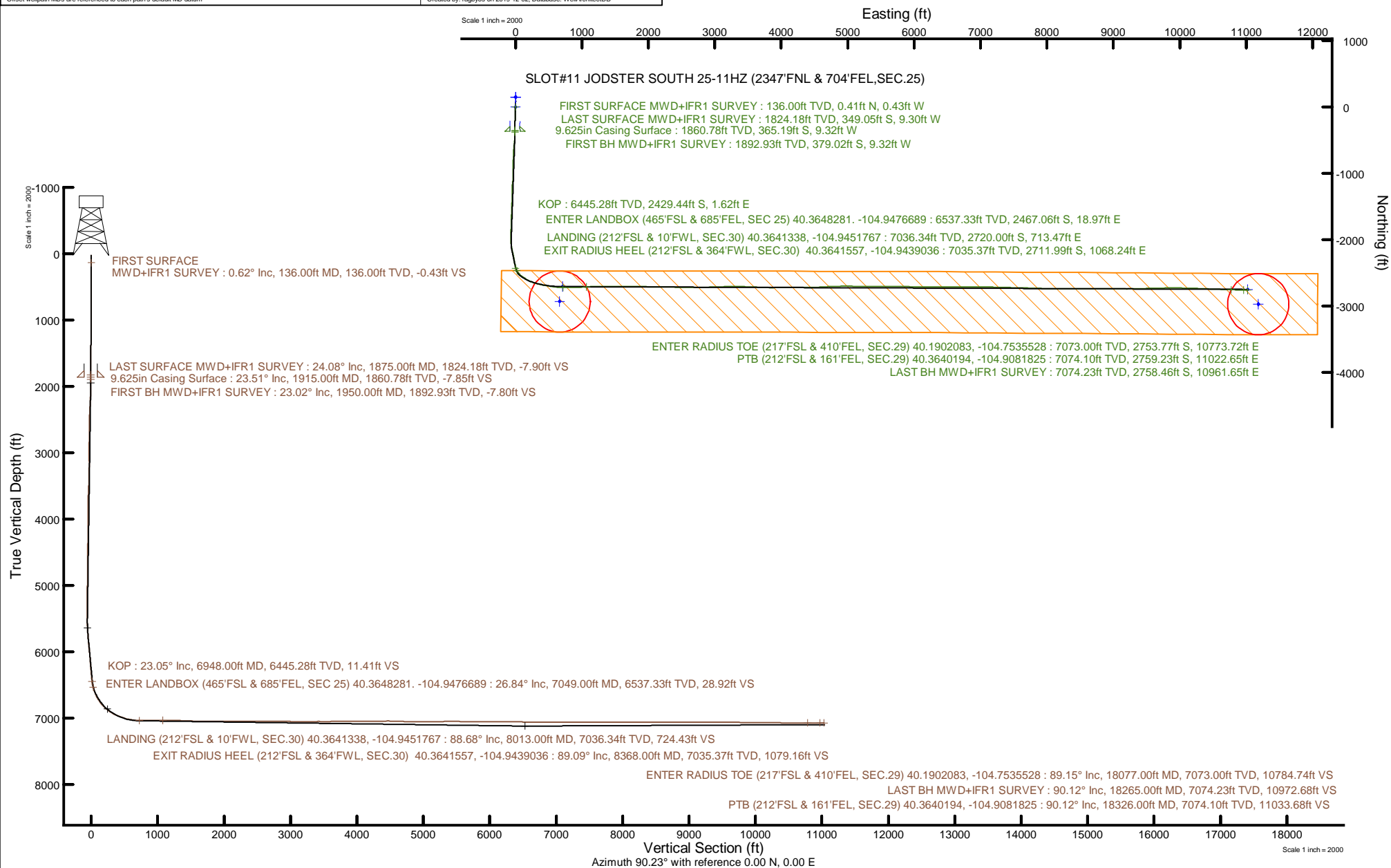


Anadarko
Petroleum Corporation

Baker Hughes 

Plot reference wellpath is JODSTER SOUTH 25-11HZ-WP Rev-B.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: SLO70111 JODSTER SOUTH 25-11HZ (2347FNL & 704FEL,SEC.25): 0 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: raybos on 2019-12-02; Database: WslArchArchIDB



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER SOUTH 25-11HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER SOUTH 25-11HZ AWB
Slot	SLOT#11 JODSTER SOUTH 25-11HZ (2347'FNL & 704'FEL,SEC.25)		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 6.0
North Reference	True	User	Ragbyos
Scale	0.999600	Report Generated	12/2/2019 at 2:20:55 PM
Convergence at slot	0.03° East	Database	WellArchitectDB

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-149.77	-1.32	1654973.34	14662056.71	40.3716000°	-104.9477369°
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#11 JODSTER SOUTH 25-11HZ (2347'FNL & 704'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	90.23°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER SOUTH 25-11HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER SOUTH 25-11HZ AWB
Slot	SLOT#11 JODSTER SOUTH 25-11HZ (2347'FNL & 704'FEL,SEC.25)		

WELLPATH DATA (210 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	313.590	0.00	0.00	0.00	0.00	1654973.34	14662056.71	40.3716000	-104.9477369	0.00	
26.00	0.000	313.590	26.00	0.00	0.00	0.00	1654973.34	14662056.71	40.3716000	-104.9477369	0.00	
136.00	0.620	313.590	136.00	-0.43	0.41	-0.43	1654972.91	14662057.12	40.3716011	-104.9477385	0.56	FIRST SURFACE MWD+IFR1 SURVEY
231.00	0.440	289.770	230.99	-1.15	0.89	-1.15	1654972.19	14662057.59	40.3716024	-104.9477411	0.30	
327.00	1.010	197.570	326.99	-1.75	0.21	-1.75	1654971.59	14662056.91	40.3716006	-104.9477432	1.16	
422.00	2.550	183.420	421.94	-2.12	-2.70	-2.13	1654971.21	14662054.00	40.3715926	-104.9477446	1.67	
517.00	4.790	181.580	516.74	-2.33	-8.78	-2.36	1654970.98	14662047.93	40.3715759	-104.9477454	2.36	
611.00	5.800	182.280	610.34	-2.59	-17.45	-2.66	1654970.69	14662039.27	40.3715521	-104.9477465	1.08	
706.00	6.940	179.030	704.75	-2.64	-27.98	-2.75	1654970.60	14662028.73	40.3715232	-104.9477468	1.26	
802.00	8.220	178.760	799.91	-2.34	-40.64	-2.51	1654970.86	14662016.08	40.3714884	-104.9477459	1.33	
897.00	10.500	180.700	893.64	-2.24	-56.09	-2.47	1654970.91	14662000.64	40.3714460	-104.9477458	2.42	
992.00	11.730	180.170	986.85	-2.30	-74.40	-2.60	1654970.78	14661982.33	40.3713958	-104.9477463	1.30	
1088.00	12.700	181.050	1080.68	-2.44	-94.71	-2.82	1654970.57	14661962.03	40.3713400	-104.9477471	1.03	
1183.00	14.590	181.930	1172.99	-2.95	-117.11	-3.42	1654969.99	14661939.64	40.3712785	-104.9477492	2.00	
1278.00	16.660	181.140	1264.48	-3.52	-142.69	-4.09	1654969.33	14661914.07	40.3712083	-104.9477516	2.19	
1373.00	18.060	183.510	1355.15	-4.57	-171.01	-5.26	1654968.18	14661885.77	40.3711306	-104.9477558	1.65	
1468.00	18.540	183.420	1445.34	-6.26	-200.78	-7.07	1654966.39	14661856.00	40.3710489	-104.9477623	0.51	
1563.00	20.260	183.770	1534.95	-8.11	-232.27	-9.05	1654964.43	14661824.52	40.3709624	-104.9477694	1.81	
1658.00	21.010	180.430	1623.86	-9.19	-265.72	-10.26	1654963.24	14661791.09	40.3708706	-104.9477738	1.47	
1753.00	22.320	179.120	1712.14	-8.90	-300.78	-10.11	1654963.41	14661756.04	40.3707744	-104.9477732	1.47	
1848.00	23.910	178.760	1799.51	-8.05	-338.07	-9.42	1654964.13	14661718.76	40.3706720	-104.9477707	1.68	
1875.00	24.080	180.080	1824.18	-7.90	-349.05	-9.30	1654964.24	14661707.79	40.3706419	-104.9477703	2.09	LAST SURFACE MWD+IFR1 SURVEY
1950.00	23.020	179.990	1892.93	-7.80	-379.02	-9.32	1654964.24	14661677.84	40.3705596	-104.9477704	1.41	FIRST BH MWD+IFR1 SURVEY
2040.00	23.850	179.290	1975.51	-7.42	-414.81	-9.10	1654964.49	14661642.06	40.3704614	-104.9477696	0.97	
2129.00	24.740	184.200	2056.63	-8.42	-451.38	-10.24	1654963.37	14661605.50	40.3703610	-104.9477737	2.48	
2219.00	25.610	184.670	2138.08	-11.23	-489.55	-13.20	1654960.43	14661567.35	40.3702562	-104.9477843	0.99	
2308.00	25.330	184.510	2218.43	-14.13	-527.70	-16.26	1654957.39	14661529.21	40.3701515	-104.9477953	0.32	
2398.00	27.370	186.380	2299.08	-17.79	-567.46	-20.08	1654953.61	14661489.47	40.3700424	-104.9478090	2.45	
2487.00	27.080	186.680	2378.22	-22.25	-607.91	-24.71	1654949.00	14661449.03	40.3699313	-104.9478256	0.36	
2577.00	25.690	185.480	2458.84	-26.34	-647.67	-28.95	1654944.78	14661409.27	40.3698222	-104.9478408	1.65	
2666.00	25.750	182.040	2539.03	-28.72	-686.20	-31.48	1654942.27	14661370.76	40.3697164	-104.9478499	1.68	
2756.00	24.660	182.670	2620.46	-30.13	-724.49	-33.05	1654940.73	14661332.48	40.3696113	-104.9478556	1.25	
2845.00	26.020	180.570	2700.90	-31.04	-762.56	-34.11	1654939.69	14661294.43	40.3695068	-104.9478594	1.83	
2935.00	24.080	180.440	2782.43	-31.22	-800.67	-34.45	1654939.38	14661256.34	40.3694022	-104.9478606	2.16	
3024.00	25.150	181.310	2863.34	-31.64	-837.73	-35.02	1654938.83	14661219.29	40.3693005	-104.9478626	1.27	
3114.00	25.020	180.610	2944.85	-32.13	-875.88	-35.66	1654938.21	14661181.16	40.3691958	-104.9478649	0.36	
3203.00	25.560	180.080	3025.32	-32.20	-913.90	-35.89	1654938.00	14661143.15	40.3690914	-104.9478657	0.66	
3292.00	23.290	178.840	3106.35	-31.73	-950.70	-35.56	1654938.36	14661106.37	40.3689904	-104.9478646	2.61	
3382.00	23.060	180.460	3189.09	-31.36	-986.11	-35.34	1654938.59	14661070.97	40.3688932	-104.9478638	0.75	
3471.00	23.260	181.970	3270.92	-31.97	-1021.11	-36.08	1654937.87	14661035.99	40.3687972	-104.9478664	0.70	
3561.00	23.950	180.420	3353.39	-32.57	-1057.13	-36.83	1654937.15	14660999.98	40.3686983	-104.9478691	1.03	
3650.00	26.280	186.300	3433.98	-34.71	-1094.79	-39.12	1654934.88	14660962.33	40.3685949	-104.9478773	3.83	
3740.00	26.740	186.000	3514.52	-38.85	-1134.73	-43.43	1654930.60	14660922.40	40.3684853	-104.9478928	0.53	
3829.00	26.980	186.280	3593.91	-42.99	-1174.71	-47.73	1654926.32	14660882.44	40.3683755	-104.9479082	0.30	
3918.00	27.230	181.070	3673.15	-45.42	-1215.14	-50.32	1654923.76	14660842.02	40.3682645	-104.9479175	2.68	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER SOUTH 25-11HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER SOUTH 25-11HZ AWB
Slot	SLOT#11 JODSTER SOUTH 25-11HZ (2347'FNL & 704'FEL,SEC.25)		

WELLPATH DATA (210 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
4008.00	24.620	180.730	3754.09	-45.88	-1254.48	-50.94	1654923.16	14660802.70	40.3681566	-104.9479198	2.90	
4097.00	23.030	180.050	3835.50	-45.99	-1290.43	-51.19	1654922.93	14660766.76	40.3680579	-104.9479207	1.81	
4187.00	23.350	178.950	3918.23	-45.53	-1325.87	-50.88	1654923.26	14660731.34	40.3679606	-104.9479195	0.60	
4276.00	23.210	181.170	3999.99	-45.43	-1361.04	-50.92	1654923.25	14660696.19	40.3678641	-104.9479197	1.00	
4365.00	23.250	182.980	4081.77	-46.56	-1396.11	-52.19	1654922.00	14660661.12	40.3677678	-104.9479242	0.80	
4454.00	25.030	182.530	4162.98	-48.16	-1432.47	-53.93	1654920.27	14660624.78	40.3676680	-104.9479305	2.01	
4544.00	22.430	181.820	4245.37	-49.40	-1468.66	-55.32	1654918.91	14660588.61	40.3675687	-104.9479355	2.91	
4633.00	23.710	182.880	4327.25	-50.69	-1503.50	-56.76	1654917.49	14660553.78	40.3674730	-104.9479406	1.51	
4723.00	23.470	181.240	4409.73	-51.85	-1539.49	-58.05	1654916.22	14660517.80	40.3673742	-104.9479453	0.78	
4813.00	25.970	182.630	4491.48	-52.99	-1577.10	-59.34	1654914.95	14660480.20	40.3672710	-104.9479499	2.85	
4902.00	24.030	182.250	4572.13	-54.44	-1614.68	-60.95	1654913.37	14660442.64	40.3671679	-104.9479557	2.19	
4991.00	24.750	182.800	4653.19	-55.91	-1651.39	-62.57	1654911.77	14660405.94	40.3670671	-104.9479615	0.85	
5081.00	23.100	180.420	4735.46	-56.82	-1687.87	-63.62	1654910.74	14660369.48	40.3669669	-104.9479653	2.12	
5170.00	23.210	179.490	4817.29	-56.65	-1722.86	-63.59	1654910.79	14660334.50	40.3668709	-104.9479652	0.43	
5260.00	25.080	181.420	4899.41	-56.81	-1759.67	-63.91	1654910.49	14660297.71	40.3667699	-104.9479663	2.26	
5349.00	24.520	181.930	4980.20	-57.75	-1796.98	-65.00	1654909.43	14660260.40	40.3666674	-104.9479702	0.67	
5464.00	23.300	185.060	5085.34	-60.38	-1843.49	-67.81	1654906.65	14660213.91	40.3665398	-104.9479803	1.53	
5553.00	22.170	183.080	5167.42	-62.69	-1877.80	-70.26	1654904.21	14660179.62	40.3664456	-104.9479891	1.53	
5643.00	22.450	181.210	5250.68	-63.83	-1911.93	-71.54	1654902.96	14660145.50	40.3663519	-104.9479937	0.85	
5732.00	24.890	176.740	5332.20	-62.98	-1947.63	-70.83	1654903.69	14660109.82	40.3662539	-104.9479911	3.40	
5822.00	25.770	179.850	5413.55	-61.70	-1986.11	-69.70	1654904.84	14660071.36	40.3661483	-104.9479871	1.77	
5911.00	23.450	180.250	5494.46	-61.57	-2023.17	-69.73	1654904.83	14660034.31	40.3660466	-104.9479872	2.61	
6000.00	21.000	173.550	5576.85	-59.72	-2056.73	-68.02	1654906.56	14660000.76	40.3659544	-104.9479810	3.96	
6090.00	20.400	171.030	5661.04	-55.34	-2088.25	-63.76	1654910.84	14659969.26	40.3658679	-104.9479657	1.19	
6179.00	21.730	169.250	5744.10	-49.72	-2119.76	-58.27	1654916.35	14659937.76	40.3657814	-104.9479460	1.66	
6269.00	23.300	170.040	5827.23	-43.40	-2153.66	-52.08	1654922.55	14659903.88	40.3656884	-104.9479238	1.78	
6358.00	24.350	167.660	5908.65	-36.29	-2188.92	-45.11	1654929.54	14659868.63	40.3655916	-104.9478988	1.60	
6447.00	24.420	167.620	5989.71	-28.28	-2224.82	-37.25	1654937.42	14659832.76	40.3654931	-104.9478706	0.08	
6537.00	25.320	168.890	6071.36	-20.43	-2261.88	-29.55	1654945.13	14659795.72	40.3653913	-104.9478430	1.16	
6626.00	24.810	170.280	6151.98	-13.46	-2298.96	-22.73	1654951.97	14659758.66	40.3652896	-104.9478185	0.88	
6715.00	25.040	170.810	6232.69	-7.15	-2335.95	-16.57	1654958.15	14659721.68	40.3651880	-104.9477964	0.36	
6805.00	24.820	170.180	6314.31	-0.74	-2373.37	-10.31	1654964.44	14659684.29	40.3650853	-104.9477739	0.38	
6894.00	23.180	168.790	6395.61	6.00	-2408.96	-3.72	1654971.05	14659648.71	40.3649876	-104.9477503	1.95	
6948.00†	23.053	162.013	6445.28	11.41	-2429.44	1.62	1654976.39	14659628.24	40.3649314	-104.9477311	4.93	KOP
6984.00	23.130	157.490	6478.40	16.35	-2442.68	6.50	1654981.28	14659615.01	40.3648951	-104.9477136	4.93	
7049.00‡	26.839	148.934	6537.33	28.92	-2467.06	18.97	1654993.76	14659590.65	40.3648281	-104.9476689	7.95	ENTER LANDBOX (465'FSL & 685'FEL, SEC 25) 40.3648281, -104.9476689
7074.00	28.380	146.220	6559.48	35.17	-2476.83	25.19	1654999.98	14659580.88	40.3648013	-104.9476466	7.95	
7163.00	31.830	138.900	6636.49	62.52	-2512.12	52.39	1655027.19	14659545.62	40.3647044	-104.9475489	5.65	
7252.00	37.980	126.720	6709.54	100.12	-2546.26	89.85	1655064.66	14659511.53	40.3646107	-104.9474145	10.42	
7342.00	41.880	123.440	6778.54	147.54	-2579.38	137.14	1655111.95	14659478.44	40.3645198	-104.9472448	4.92	
7431.00	49.830	117.980	6840.51	202.60	-2611.77	192.07	1655166.87	14659446.10	40.3644309	-104.9470477	9.95	
7521.00	56.570	111.490	6894.42	268.15	-2641.72	257.50	1655232.29	14659416.20	40.3643487	-104.9468129	9.45	
7610.00	62.760	104.450	6939.39	341.25	-2665.24	330.51	1655305.29	14659392.73	40.3642841	-104.9465509	9.74	
7700.00	69.080	101.420	6976.10	421.37	-2683.57	410.55	1655385.31	14659374.46	40.3642338	-104.9462637	7.66	
7789.00	74.460	99.140	7003.94	504.57	-2698.62	493.69	1655468.43	14659359.46	40.3641925	-104.9459653	6.52	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER SOUTH 25-11HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER SOUTH 25-11HZ AWB
Slot	SLOT#11 JODSTER SOUTH 25-11HZ (2347'FNL & 704'FEL,SEC.25)		

WELLPATH DATA (210 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
7878.00	79.830	96.970	7023.73	590.50	-2710.76	579.57	1655554.28	14659347.38	40.3641592	-104.9456572	6.48	
7968.00	86.500	92.780	7034.44	679.50	-2718.32	668.54	1655643.22	14659339.87	40.3641384	-104.9453379	8.73	
8013.00†	88.679	91.495	7036.34	724.43	-2720.00	713.47	1655688.12	14659338.22	40.3641338	-104.9451767	5.62	LANDING (212'FSL & 10'FWL, SEC.30) 40.3641338, -104.9451767
8057.00	90.810	90.240	7036.53	768.42	-2720.67	757.46	1655732.10	14659337.58	40.3641320	-104.9450188	5.62	
8147.00	90.500	89.580	7035.50	858.41	-2720.52	847.45	1655822.06	14659337.78	40.3641324	-104.9446959	0.81	
8236.00	91.010	87.940	7034.33	947.37	-2718.60	936.42	1655910.99	14659339.75	40.3641376	-104.9443766	1.93	
8325.00	88.710	86.730	7034.55	1036.25	-2714.46	1025.31	1655999.84	14659343.94	40.3641490	-104.9440576	2.92	
8368.00†	89.087	86.687	7035.37	1079.16	-2711.99	1068.24	1656042.75	14659346.43	40.3641557	-104.9439036	0.88	EXIT RADIUS HEEL (212'FSL & 364'FWL, SEC.30) 40.3641557, -104.9439036
8415.00	89.500	86.640	7035.95	1126.07	-2709.26	1115.15	1656089.64	14659349.20	40.3641633	-104.9437352	0.88	
8504.00	89.270	88.480	7036.91	1214.96	-2705.47	1204.06	1656178.51	14659353.04	40.3641736	-104.9434162	2.08	
8593.00	89.500	90.230	7037.87	1303.94	-2704.47	1293.05	1656267.46	14659354.09	40.3641764	-104.9430969	1.98	
8683.00	87.680	89.470	7040.08	1393.91	-2704.23	1383.02	1656357.40	14659354.38	40.3641770	-104.9427740	2.19	
8772.00	87.680	89.190	7043.68	1482.82	-2703.19	1471.94	1656446.28	14659355.47	40.3641798	-104.9424549	0.31	
8862.00	89.360	90.850	7046.01	1572.79	-2703.22	1561.90	1656536.21	14659355.49	40.3641797	-104.9421321	2.62	
8950.00	89.640	91.040	7046.77	1660.78	-2704.68	1649.89	1656624.16	14659354.09	40.3641757	-104.9418164	0.38	
9039.00	89.900	90.590	7047.13	1749.77	-2705.94	1738.88	1656713.11	14659352.88	40.3641723	-104.9414970	0.58	
9129.00	90.500	90.890	7046.82	1839.77	-2707.10	1828.87	1656803.07	14659351.77	40.3641690	-104.9411741	0.75	
9218.00	89.700	90.420	7046.66	1928.76	-2708.12	1917.86	1656892.03	14659350.81	40.3641662	-104.9408547	1.04	
9307.00	90.500	91.170	7046.51	2017.76	-2709.36	2006.85	1656980.98	14659349.62	40.3641628	-104.9405354	1.23	
9397.00	89.920	91.540	7046.18	2107.74	-2711.48	2096.82	1657070.92	14659347.55	40.3641570	-104.9402125	0.76	
9486.00	89.790	90.260	7046.40	2196.73	-2712.88	2185.81	1657159.87	14659346.21	40.3641531	-104.9398932	1.45	
9576.00	90.790	90.690	7045.95	2286.73	-2713.63	2275.81	1657249.83	14659345.51	40.3641510	-104.9395703	1.21	
9665.00	88.210	91.000	7046.72	2375.71	-2714.94	2364.78	1657338.78	14659344.25	40.3641474	-104.9392510	2.92	
9755.00	88.560	91.150	7049.26	2465.67	-2716.63	2454.73	1657428.69	14659342.62	40.3641428	-104.9389282	0.42	
9844.00	89.480	91.130	7050.78	2554.64	-2718.40	2543.70	1657517.62	14659340.90	40.3641379	-104.9386089	1.03	
9934.00	90.440	91.630	7050.85	2644.62	-2720.57	2633.67	1657607.56	14659338.79	40.3641319	-104.9382861	1.20	
10023.00	89.980	89.060	7050.52	2733.61	-2721.10	2722.66	1657696.51	14659338.31	40.3641304	-104.9379667	2.93	
10112.00	90.590	87.880	7050.08	2822.57	-2718.73	2811.63	1657785.44	14659340.73	40.3641369	-104.9376475	1.49	
10202.00	88.910	88.510	7050.47	2912.51	-2715.89	2901.58	1657875.36	14659343.62	40.3641446	-104.9373247	1.99	
10291.00	89.270	88.450	7051.88	3001.45	-2713.53	2990.54	1657964.28	14659346.03	40.3641511	-104.9370055	0.41	
10381.00	90.320	87.800	7052.20	3091.39	-2710.59	3080.49	1658054.19	14659349.03	40.3641591	-104.9366827	1.37	
10471.00	89.320	88.670	7052.49	3181.33	-2707.81	3170.44	1658144.10	14659351.85	40.3641667	-104.9363599	1.47	
10560.00	89.870	88.720	7053.12	3270.30	-2705.79	3259.42	1658233.04	14659353.93	40.3641723	-104.9360406	0.62	
10649.00	91.010	91.490	7052.43	3359.29	-2705.95	3348.40	1658321.99	14659353.82	40.3641718	-104.9357213	3.37	
10738.00	89.680	91.480	7051.90	3448.26	-2708.26	3437.37	1658410.93	14659351.57	40.3641654	-104.9354020	1.49	
10828.00	90.070	92.100	7052.09	3538.23	-2711.07	3527.32	1658500.85	14659348.81	40.3641577	-104.9350792	0.81	
10917.00	90.440	92.720	7051.70	3627.16	-2714.81	3616.24	1658589.73	14659345.12	40.3641474	-104.9347601	0.81	
11007.00	90.820	92.960	7050.71	3717.06	-2719.27	3706.13	1658679.58	14659340.72	40.3641351	-104.9344376	0.50	
11097.00	89.700	90.610	7050.30	3807.02	-2722.07	3796.08	1658769.50	14659337.97	40.3641273	-104.9341148	2.89	
11186.00	90.350	89.630	7050.26	3896.02	-2722.26	3885.07	1658858.46	14659337.84	40.3641268	-104.9337954	1.32	
11276.00	91.270	89.520	7048.99	3986.00	-2721.59	3975.06	1658948.41	14659338.56	40.3641286	-104.9334725	1.03	
11365.00	89.790	90.010	7048.16	4074.99	-2721.23	4064.05	1659037.37	14659338.97	40.3641296	-104.9331532	1.75	
11455.00	90.350	89.860	7048.05	4164.99	-2721.12	4154.05	1659127.33	14659339.13	40.3641298	-104.9328302	0.64	
11544.00	90.620	90.420	7047.30	4253.99	-2721.34	4243.05	1659216.29	14659338.96	40.3641292	-104.9325109	0.70	
11634.00	90.580	89.980	7046.36	4343.98	-2721.65	4333.04	1659306.25	14659338.70	40.3641282	-104.9321879	0.49	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER SOUTH 25-11HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER SOUTH 25-11HZ AWB
Slot	SLOT#11 JODSTER SOUTH 25-11HZ (2347'FNL & 704'FEL,SEC.25)		

WELLPATH DATA (210 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS ["/100ft]	Comments
11724.00	90.750	89.690	7045.31	4433.97	-2721.40	4423.04	1659396.21	14659339.02	40.3641289	-104.9318650	0.37	
11813.00	88.410	87.360	7045.97	4522.92	-2719.11	4511.99	1659485.12	14659341.36	40.3641352	-104.9315458	3.71	
11902.00	88.010	86.030	7048.75	4611.70	-2713.98	4600.80	1659573.89	14659346.54	40.3641492	-104.9312271	1.56	
11992.00	88.240	87.790	7051.69	4701.50	-2709.13	4690.62	1659663.67	14659351.44	40.3641624	-104.9309048	1.97	
12081.00	88.670	88.130	7054.09	4790.40	-2705.96	4779.53	1659752.54	14659354.65	40.3641711	-104.9305857	0.62	
12171.00	89.010	87.840	7055.91	4880.31	-2702.80	4869.45	1659842.43	14659357.87	40.3641797	-104.9302630	0.50	
12260.00	88.980	89.570	7057.47	4969.26	-2700.79	4958.41	1659931.35	14659359.93	40.3641852	-104.9299438	1.94	
12350.00	90.750	91.540	7057.69	5059.25	-2701.66	5048.40	1660021.31	14659359.11	40.3641828	-104.9296209	2.94	
12440.00	91.350	91.570	7056.04	5149.21	-2704.10	5138.35	1660111.22	14659356.73	40.3641760	-104.9292981	0.67	
12529.00	91.660	91.560	7053.70	5238.16	-2706.53	5227.29	1660200.12	14659354.35	40.3641693	-104.9289789	0.35	
12618.00	91.090	90.350	7051.56	5327.12	-2708.01	5316.25	1660289.05	14659352.92	40.3641652	-104.9286597	1.50	
12708.00	90.240	88.690	7050.52	5417.11	-2707.26	5406.24	1660379.00	14659353.73	40.3641672	-104.9283368	2.07	
12797.00	88.880	88.640	7051.20	5506.07	-2705.19	5495.21	1660467.93	14659355.85	40.3641728	-104.9280175	1.53	
12887.00	88.950	90.880	7052.91	5596.04	-2704.81	5585.18	1660557.87	14659356.28	40.3641738	-104.9276946	2.49	
12976.00	89.420	90.520	7054.17	5685.03	-2705.90	5674.17	1660646.82	14659355.25	40.3641708	-104.9273753	0.67	
13066.00	90.040	90.840	7054.60	5775.03	-2706.96	5764.16	1660736.78	14659354.23	40.3641678	-104.9270524	0.78	
13155.00	90.410	90.660	7054.25	5864.02	-2708.13	5853.15	1660825.74	14659353.12	40.3641645	-104.9267330	0.46	
13245.00	90.990	90.350	7053.15	5954.01	-2708.92	5943.14	1660915.69	14659352.38	40.3641623	-104.9264101	0.73	
13334.00	89.360	90.800	7052.88	6043.01	-2709.82	6032.13	1661004.65	14659351.54	40.3641598	-104.9260908	1.90	
13424.00	89.520	90.930	7053.76	6133.00	-2711.17	6122.12	1661094.60	14659350.24	40.3641560	-104.9257679	0.23	
13513.00	89.310	90.150	7054.67	6221.99	-2712.01	6211.11	1661183.55	14659349.45	40.3641536	-104.9254485	0.91	
13602.00	89.250	89.200	7055.78	6310.98	-2711.51	6300.10	1661272.51	14659350.01	40.3641549	-104.9251292	1.07	
13691.00	89.050	90.730	7057.10	6399.97	-2711.45	6389.09	1661361.46	14659350.12	40.3641550	-104.9248098	1.73	
13781.00	89.180	90.230	7058.49	6489.95	-2712.21	6479.07	1661451.41	14659349.42	40.3641529	-104.9244869	0.57	
13871.00	89.440	90.030	7059.58	6579.95	-2712.41	6569.07	1661541.37	14659349.26	40.3641523	-104.9241640	0.36	
13960.00	89.930	89.660	7060.07	6668.94	-2712.17	6658.06	1661630.33	14659349.56	40.3641529	-104.9238446	0.69	
14050.00	90.020	89.370	7060.11	6758.94	-2711.41	6748.06	1661720.29	14659350.37	40.3641549	-104.9235217	0.34	
14139.00	90.020	90.700	7060.08	6847.93	-2711.46	6837.06	1661809.25	14659350.37	40.3641547	-104.9232023	1.49	
14229.00	90.020	90.560	7060.04	6937.93	-2712.45	6927.05	1661899.21	14659349.43	40.3641519	-104.9228794	0.16	
14318.00	90.590	89.690	7059.57	7026.93	-2712.65	7016.05	1661988.17	14659349.29	40.3641513	-104.9225600	1.17	
14408.00	89.720	91.480	7059.33	7116.92	-2713.57	7106.04	1662078.13	14659348.43	40.3641487	-104.9222371	2.21	
14498.00	89.950	91.350	7059.59	7206.90	-2715.79	7196.01	1662168.06	14659346.26	40.3641425	-104.9219142	0.29	
14587.00	90.750	91.390	7059.04	7295.88	-2717.92	7284.99	1662257.00	14659344.18	40.3641366	-104.9215949	0.90	
14677.00	89.530	91.630	7058.82	7385.86	-2720.29	7374.95	1662346.93	14659341.87	40.3641300	-104.9212721	1.38	
14766.00	89.780	91.360	7059.36	7474.84	-2722.61	7463.92	1662435.87	14659339.60	40.3641236	-104.9209528	0.41	
14856.00	90.070	91.030	7059.48	7564.82	-2724.49	7553.90	1662525.81	14659337.78	40.3641183	-104.9206300	0.49	
14946.00	89.040	91.830	7060.17	7654.80	-2726.73	7643.87	1662615.74	14659335.58	40.3641121	-104.9203071	1.45	
15035.00	89.300	92.170	7061.46	7743.75	-2729.84	7732.80	1662704.65	14659332.53	40.3641035	-104.9199880	0.48	
15125.00	90.080	91.530	7061.95	7833.71	-2732.74	7822.75	1662794.56	14659329.68	40.3640954	-104.9196652	1.12	
15214.00	90.820	91.870	7061.25	7922.68	-2735.38	7911.71	1662883.49	14659327.09	40.3640881	-104.9193460	0.92	
15304.00	89.480	92.280	7061.02	8012.63	-2738.64	8001.65	1662973.39	14659323.89	40.3640791	-104.9190232	1.56	
15393.00	90.130	90.760	7061.32	8101.60	-2741.00	8090.61	1663062.32	14659321.58	40.3640725	-104.9187040	1.86	
15482.00	90.160	89.520	7061.09	8190.60	-2741.22	8179.61	1663151.28	14659321.42	40.3640719	-104.9183846	1.39	
15571.00	89.420	89.290	7061.42	8279.59	-2740.30	8268.61	1663240.24	14659322.39	40.3640743	-104.9180653	0.87	
15661.00	90.070	88.970	7061.82	8369.57	-2738.93	8358.59	1663330.19	14659323.81	40.3640780	-104.9177423	0.80	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER SOUTH 25-11HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER SOUTH 25-11HZ AWB
Slot	SLOT#11 JODSTER SOUTH 25-11HZ (2347'FNL & 704'FEL,SEC.25)		

WELLPATH DATA (210 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
15751.00	90.930	89.070	7061.04	8459.54	-2737.39	8448.58	1663420.14	14659325.41	40.3640821	-104.9174194	0.96	
15840.00	89.220	90.220	7060.92	8548.54	-2736.84	8537.57	1663509.09	14659326.01	40.3640836	-104.9171001	2.32	
15930.00	89.480	89.670	7061.94	8638.53	-2736.75	8627.56	1663599.05	14659326.15	40.3640837	-104.9167772	0.68	
16019.00	90.560	90.070	7061.91	8727.52	-2736.55	8716.56	1663688.01	14659326.40	40.3640842	-104.9164578	1.29	
16108.00	89.270	90.610	7062.04	8816.52	-2737.08	8805.56	1663776.97	14659325.93	40.3640826	-104.9161384	1.57	
16198.00	90.130	90.870	7062.51	8906.52	-2738.24	8895.55	1663866.93	14659324.82	40.3640794	-104.9158155	1.00	
16287.00	91.410	90.880	7061.32	8995.50	-2739.60	8984.53	1663955.87	14659323.51	40.3640755	-104.9154962	1.44	
16376.00	89.390	90.820	7060.69	9084.49	-2740.92	9073.51	1664044.82	14659322.25	40.3640718	-104.9151769	2.27	
16466.00	90.240	90.580	7060.99	9174.48	-2742.02	9163.50	1664134.78	14659321.20	40.3640687	-104.9148540	0.98	
16555.00	88.850	89.170	7061.69	9263.48	-2741.83	9252.50	1664223.74	14659321.45	40.3640692	-104.9145346	2.22	
16645.00	89.160	88.550	7063.26	9353.44	-2740.04	9342.46	1664313.67	14659323.29	40.3640740	-104.9142118	0.77	
16734.00	89.620	88.280	7064.20	9442.39	-2737.57	9431.43	1664402.59	14659325.80	40.3640806	-104.9138925	0.60	
16824.00	90.100	88.140	7064.42	9532.33	-2734.76	9521.38	1664492.51	14659328.67	40.3640883	-104.9135697	0.56	
16914.00	90.810	88.510	7063.71	9622.28	-2732.13	9611.34	1664582.43	14659331.35	40.3640954	-104.9132469	0.89	
17003.00	88.730	89.090	7064.07	9711.24	-2730.27	9700.31	1664671.37	14659333.26	40.3641004	-104.9129276	2.43	
17093.00	88.960	88.280	7065.88	9801.19	-2728.20	9790.27	1664761.28	14659335.38	40.3641060	-104.9126048	0.94	
17182.00	88.310	89.830	7068.00	9890.14	-2726.74	9879.23	1664850.21	14659336.90	40.3641099	-104.9122856	1.89	
17272.00	89.130	91.270	7070.01	9980.12	-2727.60	9969.20	1664940.14	14659336.09	40.3641074	-104.9119627	1.84	
17361.00	90.300	91.090	7070.45	10069.10	-2729.43	10058.18	1665029.09	14659334.31	40.3641023	-104.9116434	1.33	
17450.00	90.120	91.440	7070.13	10158.09	-2731.40	10147.16	1665118.03	14659332.40	40.3640968	-104.9113241	0.44	
17540.00	88.950	92.290	7070.86	10248.04	-2734.33	10237.10	1665207.94	14659329.52	40.3640887	-104.9110014	1.61	
17630.00	90.020	92.020	7071.67	10337.99	-2737.71	10327.03	1665297.84	14659326.20	40.3640793	-104.9106787	1.23	
17719.00	89.130	92.550	7072.33	10426.93	-2741.26	10415.96	1665386.73	14659322.70	40.3640694	-104.9103596	1.16	
17808.00	89.680	92.420	7073.25	10515.85	-2745.12	10504.87	1665475.61	14659318.90	40.3640587	-104.9100405	0.64	
17898.00	90.560	91.660	7073.06	10605.81	-2748.32	10594.81	1665565.52	14659315.75	40.3640498	-104.9097178	1.29	
17987.00	90.190	91.510	7072.48	10694.78	-2750.78	10683.78	1665654.44	14659313.34	40.3640430	-104.9093985	0.45	
18077.00	89.150	92.300	7073.00	10784.74	-2753.77	10773.72	1665744.36	14659310.40	40.3640347	-104.9090757	1.45	ENTER RADIUS TOE (217°FSL & 410°FEL, SEC.29) 40.1902083, -104.7535528
18166.00	89.590	91.390	7073.98	10873.70	-2756.64	10862.67	1665833.27	14659307.59	40.3640267	-104.9087566	1.14	
18265.00	90.120	90.720	7074.23	10972.68	-2758.46	10961.65	1665932.21	14659305.83	40.3640216	-104.9084014	0.86	LAST BH MWD+IFR1 SURVEY
18326.00†	90.120	90.720	7074.10	11033.68	-2759.23	11022.65	1665993.18	14659305.10	40.3640194	-104.9081825	0.00	PTB (212°FSL & 161°FEL, SEC.29) 40.3640194, -104.9081825

HOLE & CASING SECTIONS - Ref Wellbore: JODSTER SOUTH 25-11HZ AWB Ref Wellpath: JODSTER SOUTH 25-11HZ 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	1915.00	1889.00	26.00	1860.78	0.00	0.00	-365.19	-9.32

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER SOUTH 25-11HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER SOUTH 25-11HZ AWB
Slot	SLOT#11 JODSTER SOUTH 25-11HZ (2347'FNL & 704'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	149.77	1.32	1654974.57	14662206.42	40.3720111	-104.9477322	polygon
	2D Polygon: dimensions not calculated							
SEC.29-T5N-R67W	0.00	149.77	1.32	1654974.56	14662206.42	40.3720111	-104.9477322	polygon
	2D Polygon: dimensions not calculated							
SEC.30-T5N-R67W	0.00	149.77	1.32	1654974.56	14662206.42	40.3720111	-104.9477322	polygon
	2D Polygon: dimensions not calculated							
JODSTER SOUTH 25-11HZ HEEL REV-1(224'FSL & 42'FWL,SEC.30)	7041.00	-2707.54	709.48	1655684.13	14659350.67	40.3641680	-104.9451910	point
JODSTER SOUTH 25-11HZ BHL REV-1(222'FSL & 161'FEL,SEC.29)	7099.00	-2749.17	11023.34	1665993.87	14659315.15	40.3640470	-104.9081800	point
JODSTER SOUTH 25-11HZ LANDBOX	7099.00	0.00	0.00	1654973.34	14662056.71	40.3716000	-104.9477369	polygon
	2D Polygon: dimensions not calculated							
JODSTER SOUTH 25-11HZ RADIUS 1	7099.00	-2931.28	664.30	1655639.10	14659127.00	40.3635539	-104.9453531	polygon
	2D Polygon: dimensions not calculated							
JODSTER SOUTH 25-11HZ RADIUS 2	7099.00	-2972.11	11182.60	1666153.20	14659092.40	40.3634349	-104.9076089	polygon
	2D Polygon: dimensions not calculated							

WELLPATH COMPOSITION - Ref Wellbore: JODSTER SOUTH 25-11HZ AWB Ref Wellpath: JODSTER SOUTH 25-11HZ AWP					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
26.00	1875.00	Custom APC ISCWSA REV 2 MWD+IFR1 (approximation)	Custom APC ISCWSA Rev-2 MWD+IFR1 <136 - 1875>	JODSTER SOUTH 25-11HZ AWB	
1875.00	18326.00	Custom APC ISCWSA REV 2 MWD+IFR1 (approximation)	BH Custom APC ISCWSA Rev-2 MWD+IFR1 <1950-18265>	JODSTER SOUTH 25-11HZ AWB	11/21/2019

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Well	JODSTER SOUTH 25-11HZ
Field	LARIMER COUNTY	API/Legal	
Facility	SEC.25-T5N-R68W	Wellbore	JODSTER SOUTH 25-11HZ AWB
Slot	SLOT#11 JODSTER SOUTH 25-11HZ (2347'FNL & 704'FEL,SEC.25)		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
136.00	0.620	313.590	136.00	FIRST SURFACE MWD+IFR1 SURVEY
1875.00	24.080	180.080	1824.18	LAST SURFACE MWD+IFR1 SURVEY
1950.00	23.020	179.990	1892.93	FIRST BH MWD+IFR1 SURVEY
6948.00	23.053	162.013	6445.28	KOP
7049.00	26.839	148.934	6537.33	ENTER LANDBOX (465'FSL & 685'FEL, SEC.25) 40.3648281, -104.9476689
8013.00	88.679	91.495	7036.34	LANDING (212'FSL & 10'FWL, SEC.30) 40.3641338, -104.9451767
8368.00	89.087	86.687	7035.37	EXIT RADIUS HEEL (212'FSL & 364'FWL, SEC.30) 40.3641557, -104.9439036
18077.00	89.150	92.300	7073.00	ENTER RADIUS TOE (217'FSL & 410'FEL, SEC.29) 40.1902083, -104.7535528
18265.00	90.120	90.720	7074.23	LAST BH MWD+IFR1 SURVEY
18326.00	90.120	90.720	7074.10	PTB (212'FSL & 161'FEL, SEC.29) 40.3640194, -104.9081825