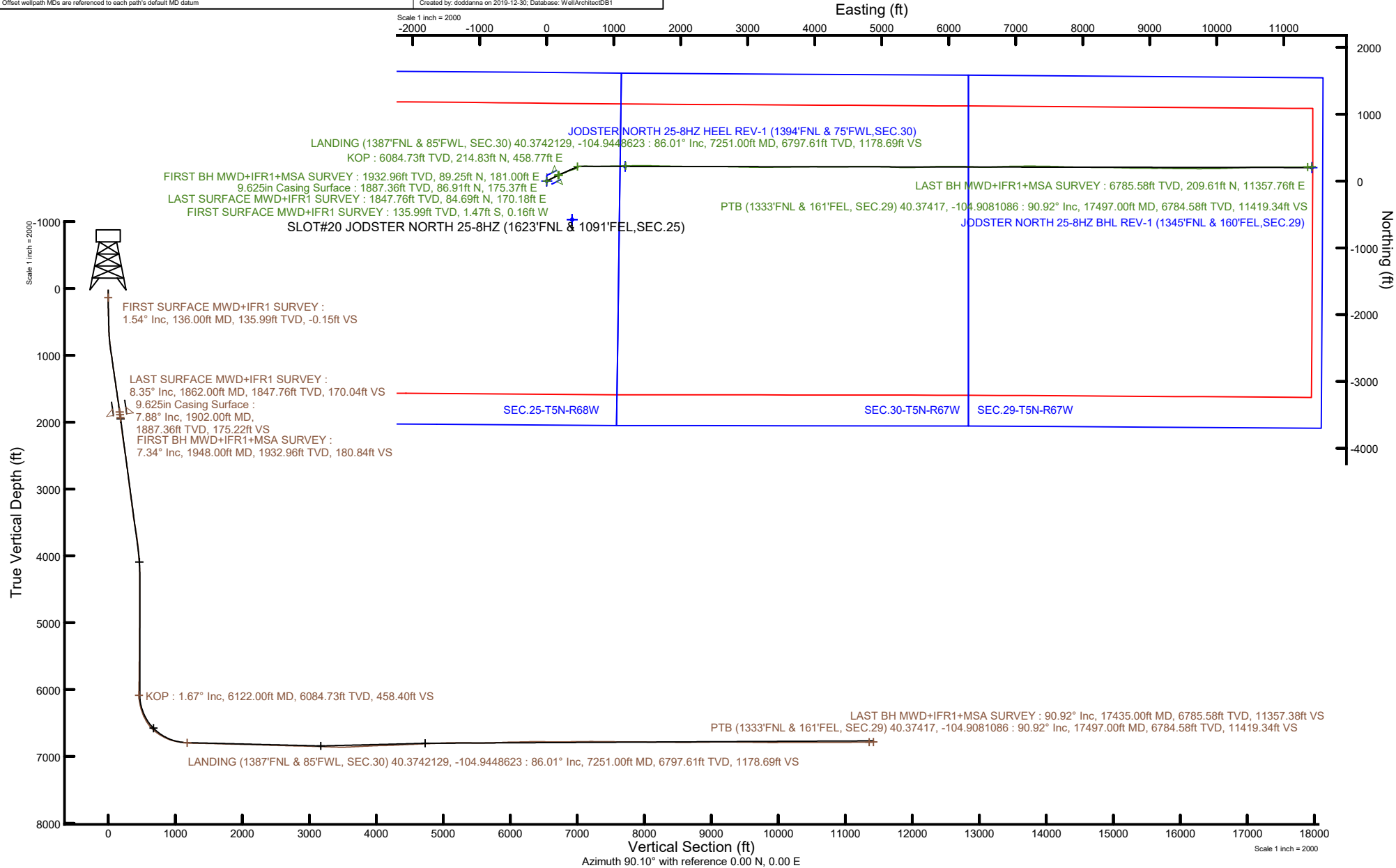


KERR-MCGEE OIL & GAS ONSHORE LP (WA)

Location: COLORADO Slot: SLOT#20 JODSTER NORTH 25-8HZ (1623°FNL & 1091°FEL,SEC.25)
Field: LARIMER COUNTY Well: JODSTER NORTH 25-8HZ
Facility: SEC.25-T5N-R68W Wellbore: JODSTER NORTH 25-8HZ PWB



Plot reference wellpath is JODSTER NORTH 25-8HZ PWP Rev-A.0	Grid System: NAD83 / UTM Zone 13 North, US feet
True vertical depths are referenced to PD 564 (26') (RT)	North Reference: True north
Reference wellpath measured depths are referenced to PD 564 (26') (RT)	Scale: True distance
PD 564 (26') (RT) to Mean Sea Level: 4887 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Mud line (At Slot: SLOT#20 JODSTER NORTH 25-8HZ (1623°FNL & 1091°FEL,SEC.25)): 0 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: doddanna on 2019-12-30; Database: WellArchitectDB1



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER NORTH 25-8HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER NORTH 25-8HZ AWP
Slot	SLOT#20 JODSTER NORTH 25-8HZ (1623'FNL & 1091'FEL,SEC.25)		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 6.0
North Reference	True	User	Doddanna
Scale	0.999600	Report Generated	12/31/2019 at 9:38:35 AM
Convergence at slot	0.03° East	Database	WellArchitectDB1

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	577.39	-379.43	1654594.94	14662783.36	40.3735960°	-104.9490940°
Facility Reference Pt			1654974.57	14662206.42	40.3720111°	-104.9477322°
Field Reference Pt			0.00	0.00	0.0000000°	-109.4887439°

WELLPATH DATUM			
Calculation method	Minimum curvature	PD 564 (26') (RT) to Facility Vertical Datum	4887.00ft
Horizontal Reference Pt	Slot	PD 564 (26') (RT) to Mean Sea Level	4887.00ft
Vertical Reference Pt	PD 564 (26') (RT)	PD 564 (26') (RT) to Mud Line at Slot (SLOT#20 JODSTER NORTH 25-8HZ (1623'FNL & 1091'FEL,SEC.25))	4887.00ft
MD Reference Pt	PD 564 (26') (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	90.10°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER NORTH 25-8HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER NORTH 25-8HZ AWP
Slot	SLOT#20 JODSTER NORTH 25-8HZ (1623'FNL & 1091'FEL,SEC.25)		

WELLPATH DATA (198 stations) † = interpolated, ‡ = extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	186.060	0.00	0.00	0.00	0.00	1654594.94	14662783.36	40.3735960	-104.9490940	0.00	
26.00	0.000	186.060	26.00	0.00	0.00	0.00	1654594.94	14662783.36	40.3735960	-104.9490940	0.00	
136.00	1.540	186.060	135.99	-0.15	-1.47	-0.16	1654594.79	14662781.89	40.3735920	-104.9490946	1.40	FIRST SURFACE MWD+IFR1 SURVEY
232.00	0.970	164.610	231.96	-0.07	-3.54	-0.08	1654594.87	14662779.82	40.3735863	-104.9490943	0.76	
327.00	1.490	98.080	326.95	1.37	-4.49	1.36	1654596.30	14662778.87	40.3735837	-104.9490891	1.49	
423.00	1.890	69.780	422.91	4.09	-4.11	4.08	1654599.02	14662779.25	40.3735847	-104.9490794	0.95	
517.00	1.850	37.520	516.86	6.46	-2.37	6.46	1654601.40	14662780.99	40.3735895	-104.9490708	1.11	
612.00	2.420	42.180	611.79	8.74	0.33	8.74	1654603.68	14662783.69	40.3735969	-104.9490626	0.63	
707.00	4.170	57.560	706.63	13.00	3.67	13.00	1654607.94	14662787.03	40.3736061	-104.9490473	2.05	
802.00	6.940	60.730	801.18	20.91	8.33	20.93	1654615.86	14662791.69	40.3736189	-104.9490189	2.93	
897.00	8.750	60.900	895.28	32.22	14.65	32.25	1654627.17	14662798.02	40.3736362	-104.9489783	1.91	
993.00	10.200	61.250	989.97	46.04	22.29	46.08	1654640.99	14662805.66	40.3736572	-104.9489286	1.51	
1088.00	8.440	62.220	1083.71	59.57	29.58	59.62	1654654.53	14662812.96	40.3736772	-104.9488800	1.86	
1183.00	8.660	65.120	1177.66	72.22	35.84	72.28	1654667.17	14662819.23	40.3736944	-104.9488346	0.51	
1278.00	9.760	65.380	1271.43	86.02	42.21	86.09	1654680.97	14662825.60	40.3737119	-104.9487850	1.16	
1374.00	9.400	61.870	1366.10	100.32	49.29	100.40	1654695.28	14662832.69	40.3737313	-104.9487337	0.71	
1469.00	9.580	59.410	1459.80	113.95	56.97	114.05	1654708.91	14662840.37	40.3737524	-104.9486847	0.47	
1564.00	9.320	61.610	1553.51	127.51	64.65	127.62	1654722.47	14662848.06	40.3737735	-104.9486360	0.47	
1658.00	9.180	65.300	1646.28	141.01	71.41	141.13	1654735.97	14662854.82	40.3737920	-104.9485875	0.65	
1754.00	9.450	65.030	1741.02	155.10	77.93	155.23	1654750.07	14662861.35	40.3738099	-104.9485369	0.28	
1848.00	8.170	66.180	1833.91	168.19	83.89	168.34	1654763.16	14662867.31	40.3738263	-104.9484898	1.37	
1862.00	8.350	66.620	1847.76	170.04	84.69	170.18	1654765.01	14662868.11	40.3738285	-104.9484832	1.36	LAST SURFACE MWD+IFR1 SURVEY
1948.00	7.340	67.760	1932.96	180.84	89.25	181.00	1654775.82	14662872.68	40.3738410	-104.9484444	1.19	FIRST BH MWD+IFR1+MSA SURVEY
2037.00	7.870	61.790	2021.17	191.47	94.28	191.63	1654786.44	14662877.71	40.3738548	-104.9484062	1.07	
2126.00	7.950	55.670	2109.33	201.91	100.63	202.08	1654796.88	14662884.07	40.3738722	-104.9483687	0.95	
2216.00	7.690	64.440	2198.50	212.47	106.74	212.65	1654807.45	14662890.18	40.3738890	-104.9483308	1.36	
2305.00	9.140	75.840	2286.54	224.69	111.04	224.88	1654819.67	14662894.48	40.3739008	-104.9482869	2.48	
2394.00	9.380	73.120	2374.38	238.48	114.88	238.67	1654833.46	14662898.32	40.3739113	-104.9482374	0.56	
2484.00	8.900	71.210	2463.24	252.08	119.25	252.28	1654847.06	14662902.70	40.3739233	-104.9481886	0.63	
2573.00	8.350	68.540	2551.23	264.61	123.83	264.82	1654859.58	14662907.29	40.3739359	-104.9481436	0.76	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER NORTH 25-8HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER NORTH 25-8HZ AWP
Slot	SLOT#20 JODSTER NORTH 25-8HZ (1623'FNL & 1091'FEL,SEC.25)		

WELLPATH DATA (198 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2663.00	7.660	68.780	2640.36	276.27	128.39	276.49	1654871.25	14662911.86	40.3739484	-104.9481017	0.77	
2752.00	8.670	66.060	2728.45	287.92	133.26	288.15	1654882.90	14662916.73	40.3739618	-104.9480598	1.21	
2841.00	7.820	63.980	2816.53	299.49	138.64	299.72	1654894.47	14662922.11	40.3739765	-104.9480183	1.01	
2931.00	6.810	64.320	2905.80	309.79	143.64	310.03	1654904.77	14662927.12	40.3739903	-104.9479813	1.12	
3020.00	8.300	65.500	2994.02	320.38	148.59	320.64	1654915.36	14662932.07	40.3740039	-104.9479432	1.68	
3110.00	7.620	66.010	3083.16	331.74	153.71	332.00	1654926.72	14662937.20	40.3740179	-104.9479025	0.76	
3199.00	8.760	74.090	3171.25	343.64	157.97	343.91	1654938.62	14662941.46	40.3740296	-104.9478597	1.82	
3289.00	7.360	75.270	3260.36	355.80	161.31	356.07	1654950.78	14662944.81	40.3740388	-104.9478160	1.57	
3378.00	7.460	73.830	3348.61	366.86	164.37	367.14	1654961.84	14662947.87	40.3740472	-104.9477763	0.24	
3467.00	9.490	75.830	3436.64	379.52	167.77	379.80	1654974.49	14662951.28	40.3740565	-104.9477309	2.30	
3557.00	9.610	74.530	3525.39	393.94	171.60	394.23	1654988.92	14662955.11	40.3740670	-104.9476791	0.27	
3646.00	10.630	67.790	3613.01	408.70	176.68	408.99	1655003.67	14662960.20	40.3740810	-104.9476261	1.75	
3736.00	9.560	67.780	3701.61	423.29	182.64	423.60	1655018.27	14662966.17	40.3740973	-104.9475737	1.19	
3825.00	7.550	64.070	3789.62	435.38	188.00	435.70	1655030.36	14662971.53	40.3741120	-104.9475303	2.34	
3915.00	5.880	62.350	3879.00	444.78	192.72	445.10	1655039.76	14662976.26	40.3741250	-104.9474965	1.87	
4005.00	5.420	62.210	3968.56	452.61	196.84	452.95	1655047.59	14662980.38	40.3741363	-104.9474684	0.51	
4094.00	4.440	61.390	4057.23	459.35	200.45	459.69	1655054.33	14662983.99	40.3741462	-104.9474442	1.10	
4183.00	3.780	52.030	4146.00	464.68	203.91	465.03	1655059.66	14662987.45	40.3741557	-104.9474250	1.06	
4273.00	1.950	47.990	4235.89	468.15	206.76	468.50	1655063.14	14662990.30	40.3741635	-104.9474125	2.04	
4362.00	0.780	11.400	4324.86	469.39	208.36	469.75	1655064.38	14662991.91	40.3741679	-104.9474081	1.58	
4452.00	0.950	3.870	4414.85	469.56	209.71	469.92	1655064.55	14662993.25	40.3741716	-104.9474075	0.23	
4541.00	0.940	5.750	4503.84	469.68	211.17	470.04	1655064.67	14662994.71	40.3741756	-104.9474070	0.04	
4631.00	0.960	346.460	4593.83	469.58	212.64	469.94	1655064.57	14662996.18	40.3741797	-104.9474074	0.35	
4721.00	0.880	348.190	4683.82	469.26	214.05	469.62	1655064.25	14662997.59	40.3741835	-104.9474085	0.09	
4810.00	0.830	323.450	4772.81	468.73	215.24	469.10	1655063.73	14662998.78	40.3741868	-104.9474104	0.42	
4900.00	0.690	320.540	4862.80	468.00	216.18	468.37	1655063.00	14662999.72	40.3741894	-104.9474130	0.16	
4989.00	0.730	335.310	4951.79	467.42	217.11	467.79	1655062.42	14663000.64	40.3741919	-104.9474151	0.21	
5079.00	0.600	312.050	5041.79	466.83	217.94	467.20	1655061.83	14663001.48	40.3741942	-104.9474172	0.33	
5168.00	0.540	293.410	5130.78	466.10	218.42	466.47	1655061.10	14663001.96	40.3741955	-104.9474198	0.22	
5258.00	0.530	277.770	5220.78	465.30	218.65	465.67	1655060.30	14663002.18	40.3741962	-104.9474227	0.16	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER NORTH 25-8HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER NORTH 25-8HZ AWP
Slot	SLOT#20 JODSTER NORTH 25-8HZ (1623'FNL & 1091'FEL,SEC.25)		

WELLPATH DATA (198 stations)												† = interpolated, ‡ = extrapolated station	
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments	
5347.00	0.390	179.910	5309.78	464.89	218.40	465.26	1655059.89	14663001.94	40.3741955	-104.9474242	0.79		
5462.00	0.360	241.080	5424.77	464.57	217.83	464.94	1655059.57	14663001.37	40.3741939	-104.9474253	0.33		
5551.00	0.600	237.550	5513.77	463.94	217.45	464.30	1655058.94	14663000.98	40.3741929	-104.9474276	0.27		
5641.00	0.640	252.960	5603.76	463.06	217.05	463.43	1655058.06	14663000.58	40.3741918	-104.9474308	0.19		
5730.00	0.740	247.080	5692.76	462.05	216.68	462.42	1655057.05	14663000.21	40.3741908	-104.9474344	0.14		
5819.00	0.750	251.650	5781.75	460.97	216.27	461.34	1655055.97	14662999.81	40.3741896	-104.9474382	0.07		
5909.00	0.540	254.240	5871.75	460.01	215.97	460.37	1655055.01	14662999.50	40.3741888	-104.9474417	0.24		
5998.00	0.660	227.280	5960.74	459.23	215.51	459.59	1655054.23	14662999.04	40.3741875	-104.9474445	0.34		
6088.00	0.930	248.700	6050.73	458.17	214.89	458.53	1655053.17	14662998.43	40.3741858	-104.9474483	0.44		
6122.00†	1.666	85.247	6084.73	458.40	214.83	458.77	1655053.40	14662998.37	40.3741857	-104.9474475	7.56	KOP	
6177.00	5.820	81.020	6139.60	461.95	215.33	462.32	1655056.95	14662998.87	40.3741871	-104.9474347	7.56		
6267.00	12.000	85.220	6228.47	475.80	216.83	476.16	1655070.79	14663000.37	40.3741912	-104.9473850	6.90		
6356.00	16.680	84.700	6314.67	497.74	218.78	498.11	1655092.73	14663002.33	40.3741965	-104.9473063	5.26		
6445.00	24.840	88.680	6397.83	529.20	220.39	529.58	1655124.18	14663003.97	40.3742009	-104.9471933	9.30		
6535.00	30.140	89.380	6477.64	570.72	221.07	571.10	1655165.68	14663004.67	40.3742028	-104.9470443	5.90		
6624.00	39.230	92.200	6550.75	621.30	220.23	621.67	1655216.24	14663003.86	40.3742005	-104.9468628	10.37		
6713.00	49.980	92.460	6614.02	683.66	217.68	684.03	1655278.57	14663001.34	40.3741935	-104.9466390	12.08		
6803.00	57.090	89.240	6667.49	755.97	216.70	756.34	1655350.85	14663000.41	40.3741908	-104.9463795	8.41		
6893.00	62.460	88.950	6712.78	833.69	217.94	834.06	1655428.55	14663001.68	40.3741942	-104.9461005	5.97		
6982.00	70.320	88.380	6748.39	915.15	219.85	915.53	1655509.98	14663003.64	40.3741994	-104.9458082	8.85		
7072.00	77.500	89.410	6773.32	1001.55	221.50	1001.93	1655596.34	14663005.34	40.3742039	-104.9454981	8.05		
7161.00	82.610	89.300	6788.69	1089.18	222.49	1089.56	1655683.93	14663006.38	40.3742066	-104.9451836	5.74		
7251.00	86.010	87.790	6797.61	1178.69	224.76	1179.07	1655773.41	14663008.71	40.3742129	-104.9448623	4.13	LANDING (1387'FNL & 85'FWL, SEC.30) 40.3742129, -104.9448623	
7340.00	88.360	88.840	6801.98	1267.53	227.38	1267.91	1655862.22	14663011.37	40.3742200	-104.9445434	2.89		
7430.00	89.250	88.880	6803.86	1357.49	229.17	1357.88	1655952.14	14663013.21	40.3742249	-104.9442206	0.99		
7519.00	89.250	90.630	6805.02	1446.47	229.55	1446.86	1656041.09	14663013.64	40.3742260	-104.9439012	1.97		
7609.00	88.330	91.450	6806.92	1536.44	227.91	1536.83	1656131.02	14663012.06	40.3742215	-104.9435783	1.37		
7698.00	88.730	91.400	6809.21	1625.39	225.70	1625.77	1656219.93	14663009.90	40.3742154	-104.9432591	0.45		
7788.00	87.960	91.500	6811.81	1715.32	223.42	1715.70	1656309.83	14663007.68	40.3742091	-104.9429363	0.86		
7877.00	88.240	91.070	6814.76	1804.25	221.43	1804.63	1656398.72	14663005.74	40.3742036	-104.9426172	0.58		

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER NORTH 25-8HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER NORTH 25-8HZ AWP
Slot	SLOT#20 JODSTER NORTH 25-8HZ (1623'FNL & 1091'FEL,SEC.25)		

WELLPATH DATA (198 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7966.00	89.010	91.030	6816.89	1893.22	219.80	1893.59	1656487.65	14663004.16	40.3741991	-104.9422979	0.87	
8055.00	88.640	90.960	6818.72	1982.19	218.25	1982.56	1656576.58	14663002.66	40.3741949	-104.9419786	0.42	
8145.00	88.840	90.760	6820.70	2072.16	216.90	2072.53	1656666.51	14663001.37	40.3741911	-104.9416557	0.31	
8234.00	87.880	90.090	6823.24	2161.12	216.24	2161.49	1656755.44	14663000.76	40.3741893	-104.9413364	1.32	
8324.00	88.200	90.160	6826.32	2251.06	216.05	2251.43	1656845.35	14663000.61	40.3741887	-104.9410136	0.36	
8413.00	87.590	89.850	6829.59	2340.00	216.04	2340.37	1656934.25	14663000.66	40.3741887	-104.9406944	0.77	
8503.00	88.790	90.330	6832.43	2429.96	215.90	2430.33	1657024.17	14663000.57	40.3741883	-104.9403715	1.44	
8592.00	88.250	89.950	6834.73	2518.93	215.68	2519.29	1657113.10	14663000.40	40.3741877	-104.9400522	0.74	
8682.00	88.470	90.480	6837.31	2608.89	215.34	2609.26	1657203.03	14663000.11	40.3741867	-104.9397294	0.64	
8771.00	87.980	90.790	6840.06	2697.84	214.36	2698.21	1657291.94	14662999.18	40.3741840	-104.9394101	0.65	
8861.00	89.220	91.450	6842.26	2787.80	212.60	2788.16	1657381.86	14662997.47	40.3741791	-104.9390873	1.56	
8950.00	88.500	91.610	6844.03	2876.75	210.22	2877.11	1657470.78	14662995.15	40.3741726	-104.9387680	0.83	
9040.00	89.020	90.890	6845.98	2966.71	208.26	2967.07	1657560.70	14662993.24	40.3741672	-104.9384452	0.99	
9129.00	87.650	90.420	6848.57	3055.67	207.24	3056.02	1657649.62	14662992.27	40.3741643	-104.9381259	1.63	
9219.00	87.770	90.180	6852.16	3145.59	206.77	3145.95	1657739.51	14662991.86	40.3741630	-104.9378032	0.30	
9308.00	88.130	89.950	6855.35	3234.54	206.67	3234.89	1657828.42	14662991.81	40.3741627	-104.9374839	0.48	
9398.00	87.850	89.620	6858.50	3324.48	207.01	3324.84	1657918.32	14662992.19	40.3741636	-104.9371611	0.48	
9487.00	88.350	89.400	6861.45	3413.43	207.77	3413.78	1658007.24	14662993.01	40.3741657	-104.9368419	0.61	
9577.00	90.500	88.810	6862.36	3503.40	209.18	3503.76	1658097.18	14662994.46	40.3741695	-104.9365190	2.48	
9666.00	93.060	89.610	6859.59	3592.34	210.40	3592.70	1658186.08	14662995.74	40.3741728	-104.9361998	3.01	
9756.00	93.270	89.550	6854.62	3682.20	211.06	3682.56	1658275.90	14662996.45	40.3741746	-104.9358772	0.24	
9845.00	92.470	89.320	6850.17	3771.08	211.94	3771.45	1658364.75	14662997.38	40.3741770	-104.9355582	0.94	
9934.00	93.180	89.020	6845.78	3859.96	213.22	3860.33	1658453.60	14662998.72	40.3741805	-104.9352392	0.87	
10024.00	92.700	89.630	6841.17	3949.83	214.28	3950.20	1658543.43	14662999.83	40.3741833	-104.9349167	0.86	
10113.00	91.290	90.600	6838.07	4038.78	214.10	4039.15	1658632.34	14662999.70	40.3741828	-104.9345975	1.92	
10203.00	91.360	89.600	6835.99	4128.75	213.95	4129.12	1658722.28	14662999.59	40.3741823	-104.9342745	1.11	
10292.00	91.820	90.550	6833.52	4217.72	213.83	4218.08	1658811.21	14662999.53	40.3741820	-104.9339553	1.19	
10382.00	92.950	90.640	6829.77	4307.63	212.90	4308.00	1658901.09	14662998.65	40.3741794	-104.9336325	1.26	
10471.00	92.770	89.330	6825.33	4396.52	212.92	4396.89	1658989.94	14662998.72	40.3741794	-104.9333135	1.48	
10561.00	92.210	89.270	6821.42	4486.43	214.02	4486.80	1659079.81	14662999.87	40.3741823	-104.9329908	0.63	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER NORTH 25-8HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER NORTH 25-8HZ AWP
Slot	SLOT#20 JODSTER NORTH 25-8HZ (1623'FNL & 1091'FEL,SEC.25)		

WELLPATH DATA (198 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10650.00	92.580	89.880	6817.70	4575.34	214.68	4575.71	1659168.69	14663000.58	40.3741841	-104.9326717	0.80	
10740.00	93.180	90.160	6813.18	4665.23	214.65	4665.60	1659258.54	14663000.60	40.3741840	-104.9323491	0.74	
10829.00	91.290	90.060	6809.71	4754.16	214.48	4754.53	1659347.44	14663000.48	40.3741835	-104.9320300	2.13	
10918.00	92.200	90.170	6807.00	4843.12	214.30	4843.49	1659436.36	14663000.36	40.3741829	-104.9317107	1.03	
11008.00	93.040	89.900	6802.88	4933.02	214.24	4933.39	1659526.23	14663000.35	40.3741827	-104.9313880	0.98	
11098.00	92.150	90.830	6798.81	5022.93	213.67	5023.30	1659616.10	14662999.83	40.3741811	-104.9310653	1.43	
11187.00	91.010	91.360	6796.36	5111.88	211.97	5112.24	1659705.01	14662998.18	40.3741764	-104.9307461	1.41	
11276.00	90.490	94.080	6795.19	5200.77	207.75	5201.13	1659793.86	14662994.01	40.3741647	-104.9304271	3.11	
11366.00	88.960	91.380	6795.62	5290.66	203.46	5291.01	1659883.71	14662989.78	40.3741529	-104.9301045	3.45	
11455.00	88.450	89.790	6797.63	5379.63	202.55	5379.98	1659972.65	14662988.92	40.3741504	-104.9297852	1.88	
11544.00	89.810	88.880	6798.99	5468.61	203.59	5468.96	1660061.59	14662990.01	40.3741532	-104.9294658	1.84	
11634.00	90.180	88.610	6798.99	5558.58	205.56	5558.94	1660151.53	14662992.03	40.3741585	-104.9291429	0.51	
11723.00	91.040	88.020	6798.05	5647.54	208.17	5647.90	1660240.45	14662994.70	40.3741656	-104.9288237	1.17	
11812.00	91.920	87.390	6795.75	5736.43	211.74	5736.79	1660329.31	14662998.31	40.3741754	-104.9285046	1.22	
11902.00	91.520	88.590	6793.05	5826.32	214.89	5826.70	1660419.17	14663001.51	40.3741840	-104.9281819	1.40	
11991.00	92.360	88.960	6790.03	5915.25	216.79	5915.62	1660508.06	14663003.47	40.3741891	-104.9278628	1.03	
12081.00	90.840	90.270	6787.52	6005.21	217.40	6005.58	1660597.99	14663004.12	40.3741907	-104.9275399	2.23	
12170.00	90.990	90.910	6786.10	6094.19	216.48	6094.57	1660686.93	14663003.26	40.3741882	-104.9272205	0.74	
12259.00	92.020	90.680	6783.76	6183.15	215.25	6183.52	1660775.86	14663002.07	40.3741847	-104.9269013	1.19	
12349.00	90.470	91.350	6781.81	6273.12	213.65	6273.49	1660865.78	14663000.53	40.3741803	-104.9265784	1.88	
12438.00	89.780	92.200	6781.61	6362.08	210.90	6362.44	1660954.71	14662997.83	40.3741726	-104.9262591	1.23	
12527.00	90.520	93.300	6781.38	6450.98	206.63	6451.34	1661043.57	14662993.61	40.3741609	-104.9259401	1.49	
12617.00	88.550	88.850	6782.11	6540.94	204.94	6541.29	1661133.49	14662991.97	40.3741562	-104.9256173	5.41	
12706.00	89.280	87.950	6783.79	6629.88	207.42	6630.24	1661222.40	14662994.51	40.3741629	-104.9252980	1.30	
12796.00	90.360	88.000	6784.08	6719.82	210.60	6720.18	1661312.30	14662997.74	40.3741716	-104.9249752	1.20	
12885.00	90.780	87.260	6783.19	6808.73	214.28	6809.10	1661401.18	14663001.47	40.3741816	-104.9246561	0.96	
12974.00	91.090	88.770	6781.74	6897.65	217.36	6898.03	1661490.08	14663004.60	40.3741900	-104.9243369	1.73	
13064.00	89.960	89.110	6780.91	6987.63	219.03	6988.01	1661580.02	14663006.32	40.3741945	-104.9240140	1.31	
13153.00	91.300	89.150	6779.94	7076.61	220.38	7076.99	1661668.97	14663007.72	40.3741981	-104.9236946	1.51	
13243.00	90.650	89.960	6778.40	7166.59	221.08	7166.98	1661758.91	14663008.47	40.3742000	-104.9233716	1.15	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER NORTH 25-8HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER NORTH 25-8HZ AWP
Slot	SLOT#20 JODSTER NORTH 25-8HZ (1623'FNL & 1091'FEL,SEC.25)		

WELLPATH DATA (198 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13332.00	89.070	90.160	6778.62	7255.59	220.99	7255.97	1661847.87	14663008.43	40.3741997	-104.9230522	1.79	
13421.00	90.590	90.420	6778.89	7344.59	220.54	7344.97	1661936.83	14663008.03	40.3741983	-104.9227328	1.73	
13511.00	89.160	91.080	6779.08	7434.58	219.36	7434.96	1662026.79	14663006.90	40.3741950	-104.9224099	1.75	
13600.00	88.610	91.820	6780.81	7523.53	217.11	7523.91	1662115.71	14663004.70	40.3741888	-104.9220906	1.04	
13689.00	89.020	91.350	6782.65	7612.48	214.64	7612.86	1662204.62	14663002.29	40.3741820	-104.9217714	0.70	
13779.00	91.070	92.290	6782.58	7702.44	211.79	7702.81	1662294.53	14662999.49	40.3741740	-104.9214486	2.51	
13868.00	89.320	91.390	6782.28	7791.39	208.93	7791.76	1662383.45	14662996.68	40.3741661	-104.9211293	2.21	
13958.00	88.760	90.660	6783.79	7881.37	207.32	7881.73	1662473.38	14662995.13	40.3741616	-104.9208064	1.02	
14047.00	90.190	91.040	6784.60	7970.35	206.00	7970.71	1662562.33	14662993.86	40.3741579	-104.9204870	1.66	
14137.00	89.010	90.580	6785.23	8060.34	204.73	8060.70	1662652.28	14662992.64	40.3741543	-104.9201641	1.41	
14226.00	90.070	90.360	6785.95	8149.34	204.00	8149.69	1662741.24	14662991.96	40.3741523	-104.9198447	1.22	
14315.00	89.130	89.920	6786.57	8238.33	203.78	8238.69	1662830.20	14662991.79	40.3741516	-104.9195253	1.17	
14405.00	90.780	90.390	6786.64	8328.33	203.54	8328.68	1662920.16	14662991.60	40.3741508	-104.9192023	1.91	
14494.00	88.280	91.400	6787.37	8417.31	202.15	8417.66	1663009.11	14662990.26	40.3741469	-104.9188829	3.03	
14584.00	89.210	91.760	6789.34	8507.26	199.67	8507.61	1663099.01	14662987.84	40.3741400	-104.9185601	1.11	
14673.00	90.050	91.580	6789.92	8596.22	197.07	8596.57	1663187.94	14662985.29	40.3741328	-104.9182409	0.97	
14762.00	91.530	91.900	6788.69	8685.17	194.37	8685.51	1663276.85	14662982.64	40.3741253	-104.9179216	1.70	
14852.00	89.750	90.500	6787.68	8775.14	192.49	8775.48	1663366.79	14662980.81	40.3741201	-104.9175987	2.52	
14941.00	90.320	90.760	6787.63	8864.14	191.51	8864.48	1663455.75	14662979.89	40.3741173	-104.9172793	0.70	
15031.00	91.790	90.030	6785.97	8954.12	190.89	8954.46	1663545.69	14662979.32	40.3741155	-104.9169564	1.82	
15120.00	90.880	90.200	6783.90	9043.09	190.71	9043.43	1663634.63	14662979.19	40.3741149	-104.9166371	1.04	
15210.00	90.820	89.620	6782.56	9133.08	190.85	9133.42	1663724.58	14662979.38	40.3741152	-104.9163141	0.65	
15299.00	88.950	91.220	6782.74	9222.08	190.20	9222.41	1663813.54	14662978.78	40.3741133	-104.9159947	2.77	
15388.00	89.510	91.410	6783.94	9311.05	188.15	9311.38	1663902.47	14662976.79	40.3741076	-104.9156754	0.66	
15478.00	88.440	90.490	6785.55	9401.02	186.66	9401.35	1663992.41	14662975.35	40.3741034	-104.9153525	1.57	
15567.00	89.130	90.290	6787.43	9490.00	186.06	9490.33	1664081.35	14662974.80	40.3741017	-104.9150332	0.81	
15657.00	89.870	89.880	6788.22	9579.99	185.92	9580.32	1664171.31	14662974.72	40.3741012	-104.9147102	0.94	
15746.00	89.680	91.560	6788.57	9668.99	184.80	9669.31	1664260.26	14662973.65	40.3740981	-104.9143908	1.90	
15836.00	88.510	89.440	6789.99	9758.96	184.02	9759.29	1664350.21	14662972.92	40.3740958	-104.9140679	2.69	
15925.00	88.780	89.100	6792.10	9847.93	185.15	9848.26	1664439.14	14662974.10	40.3740988	-104.9137486	0.49	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER NORTH 25-8HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER NORTH 25-8HZ AWP
Slot	SLOT#20 JODSTER NORTH 25-8HZ (1623'FNL & 1091'FEL,SEC.25)		

WELLPATH DATA (198 stations) † = interpolated, ‡ = extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16014.00	90.720	90.210	6792.48	9936.92	185.69	9937.25	1664528.09	14662974.69	40.3741002	-104.9134292	2.51	
16104.00	90.650	88.560	6791.41	10026.90	186.65	10027.24	1664618.04	14662975.70	40.3741028	-104.9131062	1.83	
16193.00	90.790	88.350	6790.29	10115.86	189.05	10116.20	1664706.96	14662978.15	40.3741092	-104.9127869	0.28	
16283.00	89.580	87.430	6790.00	10205.79	192.37	10206.13	1664796.86	14662981.52	40.3741182	-104.9124641	1.69	
16372.00	89.900	88.120	6790.40	10294.72	195.82	10295.06	1664885.76	14662985.02	40.3741276	-104.9121450	0.85	
16461.00	89.870	87.840	6790.58	10383.66	198.96	10384.01	1664974.66	14662988.21	40.3741361	-104.9118257	0.32	
16550.00	89.360	87.150	6791.18	10472.56	202.85	10472.92	1665063.54	14662992.15	40.3741467	-104.9115066	0.96	
16640.00	90.010	89.310	6791.67	10562.51	205.63	10562.87	1665153.45	14662994.98	40.3741542	-104.9111838	2.51	
16729.00	90.790	90.890	6791.05	10651.50	205.47	10651.86	1665242.41	14662994.88	40.3741537	-104.9108644	1.98	
16819.00	90.100	89.640	6790.35	10741.50	205.06	10741.86	1665332.37	14662994.51	40.3741524	-104.9105414	1.59	
16908.00	90.680	90.790	6789.75	10830.49	204.72	10830.85	1665421.33	14662994.23	40.3741514	-104.9102220	1.45	
16997.00	89.640	88.760	6789.50	10919.48	205.07	10919.85	1665510.28	14662994.63	40.3741523	-104.9099026	2.56	
17086.00	90.450	90.400	6789.43	11008.48	205.73	11008.84	1665599.24	14662995.33	40.3741539	-104.9095832	2.06	
17176.00	91.040	90.450	6788.26	11098.47	205.06	11098.83	1665689.19	14662994.72	40.3741520	-104.9092602	0.66	
17265.00	89.980	89.060	6787.47	11187.46	205.44	11187.82	1665778.15	14662995.15	40.3741529	-104.9089408	1.96	
17355.00	90.850	88.620	6786.82	11277.43	207.26	11277.80	1665868.09	14662997.02	40.3741578	-104.9086179	1.08	
17435.00	90.920	88.020	6785.58	11357.38	209.61	11357.76	1665948.01	14662999.41	40.3741642	-104.9083309	0.75	LAST BH MWD+IFR1+MSA SURVEY
17497.00†	90.920	88.020	6784.58	11419.34	211.75	11419.71	1666009.94	14663001.59	40.3741700	-104.9081086	0.00	PTB (1333'FNL & 161'FEL, SEC.29) 40.37417, -104.9081086

HOLE & CASING SECTIONS - Ref Wellbore: JODSTER NORTH 25-8HZ AWP Ref Wellpath: JODSTER NORTH 25-8HZ AWP									
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]
9.625in Casing Surface	26.00	1902.00	1876.00	26.00	1887.36	0.00	0.00	86.91	175.37

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER NORTH 25-8HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER NORTH 25-8HZ AWP
Slot	SLOT#20 JODSTER NORTH 25-8HZ (1623'FNL & 1091'FEL,SEC.25)		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.25-T5N-R68W	0.00	-577.39	379.44	1654974.57	14662206.42	40.3720111	-104.9477322	polygon
	2D Polygon: dimensions not calculated							
SEC.29-T5N-R67W	0.00	-577.39	379.44	1654974.56	14662206.42	40.3720111	-104.9477322	polygon
	2D Polygon: dimensions not calculated							
SEC.30-T5N-R67W	0.00	-577.39	379.44	1654974.56	14662206.42	40.3720111	-104.9477322	polygon
	2D Polygon: dimensions not calculated							
JODSTER NORTH 25-8HZ BHL REV-1 (1345'FNL & 160'FEL,SEC.29)	6767.00	200.10	11420.71	1666010.95	14662989.95	40.3741380	-104.9081050	point
JODSTER NORTH 25-8HZ HEEL REV-1 (1394'FNL & 75'FWL,SEC.30)	6794.00	217.52	1169.40	1655763.75	14663001.46	40.3741930	-104.9448970	point
JODSTER NORTH 25-8HZ LANDBOX	6794.00	0.00	0.00	1654594.94	14662783.36	40.3735960	-104.9490940	polygon
	2D Polygon: dimensions not calculated							

WELLPATH COMPOSITION - Ref Wellbore: JODSTER NORTH 25-8HZ AWP					Ref Wellpath: JODSTER NORTH 25-8HZ AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment		Wellbore	Survey Date
26.00	1862.00	Custom APC ISCWSA REV 2 MWD+IFR1 (approximation)	Custom APC ISCWSA Rev-2 MWD+IFR1 <136 - 1862 >		JODSTER NORTH 25-8HZ AWP	11/15/2019
1862.00	17497.00	Custom APC ISCWSA REV 2 MWD+IFR1+MSA (approximation)	BH Custom APC ISCWSA Rev-2 MWD+IFR1+MSA <1948 - 17435 >		JODSTER NORTH 25-8HZ AWP	12/21/2019

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER NORTH 25-8HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER NORTH 25-8HZ AWP
Slot	SLOT#20 JODSTER NORTH 25-8HZ (1623'FNL & 1091'FEL,SEC.25)		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
136.00	1.540	186.060	135.99	FIRST SURFACE MWD+IFR1 SURVEY
1862.00	8.350	66.620	1847.76	LAST SURFACE MWD+IFR1 SURVEY
1948.00	7.340	67.760	1932.96	FIRST BH MWD+IFR1+MSA SURVEY
6122.00	1.666	85.247	6084.73	KOP
7251.00	86.010	87.790	6797.61	LANDING (1387'FNL & 85'FWL, SEC.30) 40.3742129, -104.9448623
17435.00	90.920	88.020	6785.58	LAST BH MWD+IFR1+MSA SURVEY
17497.00	90.920	88.020	6784.58	PTB (1333'FNL & 161'FEL, SEC.29) 40.37417, -104.9081086