	8.340	100.500	1815.53	-2.12	-5.52	29.79	40°08'20.703"N	104°41'35.578"W	2.00	
1900.00	10.000	100.500	1897.47	-3.05	-7.93	42.79	40°08'20.680"N	104°41'35.411"W	2.00	End of Build (J)
1917.00†	10.000	100.500	1914.21	-3.25	-8.47	45.70	40°08'20.674"N	104°41'35.374"W	0.00	
2017.00†	10.000	100.500	2012.69	-4.47	-11.63	62.77	40°08'20.643"N	104°41'35.154"W	0.00	
2117.00†	10.000	100.500	2111.17	-5.68	-14.80	79.84	40°08'20.612"N	104°41'34.934"W	0.00	
2217.00†	10.000	100.500	2209.65	-6.90	-17.96	96.92	40°08'20.580"N	104°41'34.714"W	0.00	
2317.00†	10.000	100.500	2308.13	-8.11	-21.13	113.99	40°08'20.549"N	104°41'34.494"W	0.00	
2417.00†	10.000	100.500	2406.61	-9.33	-24.29	131.07	40°08'20.518"N	104°41'34.274"W	0.00	
2517.00†	10.000	100.500	2505.09	-10.55	-27.46	148.14	40°08'20.487"N	104°41'34.055"W	0.00	
2617.00†	10.000	100.500	2603.57	-11.76	-30.62	165.21	40°08'20.455"N	104°41'33.835"W	0.00	
2717.00†	10.000	100.500	2702.05	-12.98	-33.79	182.29	40°08'20.424"N	104°41'33.615"W	0.00	
2817.00†	10.000	100.500	2800.53	-14.19	-36.95	199.36	40°08'20.393"N	104°41'33.395"W	0.00	
2917.00†	10.000	100.500	2899.01	-15.41	-40.11	216.44	40°08'20.362"N	104°41'33.175"W	0.00	
3017.00†	10.000	100.500	2997.50	-16.62	-43.28	233.51	40°08'20.330"N	104°41'32.955"W	0.00	
3117.00†	10.000	100.500	3095.98	-17.84	-46.44	250.58	40°08'20.299"N	104°41'32.736"W	0.00	
3217.00†	10.000	100.500	3194.46	-19.05	-49.61	267.66	40°08'20.268"N	104°41'32.516"W	0.00	
3317.00†	10.000	100.500	3292.94	-20.27	-52.77	284.73	40°08'20.236"N	104°41'32.296"W	0.00	
3417.00†	10.000	100.500	3391.42	-21.48	-55.94	301.81	40°08'20.205"N	104°41'32.076"W	0.00	
3517.00†	10.000	100.500	3489.90	-22.70	-59.10	318.88	40°08'20.174"N	104°41'31.856"W	0.00	
3617.00†	10.000	100.500	3588.38	-23.92	-62.27	335.96	40°08'20.143"N	104°41'31.636"W	0.00	
3717.00†	10.000	100.500	3686.86	-25.13	-65.43	353.03	40°08'20.111"N	104°41'31.416"W	0.00	
3817.00†	10.000	100.500	3785.34	-26.35	-68.59	370.10	40°08'20.080"N	104°41'31.197"W	0.00	
3917.00†	10.000	100.500	3883.82	-27.56	-71.76	387.18	40°08'20.049"N	104°41'30.977"W	0.00	
4017.00†	10.000	100.500	3982.30	-28.78	-74.92	404.25	40°08'20.018"N	104°41'30.757"W	0.00	
4072.54†	10.000	100.500	4037.00	-29.45	-76.68	413.73	40°08'20.000"N	104°41'30.635"W	0.00	PARKMAN

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL, SEC.17)
Area	COLORADO	Well	MELBON 19N-E8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MELBON 19N-E8HZ PWB
Facility	SEC.17-T2N-R65W		

## WELLPATH DATA (133 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4117.00†	10.000	100.500	4080.78	-29.99	-78.09	421.33	40°08'19.986"N	104°41'30.537"W	0.00	
4217.00†	10.000	100.500	4179.26	-31.21	-81.25	438.40	40°08'19.955"N	104°41'30.317"W	0.00	
4270.00	10.000	100.500	4231.46	-31.85	-82.93	447.45	40°08'19.938"N	104°41'30.201"W	0.00	End of Tangent (J)
4317.00†	9.060	100.500	4277.81	-32.40	-84.35	455.10	40°08'19.924"N	104°41'30.102"W	2.00	
4417.00†	7.060	100.500	4376.82	-33.38	-86.90	468.89	40°08'19.899"N	104°41'29.925"W	2.00	
4517.00†	5.060	100.500	4476.25	-34.12	-88.83	479.26	40°08'19.880"N	104°41'29.791"W	2.00	
4617.00†	3.060	100.500	4576.00	-34.61	-90.12	486.23	40°08'19.867"N	104°41'29.701"W	2.00	
4672.06†	1.959	100.500	4631.00	-34.78	-90.56	488.60	40°08'19.863"N	104°41'29.671"W	2.00	SUSSEX
4717.00†	1.060	100.500	4675.93	-34.86	-90.77	489.76	40°08'19.861"N	104°41'29.656"W	2.00	
4770.00	0.000	0.507	4728.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	2.00	End of Drop (J)
4817.00†	0.000	0.507	4775.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
4917.00†	0.000	0.507	4875.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
5017.00†	0.000	0.507	4975.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
5117.00†	0.000	0.507	5075.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
5217.00†	0.000	0.507	5175.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
5317.00†	0.000	0.507	5275.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
5417.00†	0.000	0.507	5375.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
5517.00†	0.000	0.507	5475.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
5617.00†	0.000	0.507	5575.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
5717.00†	0.000	0.507	5675.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
5817.00†	0.000	0.507	5775.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
5917.00†	0.000	0.507	5875.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
6017.00†	0.000	0.507	5975.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
6117.00†	0.000	0.507	6075.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
6217.00†	0.000	0.507	6175.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
6317.00†	0.000	0.507	6275.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
6417.00†	0.000	0.507	6375.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
6517.00†	0.000	0.507	6475.93	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	
6603.13	0.000	0.507	6562.06	-34.90	-90.86	490.24	40°08'19.860"N	104°41'29.650"W	0.00	End of Tangent (J)
6617.00†	1.387	0.507	6575.92	-34.73	-90.69	490.24	40°08'19.862"N	104°41'29.650"W	10.00	
6717.00†	11.387	0.507	6675.18	-23.68	-79.58	490.34	40°08'19.972"N	104°41'29.648"W	10.00	
6817.00†	21.387	0.507	6770.99	4.34	-51.41	490.59	40°08'20.250"N	104°41'29.645"W	10.00	
6917.00†	31.387	0.507	6860.46	48.49	-7.02	490.98	40°08'20.689"N	104°41'29.640"W	10.00	
7017.00†	41.387	0.507	6940.86	107.41	52.22	491.51	40°08'21.274"N	104°41'29.633"W	10.00	
7115.80†	51.267	0.507	7009.00	178.39	123.59	492.14	40°08'21.979"N	104°41'29.625"W	10.00	SHARON SPRINGS
7117.00†	51.387	0.507	7009.75	179.33	124.53	492.15	40°08'21.989"N	104°41'29.625"W	10.00	
7217.00†	61.387	0.507	7065.04	262.05	207.70	492.88	40°08'22.810"N	104°41'29.616"W	10.00	
7236.31†	63.318	0.507	7074.00	279.06	224.80	493.03	40°08'22.979"N	104°41'29.614"W	10.00	NIOBRARA A
7301.79†	69.866	0.507	7100.00	338.79	284.86	493.56	40°08'23.573"N	104°41'29.607"W	10.00	NIOBRARA B
7317.00†	71.387	0.507	7105.04	353.06	299.21	493.69	40°08'23.715"N	104°41'29.605"W	10.00	
7326.49†	72.336	0.507	7108.00	362.03	308.23	493.77	40°08'23.804"N	104°41'29.604"W	10.00	NIOBRARA B (TOE)
7417.00†	81.387	0.507	7128.55	449.60	396.27	494.55	40°08'24.674"N	104°41'29.594"W	10.00	
7499.28†	89.615	0.507	7135.00	531.11	478.22	495.27	40°08'25.484"N	104°41'29.585"W	10.00	NIOBRARA B TL (HEEL)
7506.82	90.369	0.507	7135.00	538.61	485.76	495.34	40°08'25.558"N	104°41'29.584"W	10.00	End of Build (J)
7506.98†	90.369	0.507	7135.00	538.77	485.93	495.34	40°08'25.560"N	104°41'29.584"W	0.00	NIOBRARA B TL (HEEL)

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL, SEC.17)
Area	COLORADO	Well	MELBON 19N-E8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MELBON 19N-E8HZ PWB
Facility	SEC.17-T2N-R65W		

## WELLPATH DATA (133 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7517.00†	90.369	0.507	7134.94	548.74	495.94	495.43	40°08'25.659"N	104°41'29.583"W	0.00	
7617.00†	90.369	0.507	7134.29	648.19	595.94	496.31	40°08'26.647"N	104°41'29.571"W	0.00	
7717.00†	90.369	0.507	7133.65	747.64	695.93	497.20	40°08'27.635"N	104°41'29.560"W	0.00	
7817.00†	90.369	0.507	7133.01	847.10	795.93	498.08	40°08'28.623"N	104°41'29.549"W	0.00	
7917.00†	90.369	0.507	7132.36	946.55	895.92	498.97	40°08'29.612"N	104°41'29.537"W	0.00	
8017.00†	90.369	0.507	7131.72	1046.00	995.91	499.85	40°08'30.600"N	104°41'29.526"W	0.00	
8117.00†	90.369	0.507	7131.08	1145.46	1095.91	500.73	40°08'31.588"N	104°41'29.514"W	0.00	
8217.00†	90.369	0.507	7130.43	1244.91	1195.90	501.62	40°08'32.576"N	104°41'29.503"W	0.00	
8317.00†	90.369	0.507	7129.79	1344.37	1295.90	502.50	40°08'33.564"N	104°41'29.492"W	0.00	
8417.00†	90.369	0.507	7129.15	1443.82	1395.89	503.39	40°08'34.552"N	104°41'29.480"W	0.00	
8517.00†	90.369	0.507	7128.50	1543.27	1495.88	504.27	40°08'35.540"N	104°41'29.469"W	0.00	
8617.00†	90.369	0.507	7127.86	1642.73	1595.88	505.15	40°08'36.529"N	104°41'29.457"W	0.00	
8717.00†	90.369	0.507	7127.22	1742.18	1695.87	506.04	40°08'37.517"N	104°41'29.446"W	0.00	
8817.00†	90.369	0.507	7126.57	1841.63	1795.87	506.92	40°08'38.505"N	104°41'29.434"W	0.00	
8917.00†	90.369	0.507	7125.93	1941.09	1895.86	507.81	40°08'39.493"N	104°41'29.423"W	0.00	
9017.00†	90.369	0.507	7125.29	2040.54	1995.85	508.69	40°08'40.481"N	104°41'29.412"W	0.00	
9117.00†	90.369	0.507	7124.64	2140.00	2095.85	509.57	40°08'41.469"N	104°41'29.400"W	0.00	
9217.00†	90.369	0.507	7124.00	2239.45	2195.84	510.46	40°08'42.457"N	104°41'29.389"W	0.00	
9317.00†	90.369	0.507	7123.36	2338.90	2295.84	511.34	40°08'43.446"N	104°41'29.377"W	0.00	
9417.00†	90.369	0.507	7122.71	2438.36	2395.83	512.23	40°08'44.434"N	104°41'29.366"W	0.00	
9517.00†	90.369	0.507	7122.07	2537.81	2495.82	513.11	40°08'45.422"N	104°41'29.355"W	0.00	
9617.00†	90.369	0.507	7121.43	2637.27	2595.82	513.99	40°08'46.410"N	104°41'29.343"W	0.00	
9717.00†	90.369	0.507	7120.78	2736.72	2695.81	514.88	40°08'47.398"N	104°41'29.332"W	0.00	
9817.00†	90.369	0.507	7120.14	2836.17	2795.81	515.76	40°08'48.386"N	104°41'29.320"W	0.00	
9917.00†	90.369	0.507	7119.50	2935.63	2895.80	516.65	40°08'49.374"N	104°41'29.309"W	0.00	
10017.00†	90.369	0.507	7118.85	3035.08	2995.79	517.53	40°08'50.363"N	104°41'29.298"W	0.00	
10117.00†	90.369	0.507	7118.21	3134.53	3095.79	518.41	40°08'51.351"N	104°41'29.286"W	0.00	
10217.00†	90.369	0.507	7117.57	3233.99	3195.78	519.30	40°08'52.339"N	104°41'29.275"W	0.00	
10317.00†	90.369	0.507	7116.93	3333.44	3295.78	520.18	40°08'53.327"N	104°41'29.263"W	0.00	
10417.00†	90.369	0.507	7116.28	3432.90	3395.77	521.07	40°08'54.315"N	104°41'29.252"W	0.00	
10517.00†	90.369	0.507	7115.64	3532.35	3495.76	521.95	40°08'55.303"N	104°41'29.241"W	0.00	
10617.00†	90.369	0.507	7115.00	3631.80	3595.76	522.83	40°08'56.292"N	104°41'29.229"W	0.00	
10717.00†	90.369	0.507	7114.35	3731.26	3695.75	523.72	40°08'57.280"N	104°41'29.218"W	0.00	
10817.00†	90.369	0.507	7113.71	3830.71	3795.75	524.60	40°08'58.268"N	104°41'29.206"W	0.00	
10917.00†	90.369	0.507	7113.07	3930.17	3895.74	525.49	40°08'59.256"N	104°41'29.195"W	0.00	
11017.00†	90.369	0.507	7112.42	4029.62	3995.73	526.37	40°09'00.244"N	104°41'29.183"W	0.00	
11117.00†	90.369	0.507	7111.78	4129.07	4095.73	527.25	40°09'01.232"N	104°41'29.172"W	0.00	
11217.00†	90.369	0.507	7111.14	4228.53	4195.72	528.14	40°09'02.220"N	104°41'29.161"W	0.00	
11317.00†	90.369	0.507	7110.49	4327.98	4295.72	529.02	40°09'03.209"N	104°41'29.149"W	0.00	
11417.00†	90.369	0.507	7109.85	4427.43	4395.71	529.91	40°09'04.197"N	104°41'29.138"W	0.00	
11517.00†	90.369	0.507	7109.21	4526.89	4495.70	530.79	40°09'05.185"N	104°41'29.126"W	0.00	
11617.00†	90.369	0.507	7108.56	4626.34	4595.70	531.67	40°09'06.173"N	104°41'29.115"W	0.00	
11704.54	90.369	0.507	7108.00†	4713.40	4683.23	532.45	40°09'07.038"N	104°41'29.105"W	0.00	End of Tangent (J)



# Planned Wellpath Report

MELBON 19N-E8HZ (PERMIT) PWP  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL, SEC.17)
Area	COLORADO	Well	MELBON 19N-E8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MELBON 19N-E8HZ PWB
Facility	SEC.17-T2N-R65W		

## HOLE & CASING SECTIONS - Ref Wellbore: MELBON 19N-E8HZ PWB Ref Wellpath: MELBON 19N-E8HZ (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	1035.00	1018.00	17.00	1035.00	0.00	0.00	0.00	0.00
9.625in Casing	17.00	1035.00	1018.00	17.00	1035.00	0.00	0.00	0.00	0.00
8.75in Open Hole	1035.00	7506.82	6471.82	1035.00	7135.00	0.00	0.00	485.76	495.34
7in Casing	17.00	7506.82	7489.82	17.00	7135.00	0.00	0.00	485.76	495.34
6.125in Open Hole	7506.82	11704.54	4197.72	7135.00	7108.00	485.76	495.34	4683.23	532.45
4.5in Casing Production	17.00	11704.54	11687.54	17.00	7108.00	0.00	0.00	4683.23	532.45

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SECTION 17 E/W MIDLINE		0.00	0.00	-125.27	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W	polygon
SECTION 17 LINES		0.00	0.00	-125.27	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W	polygon
SECTION 17 N/S MIDLINE		0.00	0.00	-125.27	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W	polygon
SECTION 8 E/W MIDLINE		0.00	0.00	-125.27	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W	polygon
SECTION 8 LINES		0.00	0.00	-125.27	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W	polygon
SECTION 8 N/S MIDLINE		0.00	0.00	-125.27	3225404.19	1294542.21	40°08'20.758"N	104°41'37.575"W	polygon
1) MELBON 19N-E8HZ BHL ON PLAT (2184' FSL & 1615' FWL)	11704.54	7108.00	4683.23	532.45	3226019.26	1299231.03	40°09'07.038"N	104°41'29.105"W	point

## SURVEY PROGRAM - Ref Wellbore: MELBON 19N-E8HZ PWB Ref Wellpath: MELBON 19N-E8HZ (PERMIT) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	7506.82	NaviTrak (Standard)		MELBON 19N-E8HZ PWB
7506.82	11704.54	OnTrak (Standard)		MELBON 19N-E8HZ PWB



# Planned Wellpath Report

MELBON 19N-E8HZ (PERMIT) PWP  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#5 MELBON 19N-E8HZ (2499' FNL & 1125' FWL, SEC.17)
Area	COLORADO	Well	MELBON 19N-E8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MELBON 19N-E8HZ PWB
Facility	SEC.17-T2N-R65W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
4072.54	10.000	100.500	4037.00	PARKMAN
4672.06	1.959	100.500	4631.00	SUSSEX
7115.80	51.267	0.507	7009.00	SHARON SPRINGS
7236.31	63.318	0.507	7074.00	NIOBRARA A
7301.79	69.866	0.507	7100.00	NIOBRARA B
7326.49	72.336	0.507	7108.00	NIOBRARA B (TOE)
7499.28	89.615	0.507	7135.00	NIOBRARA B TL (HEEL)
7506.98	90.369	0.507	7135.00	NIOBRARA B TL (HEEL)