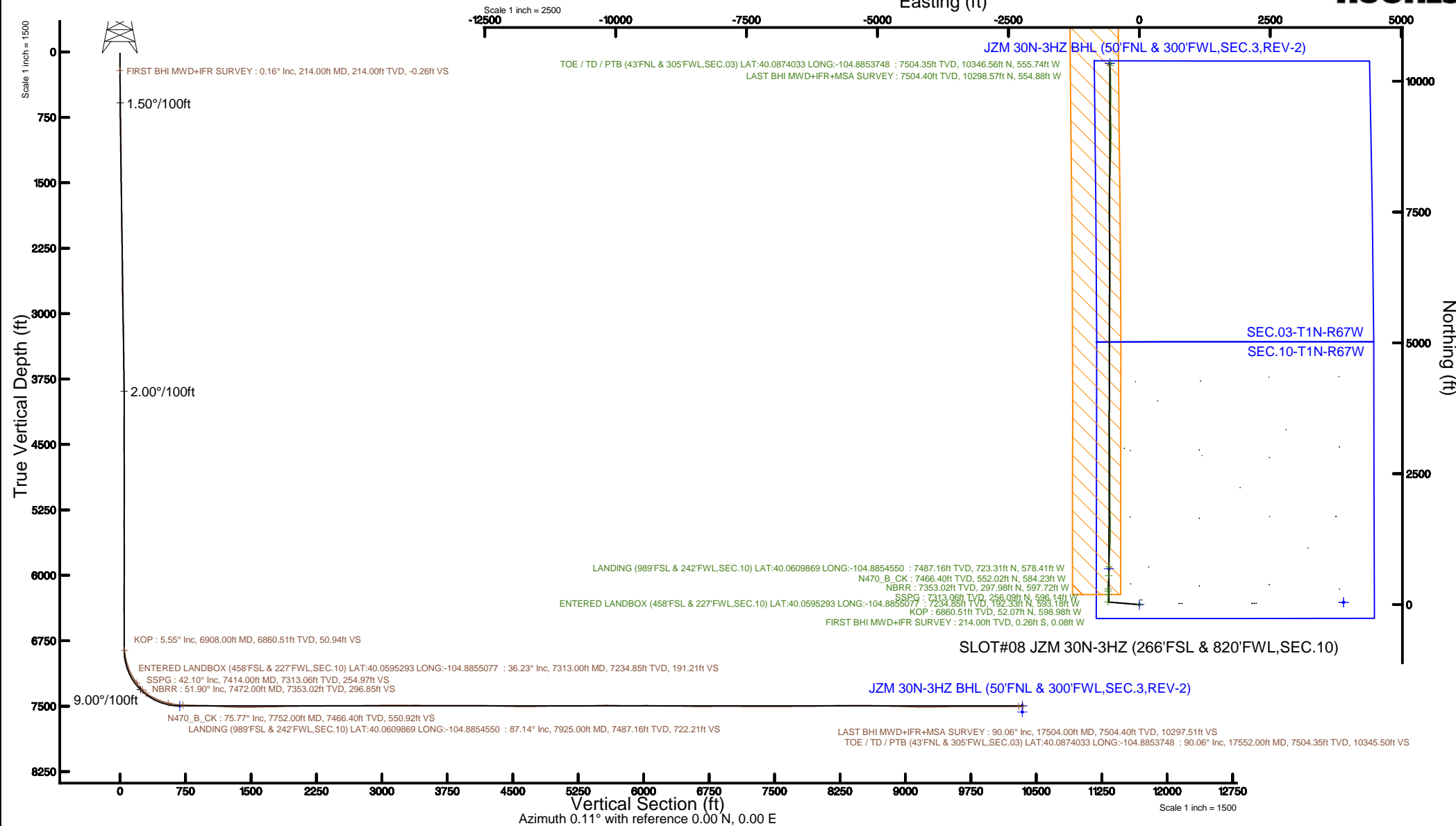


# KERR-MCGEE OIL & GAS ONSHORE LP (WA)

Location: COLORADO Slot: SLOT#08 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10)  
 Field: WELD COUNTY (UTM/TRUE NORTH) Well: JZM 30N-3HZ  
 Facility: SEC.10-T1N-R67W Wellbore: JZM 30N-3HZ PWB

Plot reference wellpath is JZM 30N-3HZ (REV-B.0) PWP	Grid System: NAD83 / UTM Zone 13 North, US feet
True vertical depths are referenced to Rig on SLOT#06 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10) (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to Rig on SLOT#06 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10) (RKB)	North Reference: True north
Rig on SLOT#06 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10) (RKB) to Mean Sea Level: 5083 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#08 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: painsetr on 2017-01-31
	Database: WA_DEN_Anadarko_Defn



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#08 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10)
Area	COLORADO	Well	JZM 30N-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	JZM 30N-3HZ AWB
Facility	SEC.10-T1N-R67W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Painsetr
Scale	0.999601	Report Generated	31/Jan/2017 at 16:19
Convergence at slot	0.08° East	Database/Source file	WA_DEN_Anadarko_Defn/JZM_30N-3HZ_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-89.15	-19.75	1673045.68	14548239.74	40°03'32.405"N	104°53'00.199"W
Facility Reference Pt			1673065.30	14548328.88	40°03'33.286"N	104°52'59.945"W
Field Reference Pt			1698235.31	14552047.82	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig on SLOT#06 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10) (RKB) to Facility Vertical Datum	5083.00ft
Horizontal Reference Pt	Slot	Rig on SLOT#06 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10) (RKB) to Mean Sea Level	5083.00ft
Vertical Reference Pt	Rig on SLOT#06 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10) (RKB)	Rig on SLOT#06 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10) (RKB) to Mud Line at Slot (SLOT#08 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10))	5083.00ft
MD Reference Pt	Rig on SLOT#06 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.11°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#08 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10)
Area	COLORADO	Well	JZM 30N-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	JZM 30N-3HZ AWB
Facility	SEC.10-T1N-R67W		

WELLPATH DATA (207 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	196.780	0.00	0.00	0.00	0.00	1673045.68	14548239.74	40°03'32.405"N	104°53'00.199"W	0.00	
17.00	0.000	196.780	17.00	0.00	0.00	0.00	1673045.68	14548239.74	40°03'32.405"N	104°53'00.199"W	0.00	
214.00	0.160	196.780	214.00	-0.26	-0.26	-0.08	1673045.60	14548239.48	40°03'32.402"N	104°53'00.200"W	0.08	FIRST BHI MWD+IFR SURVEY
305.00	1.500	297.600	304.99	0.16	0.17	-1.17	1673044.50	14548239.91	40°03'32.407"N	104°53'00.214"W	1.69	
397.00	2.250	294.230	396.94	1.46	1.47	-3.89	1673041.79	14548241.20	40°03'32.419"N	104°53'00.249"W	0.82	
488.00	3.470	276.310	487.83	2.49	2.50	-8.25	1673037.42	14548242.23	40°03'32.430"N	104°53'00.305"W	1.65	
579.00	5.220	276.010	578.56	3.21	3.24	-15.11	1673030.57	14548242.96	40°03'32.437"N	104°53'00.393"W	1.92	
671.00	7.500	275.800	669.99	4.24	4.28	-25.24	1673020.44	14548243.99	40°03'32.447"N	104°53'00.524"W	2.48	
758.00	9.650	276.390	756.01	5.60	5.67	-38.14	1673007.54	14548245.36	40°03'32.461"N	104°53'00.690"W	2.47	
846.00	10.430	275.160	842.66	7.11	7.21	-53.40	1672992.28	14548246.88	40°03'32.476"N	104°53'00.886"W	0.92	
934.00	10.470	275.510	929.20	8.56	8.69	-69.30	1672976.40	14548248.34	40°03'32.491"N	104°53'01.090"W	0.09	
1021.00	10.090	274.820	1014.81	9.93	10.09	-84.76	1672960.94	14548249.72	40°03'32.505"N	104°53'01.289"W	0.46	
1109.00	10.130	270.830	1101.44	10.66	10.85	-100.18	1672945.52	14548250.46	40°03'32.512"N	104°53'01.487"W	0.80	
1196.00	10.230	270.780	1187.07	10.85	11.07	-115.55	1672930.16	14548250.65	40°03'32.514"N	104°53'01.685"W	0.12	
1283.00	9.380	271.160	1272.80	11.07	11.31	-130.37	1672915.35	14548250.88	40°03'32.517"N	104°53'01.876"W	0.98	
1372.00	9.430	273.530	1360.60	11.64	11.91	-144.89	1672900.82	14548251.46	40°03'32.523"N	104°53'02.062"W	0.44	
1459.00	9.490	272.240	1446.42	12.33	12.63	-159.17	1672886.55	14548252.16	40°03'32.530"N	104°53'02.246"W	0.25	
1547.00	9.540	276.530	1533.21	13.41	13.74	-173.67	1672872.06	14548253.25	40°03'32.541"N	104°53'02.433"W	0.81	
1634.00	9.560	277.800	1619.01	15.19	15.54	-187.99	1672857.74	14548255.03	40°03'32.559"N	104°53'02.617"W	0.24	
1722.00	10.060	273.030	1705.72	16.56	16.94	-202.90	1672842.83	14548256.41	40°03'32.572"N	104°53'02.809"W	1.08	
1809.00	9.870	276.500	1791.41	17.78	18.19	-217.90	1672827.84	14548257.64	40°03'32.585"N	104°53'03.001"W	0.72	
1897.00	9.460	274.560	1878.16	19.18	19.61	-232.60	1672813.14	14548259.05	40°03'32.599"N	104°53'03.190"W	0.59	
1984.00	9.310	271.540	1964.00	19.91	20.37	-246.77	1672798.98	14548259.78	40°03'32.606"N	104°53'03.373"W	0.59	
2072.00	9.770	271.990	2050.78	20.33	20.82	-261.34	1672784.41	14548260.22	40°03'32.611"N	104°53'03.560"W	0.53	
2159.00	9.740	276.510	2136.52	21.39	21.91	-276.03	1672769.73	14548261.29	40°03'32.622"N	104°53'03.749"W	0.88	
2183.00	9.780	277.960	2160.17	21.90	22.43	-280.07	1672765.69	14548261.79	40°03'32.627"N	104°53'03.801"W	1.04	
2243.00	9.570	276.360	2219.32	23.14	23.68	-290.07	1672755.69	14548263.04	40°03'32.639"N	104°53'03.930"W	0.57	
2417.00	6.740	274.990	2391.54	25.58	26.17	-314.62	1672731.14	14548265.50	40°03'32.664"N	104°53'04.245"W	1.63	
2505.00	7.570	275.210	2478.86	26.54	27.15	-325.54	1672720.23	14548266.46	40°03'32.673"N	104°53'04.386"W	0.94	
2592.00	8.580	270.780	2565.00	27.12	27.76	-337.74	1672708.04	14548267.05	40°03'32.679"N	104°53'04.543"W	1.36	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#08 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10)
Area	COLORADO	Well	JZM 30N-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	JZM 30N-3HZ AWB
Facility	SEC.10-T1N-R67W		

WELLPATH DATA (207 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
2680.00	9.530	268.430	2651.90	26.99	27.65	-351.58	1672694.20	14548266.92	40°03'32.678"N	104°53'04.721"W	1.16	
2767.00	9.690	275.830	2737.68	27.51	28.20	-366.07	1672679.72	14548267.45	40°03'32.684"N	104°53'04.907"W	1.43	
2854.00	10.220	270.300	2823.37	28.26	28.98	-381.07	1672664.72	14548268.21	40°03'32.691"N	104°53'05.100"W	1.26	
2942.00	9.970	281.060	2910.02	29.73	30.48	-396.35	1672649.44	14548269.69	40°03'32.706"N	104°53'05.296"W	2.16	
3029.00	11.210	276.890	2995.54	32.16	32.94	-412.14	1672633.66	14548272.13	40°03'32.731"N	104°53'05.499"W	1.67	
3118.00	9.570	279.530	3083.07	34.40	35.20	-428.03	1672617.77	14548274.37	40°03'32.753"N	104°53'05.704"W	1.92	
3205.00	10.330	280.880	3168.76	37.04	37.87	-442.82	1672602.98	14548277.02	40°03'32.779"N	104°53'05.894"W	0.91	
3292.00	10.410	272.960	3254.35	38.89	39.75	-458.33	1672587.48	14548278.88	40°03'32.798"N	104°53'06.093"W	1.64	
3380.00	9.740	276.330	3340.99	40.09	40.98	-473.67	1672572.14	14548280.09	40°03'32.810"N	104°53'06.291"W	1.01	
3467.00	10.320	274.100	3426.66	41.43	42.35	-488.76	1672557.06	14548281.44	40°03'32.823"N	104°53'06.485"W	0.80	
3555.00	9.770	272.540	3513.31	42.30	43.25	-504.08	1672541.74	14548282.31	40°03'32.832"N	104°53'06.682"W	0.70	
3642.00	9.420	273.440	3599.10	43.02	44.00	-518.56	1672527.27	14548283.05	40°03'32.840"N	104°53'06.868"W	0.44	
3730.00	9.390	276.310	3685.91	44.22	45.22	-532.88	1672512.95	14548284.25	40°03'32.852"N	104°53'07.052"W	0.53	
3818.00	8.190	276.800	3772.88	45.72	46.75	-546.24	1672499.59	14548285.76	40°03'32.867"N	104°53'07.224"W	1.37	
3905.00	7.800	277.800	3859.03	47.24	48.29	-558.25	1672487.59	14548287.28	40°03'32.882"N	104°53'07.378"W	0.48	
3992.00	5.050	267.410	3945.48	47.85	48.92	-567.92	1672477.92	14548287.90	40°03'32.888"N	104°53'07.503"W	3.42	
4079.00	4.380	260.630	4032.19	47.12	48.20	-575.03	1672470.82	14548287.17	40°03'32.881"N	104°53'07.594"W	1.00	
4167.00	2.590	263.030	4120.02	46.32	47.41	-580.32	1672465.53	14548286.38	40°03'32.873"N	104°53'07.662"W	2.04	
4254.00	0.920	252.820	4206.98	45.87	46.97	-582.93	1672462.91	14548285.93	40°03'32.869"N	104°53'07.696"W	1.95	
4429.00	1.480	254.170	4381.94	44.83	45.94	-586.45	1672459.40	14548284.90	40°03'32.859"N	104°53'07.741"W	0.32	
4516.00	0.680	340.930	4468.92	45.01	46.12	-587.70	1672458.15	14548285.08	40°03'32.861"N	104°53'07.757"W	1.83	
4603.00	0.930	299.710	4555.92	45.85	46.96	-588.48	1672457.37	14548285.91	40°03'32.869"N	104°53'07.767"W	0.70	
4691.00	1.090	345.540	4643.90	47.01	48.12	-589.31	1672456.54	14548287.07	40°03'32.880"N	104°53'07.778"W	0.91	
4779.00	1.020	46.530	4731.89	48.36	49.47	-588.95	1672456.90	14548288.42	40°03'32.894"N	104°53'07.773"W	1.22	
4867.00	0.540	334.080	4819.89	49.27	50.38	-588.56	1672457.28	14548289.34	40°03'32.903"N	104°53'07.768"W	1.14	
4954.00	0.960	298.210	4906.88	49.99	51.10	-589.39	1672456.46	14548290.05	40°03'32.910"N	104°53'07.779"W	0.70	
5041.00	0.180	170.430	4993.87	50.19	51.31	-590.01	1672455.84	14548290.26	40°03'32.912"N	104°53'07.787"W	1.24	
5128.00	0.360	233.820	5080.87	49.90	51.01	-590.20	1672455.64	14548289.96	40°03'32.909"N	104°53'07.789"W	0.37	
5216.00	0.990	222.500	5168.87	49.17	50.29	-590.94	1672454.91	14548289.24	40°03'32.902"N	104°53'07.799"W	0.73	
5304.00	1.340	217.610	5256.85	47.79	48.91	-592.08	1672453.77	14548287.86	40°03'32.888"N	104°53'07.814"W	0.41	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#08 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10)
Area	COLORADO	Well	JZM 30N-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	JZM 30N-3HZ AWB
Facility	SEC.10-T1N-R67W		

WELLPATH DATA (207 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
5328.00	1.360	218.630	5280.84	47.35	48.47	-592.43	1672453.42	14548287.41	40°03'32.884"N	104°53'07.818"W	0.13	
5415.00	1.440	233.790	5367.82	45.89	47.01	-593.96	1672451.90	14548285.96	40°03'32.870"N	104°53'07.838"W	0.43	
5503.00	0.670	339.350	5455.81	45.72	46.84	-595.03	1672450.82	14548285.79	40°03'32.868"N	104°53'07.852"W	1.98	
5590.00	1.660	41.550	5542.79	47.14	48.26	-594.37	1672451.48	14548287.21	40°03'32.882"N	104°53'07.843"W	1.69	
5677.00	0.990	38.150	5629.77	48.68	49.79	-593.07	1672452.77	14548288.74	40°03'32.897"N	104°53'07.826"W	0.78	
5764.00	0.440	334.700	5716.76	49.57	50.69	-592.75	1672453.09	14548289.64	40°03'32.906"N	104°53'07.822"W	1.02	
5852.00	0.870	284.340	5804.75	50.04	51.16	-593.54	1672452.30	14548290.10	40°03'32.910"N	104°53'07.832"W	0.77	
5939.00	1.330	261.300	5891.74	50.05	51.17	-595.18	1672450.67	14548290.11	40°03'32.911"N	104°53'07.853"W	0.72	
6027.00	1.690	218.570	5979.71	48.88	50.00	-597.00	1672448.85	14548288.94	40°03'32.899"N	104°53'07.877"W	1.31	
6114.00	1.080	197.670	6066.69	47.09	48.22	-598.05	1672447.80	14548287.16	40°03'32.881"N	104°53'07.890"W	0.90	
6202.00	1.130	202.810	6154.67	45.50	46.63	-598.64	1672447.22	14548285.57	40°03'32.866"N	104°53'07.898"W	0.13	
6289.00	0.250	54.340	6241.66	44.82	45.95	-598.82	1672447.04	14548284.89	40°03'32.859"N	104°53'07.900"W	1.55	
6377.00	0.410	304.920	6329.66	45.11	46.24	-598.92	1672446.94	14548285.18	40°03'32.862"N	104°53'07.902"W	0.62	
6465.00	0.990	36.360	6417.66	45.90	47.03	-598.73	1672447.13	14548285.97	40°03'32.870"N	104°53'07.899"W	1.23	
6552.00	0.550	46.240	6504.65	46.80	47.92	-597.98	1672447.87	14548286.87	40°03'32.879"N	104°53'07.889"W	0.53	
6640.00	0.180	333.950	6592.65	47.21	48.34	-597.73	1672448.12	14548287.28	40°03'32.883"N	104°53'07.886"W	0.60	
6726.00	0.370	250.780	6678.65	47.24	48.37	-598.06	1672447.80	14548287.31	40°03'32.883"N	104°53'07.890"W	0.46	
6813.00	0.550	211.680	6765.65	46.79	47.92	-598.54	1672447.31	14548286.86	40°03'32.879"N	104°53'07.897"W	0.40	
6901.00	5.040	357.080	6853.54	50.30	51.43	-598.96	1672446.89	14548290.37	40°03'32.913"N	104°53'07.902"W	6.25	
6908.00†	5.546	358.884	6860.51	50.94	52.07	-598.98	1672446.87	14548291.01	40°03'32.920"N	104°53'07.902"W	7.61	KOP
6988.00	11.500	7.990	6939.59	62.72	63.85	-597.95	1672447.88	14548302.78	40°03'33.036"N	104°53'07.889"W	7.61	
7076.00	16.760	7.180	7024.90	84.01	85.14	-595.14	1672450.66	14548324.07	40°03'33.246"N	104°53'07.853"W	5.98	
7163.00	24.400	2.250	7106.30	114.47	115.59	-592.86	1672452.90	14548354.51	40°03'33.547"N	104°53'07.824"W	9.00	
7250.00	32.320	359.430	7182.80	155.75	156.86	-592.39	1672453.32	14548395.77	40°03'33.955"N	104°53'07.818"W	9.23	
7313.00†	36.233	358.093	7234.85	191.21	192.33	-593.18	1672452.49	14548431.22	40°03'34.306"N	104°53'07.828"W	6.33	ENTERED LANDBOX (458'FSL & 227'FWL,SEC.10) LAT:40.0595293 LONG:-104.8855077
7338.00	37.790	357.630	7254.81	206.25	207.37	-593.74	1672451.90	14548446.25	40°03'34.454"N	104°53'07.835"W	6.33	
7414.00†	42.096	356.763	7313.06	254.97	256.09	-596.14	1672449.44	14548494.95	40°03'34.936"N	104°53'07.866"W	5.71	SSPG
7425.00	42.720	356.650	7321.18	262.37	263.50	-596.57	1672449.00	14548502.35	40°03'35.009"N	104°53'07.871"W	5.71	
7472.00†	51.896	359.316	7353.02	296.85	297.98	-597.72	1672447.80	14548536.82	40°03'35.350"N	104°53'07.886"W	19.96	NBRR
7513.00	59.940	1.140	7375.98	330.78	331.91	-597.56	1672447.92	14548570.73	40°03'35.685"N	104°53'07.884"W	19.96	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#08 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10)
Area	COLORADO	Well	JZM 30N-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	JZM 30N-3HZ AWB
Facility	SEC.10-T1N-R67W		

WELLPATH DATA (207 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 [7/100ft]	Comments
7600.00	66.570	5.410	7415.12	408.28	409.40	-593.04	1672452.33	14548648.20	40°03'36.451"N	104°53'07.826"W	8.79	
7687.00	70.030	3.190	7447.29	488.88	489.99	-587.00	1672458.27	14548728.77	40°03'37.247"N	104°53'07.748"W	4.63	
7752.00†	75.768	1.944	7466.40	550.92	552.02	-584.23	1672460.96	14548790.78	40°03'37.860"N	104°53'07.713"W	9.02	N470_B_CK
7775.00	77.800	1.520	7471.66	573.30	574.40	-583.56	1672461.60	14548813.15	40°03'38.081"N	104°53'07.704"W	9.02	
7862.00	86.390	2.200	7483.61	659.35	660.45	-580.76	1672464.29	14548899.17	40°03'38.932"N	104°53'07.668"W	9.90	
7925.00†	87.142	2.071	7487.16	722.21	723.31	-578.41	1672466.55	14548962.00	40°03'39.553"N	104°53'07.638"W	1.21	LANDING (989'FSL & 242'FWL,SEC.10) LAT:40.0609869 LONG:-104.8854550
7950.00	87.440	2.020	7488.35	747.17	748.26	-577.52	1672467.41	14548986.95	40°03'39.799"N	104°53'07.627"W	1.21	
8038.00	88.610	1.420	7491.38	835.08	836.17	-574.88	1672469.93	14549074.82	40°03'40.668"N	104°53'07.593"W	1.49	
8125.00	89.140	1.970	7493.09	922.03	923.11	-572.31	1672472.39	14549161.74	40°03'41.527"N	104°53'07.560"W	0.88	
8213.00	88.270	3.950	7495.08	1009.90	1010.97	-567.77	1672476.82	14549249.56	40°03'42.396"N	104°53'07.501"W	2.46	
8300.00	86.640	2.810	7498.94	1096.66	1097.73	-562.64	1672481.82	14549336.29	40°03'43.253"N	104°53'07.435"W	2.29	
8387.00	87.010	3.480	7503.76	1183.41	1184.46	-557.87	1672486.47	14549423.00	40°03'44.110"N	104°53'07.374"W	0.88	
8475.00	87.970	0.760	7507.61	1271.26	1272.31	-554.62	1672489.61	14549510.81	40°03'44.978"N	104°53'07.332"W	3.27	
8563.00	88.520	0.970	7510.31	1359.21	1360.26	-553.30	1672490.82	14549598.73	40°03'45.847"N	104°53'07.315"W	0.67	
8650.00	90.000	358.480	7511.43	1446.19	1447.24	-553.71	1672490.29	14549685.68	40°03'46.707"N	104°53'07.321"W	3.33	
8738.00	91.200	359.810	7510.51	1534.17	1535.22	-555.03	1672488.86	14549773.62	40°03'47.576"N	104°53'07.337"W	2.04	
8825.00	92.030	359.560	7508.06	1621.13	1622.18	-555.50	1672488.27	14549860.55	40°03'48.436"N	104°53'07.344"W	1.00	
8913.00	90.000	357.740	7508.50	1709.08	1710.14	-557.58	1672486.08	14549948.46	40°03'49.305"N	104°53'07.370"W	3.10	
9000.00	92.070	357.740	7504.93	1795.99	1797.05	-561.01	1672482.54	14550035.34	40°03'50.164"N	104°53'07.414"W	2.38	
9088.00	91.790	359.660	7501.96	1883.91	1884.97	-563.00	1672480.43	14550123.22	40°03'51.033"N	104°53'07.440"W	2.20	
9175.00	90.060	359.570	7500.56	1970.89	1971.96	-563.59	1672479.73	14550210.17	40°03'51.892"N	104°53'07.448"W	1.99	
9263.00	91.660	0.270	7499.24	2058.88	2059.94	-563.71	1672479.49	14550298.12	40°03'52.762"N	104°53'07.449"W	1.98	
9350.00	90.180	0.220	7497.84	2145.86	2146.93	-563.34	1672479.75	14550385.07	40°03'53.621"N	104°53'07.445"W	1.70	
9437.00	89.230	359.660	7498.29	2232.86	2233.93	-563.43	1672479.55	14550472.04	40°03'54.481"N	104°53'07.446"W	1.27	
9525.00	91.600	0.240	7497.65	2320.85	2321.92	-563.51	1672479.36	14550559.99	40°03'55.351"N	104°53'07.447"W	2.77	
9612.00	90.960	359.820	7495.71	2407.83	2408.90	-563.46	1672479.29	14550646.93	40°03'56.210"N	104°53'07.446"W	0.88	
9700.00	89.750	0.060	7495.16	2495.83	2496.89	-563.55	1672479.08	14550734.90	40°03'57.080"N	104°53'07.447"W	1.40	
9788.00	89.630	0.300	7495.64	2583.82	2584.89	-563.28	1672479.24	14550822.86	40°03'57.949"N	104°53'07.444"W	0.30	
9875.00	90.220	0.290	7495.75	2670.82	2671.89	-562.83	1672479.57	14550909.82	40°03'58.809"N	104°53'07.438"W	0.68	
9963.00	90.770	0.530	7494.99	2758.82	2759.88	-562.20	1672480.09	14550997.78	40°03'59.679"N	104°53'07.430"W	0.68	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#08 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10)
Area	COLORADO	Well	JZM 30N-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	JZM 30N-3HZ AWB
Facility	SEC.10-T1N-R67W		

WELLPATH DATA (207 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
10050.00	91.110	359.000	7493.57	2845.80	2846.87	-562.56	1672479.62	14551084.73	40°04'00.538"N	104°53'07.435"W	1.80	
10138.00	90.220	358.620	7492.54	2933.77	2934.84	-564.38	1672477.68	14551172.67	40°04'01.408"N	104°53'07.458"W	1.10	
10225.00	91.080	358.460	7491.56	3020.73	3021.81	-566.60	1672475.35	14551259.60	40°04'02.267"N	104°53'07.487"W	1.01	
10312.00	90.060	359.280	7490.69	3107.71	3108.78	-568.32	1672473.52	14551346.53	40°04'03.127"N	104°53'07.509"W	1.50	
10400.00	89.290	359.160	7491.19	3195.69	3196.77	-569.51	1672472.21	14551434.49	40°04'03.996"N	104°53'07.524"W	0.89	
10487.00	89.630	358.480	7492.01	3282.67	3283.75	-571.30	1672470.30	14551521.43	40°04'04.856"N	104°53'07.547"W	0.87	
10575.00	90.650	358.210	7491.80	3370.62	3371.71	-573.85	1672467.65	14551609.35	40°04'05.725"N	104°53'07.580"W	1.20	
10663.00	88.800	359.400	7492.22	3458.60	3459.69	-575.68	1672465.70	14551697.29	40°04'06.594"N	104°53'07.604"W	2.50	
10753.00	90.090	359.560	7493.09	3548.58	3549.68	-576.50	1672464.76	14551787.24	40°04'07.484"N	104°53'07.614"W	1.44	
10845.00	89.480	1.020	7493.44	3640.58	3641.67	-576.03	1672465.11	14551879.20	40°04'08.393"N	104°53'07.608"W	1.72	
10936.00	90.150	2.010	7493.73	3731.55	3732.64	-573.63	1672467.39	14551970.13	40°04'09.292"N	104°53'07.577"W	1.31	
11027.00	90.250	1.330	7493.41	3822.52	3823.60	-570.97	1672469.92	14552061.06	40°04'10.191"N	104°53'07.543"W	0.76	
11119.00	89.570	0.090	7493.56	3914.51	3915.59	-569.83	1672470.94	14552153.01	40°04'11.100"N	104°53'07.529"W	1.54	
11206.00	90.590	0.590	7493.43	4001.51	4002.59	-569.32	1672471.35	14552239.98	40°04'11.959"N	104°53'07.522"W	1.31	
11293.00	90.030	359.510	7492.96	4088.50	4089.58	-569.24	1672471.31	14552326.94	40°04'12.819"N	104°53'07.521"W	1.40	
11381.00	88.430	359.400	7494.15	4176.49	4177.57	-570.08	1672470.36	14552414.89	40°04'13.689"N	104°53'07.532"W	1.82	
11468.00	88.640	359.590	7496.37	4263.45	4264.54	-570.85	1672469.48	14552501.82	40°04'14.548"N	104°53'07.542"W	0.33	
11555.00	88.550	359.160	7498.50	4350.42	4351.50	-571.79	1672468.41	14552588.75	40°04'15.407"N	104°53'07.554"W	0.50	
11642.00	88.920	0.120	7500.42	4437.39	4438.48	-572.34	1672467.75	14552675.69	40°04'16.267"N	104°53'07.561"W	1.18	
11729.00	88.580	0.550	7502.32	4524.37	4525.46	-571.83	1672468.15	14552762.64	40°04'17.126"N	104°53'07.555"W	0.63	
11817.00	89.850	359.910	7503.53	4612.36	4613.45	-571.48	1672468.39	14552850.59	40°04'17.996"N	104°53'07.550"W	1.62	
11905.00	90.460	0.170	7503.29	4700.36	4701.45	-571.42	1672468.33	14552938.55	40°04'18.866"N	104°53'07.549"W	0.75	
11992.00	91.450	0.080	7501.84	4787.35	4788.43	-571.23	1672468.41	14553025.51	40°04'19.725"N	104°53'07.547"W	1.14	
12079.00	91.170	359.890	7499.85	4874.32	4875.41	-571.25	1672468.27	14553112.45	40°04'20.585"N	104°53'07.547"W	0.39	
12167.00	89.780	0.440	7499.12	4962.32	4963.40	-571.00	1672468.41	14553200.41	40°04'21.454"N	104°53'07.544"W	1.70	
12254.00	90.800	359.860	7498.68	5049.32	5050.40	-570.77	1672468.52	14553287.37	40°04'22.314"N	104°53'07.541"W	1.35	
12341.00	90.520	0.240	7497.68	5136.31	5137.39	-570.69	1672468.48	14553374.33	40°04'23.174"N	104°53'07.540"W	0.54	
12429.00	89.690	1.070	7497.52	5224.30	5225.39	-569.69	1672469.37	14553462.29	40°04'24.043"N	104°53'07.527"W	1.33	
12516.00	90.220	0.860	7497.59	5311.29	5312.37	-568.22	1672470.73	14553549.24	40°04'24.903"N	104°53'07.508"W	0.66	
12604.00	91.910	0.740	7495.95	5399.27	5400.35	-566.99	1672471.84	14553637.18	40°04'25.772"N	104°53'07.493"W	1.93	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#08 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10)
Area	COLORADO	Well	JZM 30N-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	JZM 30N-3HZ AWB
Facility	SEC.10-T1N-R67W		

WELLPATH DATA (207 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
12692.00	91.730	0.430	7493.16	5487.22	5488.30	-566.10	1672472.62	14553725.10	40°04'26.641"N	104°53'07.481"W	0.41	
12779.00	89.850	0.740	7491.96	5574.21	5575.28	-565.21	1672473.39	14553812.05	40°04'27.501"N	104°53'07.470"W	2.19	
12867.00	88.060	0.280	7493.56	5662.19	5663.26	-564.43	1672474.06	14553899.99	40°04'28.370"N	104°53'07.460"W	2.10	
12954.00	89.040	0.710	7495.76	5749.15	5750.23	-563.67	1672474.70	14553986.92	40°04'29.230"N	104°53'07.450"W	1.23	
13042.00	89.850	0.650	7496.61	5837.15	5838.22	-562.63	1672475.63	14554074.88	40°04'30.099"N	104°53'07.436"W	0.92	
13129.00	91.290	360.000	7495.75	5924.14	5925.21	-562.14	1672476.01	14554161.84	40°04'30.959"N	104°53'07.430"W	1.82	
13217.00	90.400	1.170	7494.45	6012.12	6013.19	-561.24	1672476.79	14554249.79	40°04'31.829"N	104°53'07.419"W	1.67	
13304.00	88.300	0.200	7495.44	6099.11	6100.17	-560.20	1672477.72	14554336.73	40°04'32.688"N	104°53'07.405"W	2.66	
13392.00	88.770	0.270	7497.69	6187.08	6188.14	-559.84	1672477.96	14554424.67	40°04'33.557"N	104°53'07.401"W	0.54	
13480.00	89.140	0.470	7499.29	6275.06	6276.13	-559.27	1672478.41	14554512.62	40°04'34.427"N	104°53'07.393"W	0.48	
13567.00	90.740	1.730	7499.38	6362.04	6363.11	-557.60	1672479.97	14554599.56	40°04'35.286"N	104°53'07.372"W	2.34	
13655.00	88.430	359.440	7500.02	6450.03	6451.09	-556.70	1672480.75	14554687.51	40°04'36.156"N	104°53'07.360"W	3.70	
13742.00	89.170	359.380	7501.84	6537.00	6538.06	-557.60	1672479.74	14554774.45	40°04'37.015"N	104°53'07.372"W	0.85	
13830.00	89.510	0.210	7502.86	6624.99	6626.06	-557.91	1672479.31	14554862.41	40°04'37.885"N	104°53'07.376"W	1.02	
13918.00	90.090	0.150	7503.16	6712.99	6714.05	-557.63	1672479.48	14554950.37	40°04'38.755"N	104°53'07.372"W	0.66	
14005.00	91.700	0.510	7501.81	6799.98	6801.04	-557.13	1672479.86	14555037.32	40°04'39.614"N	104°53'07.366"W	1.90	
14093.00	89.880	357.940	7500.59	6887.95	6889.01	-558.32	1672478.56	14555125.26	40°04'40.484"N	104°53'07.381"W	3.58	
14180.00	90.280	357.350	7500.47	6974.87	6975.94	-561.90	1672474.87	14555212.14	40°04'41.343"N	104°53'07.427"W	0.82	
14268.00	88.770	357.690	7501.20	7062.77	7063.85	-565.71	1672470.95	14555300.02	40°04'42.211"N	104°53'07.476"W	1.76	
14356.00	88.830	358.120	7503.04	7150.69	7151.77	-568.92	1672467.62	14555387.90	40°04'43.080"N	104°53'07.518"W	0.49	
14444.00	90.030	358.280	7503.92	7238.63	7239.72	-571.69	1672464.74	14555475.81	40°04'43.949"N	104°53'07.553"W	1.38	
14531.00	90.990	357.910	7503.14	7325.57	7326.67	-574.58	1672461.74	14555562.72	40°04'44.809"N	104°53'07.591"W	1.18	
14619.00	89.170	359.780	7503.02	7413.54	7414.64	-576.35	1672459.85	14555650.66	40°04'45.678"N	104°53'07.613"W	2.97	
14706.00	90.090	359.750	7503.58	7500.54	7501.64	-576.71	1672459.38	14555737.62	40°04'46.538"N	104°53'07.618"W	1.06	
14794.00	90.680	359.210	7502.99	7588.53	7589.63	-577.51	1672458.46	14555825.57	40°04'47.407"N	104°53'07.628"W	0.91	
14881.00	90.180	1.440	7502.34	7675.52	7676.62	-577.01	1672458.84	14555912.53	40°04'48.267"N	104°53'07.622"W	2.63	
14969.00	90.460	1.470	7501.85	7763.50	7764.59	-574.78	1672460.96	14556000.47	40°04'49.136"N	104°53'07.593"W	0.32	
15057.00	90.520	1.640	7501.09	7851.47	7852.56	-572.39	1672463.23	14556088.40	40°04'50.006"N	104°53'07.563"W	0.20	
15144.00	90.550	1.920	7500.28	7938.43	7939.51	-569.69	1672465.82	14556175.32	40°04'50.865"N	104°53'07.528"W	0.32	
15232.00	91.880	1.800	7498.42	8026.36	8027.45	-566.83	1672468.56	14556263.22	40°04'51.734"N	104°53'07.491"W	1.52	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#08 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10)
Area	COLORADO	Well	JZM 30N-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	JZM 30N-3HZ AWB
Facility	SEC.10-T1N-R67W		

WELLPATH DATA (207 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
15319.00	91.540	1.290	7495.82	8113.30	8114.37	564.49	1672470.79	14556350.12	40°04'52.593"N	104°53'07.461"W	0.70	
15407.00	90.120	1.700	7494.55	8201.26	8202.33	562.19	1672472.97	14556438.05	40°04'53.462"N	104°53'07.432"W	1.68	
15494.00	89.780	1.290	7494.62	8288.23	8289.30	559.92	1672475.12	14556524.98	40°04'54.322"N	104°53'07.402"W	0.61	
15582.00	90.860	1.940	7494.13	8376.20	8377.26	557.44	1672477.49	14556612.91	40°04'55.191"N	104°53'07.370"W	1.43	
15670.00	90.340	2.590	7493.21	8464.13	8465.19	553.97	1672480.85	14556700.81	40°04'56.060"N	104°53'07.326"W	0.95	
15757.00	89.080	1.620	7493.65	8551.07	8552.13	550.77	1672483.93	14556787.72	40°04'56.919"N	104°53'07.285"W	1.83	
15845.00	89.110	1.700	7495.04	8639.03	8640.08	548.22	1672486.36	14556875.64	40°04'57.788"N	104°53'07.252"W	0.10	
15932.00	88.210	0.860	7497.07	8725.99	8727.03	546.28	1672488.19	14556962.56	40°04'58.647"N	104°53'07.227"W	1.41	
16020.00	88.430	0.620	7499.65	8813.94	8814.99	545.14	1672489.21	14557050.48	40°04'59.516"N	104°53'07.212"W	0.37	
16108.00	89.010	1.270	7501.62	8901.91	8902.95	543.69	1672490.55	14557138.41	40°05'00.386"N	104°53'07.194"W	0.99	
16195.00	88.090	359.820	7503.82	8988.88	8989.92	542.86	1672491.26	14557225.34	40°05'01.245"N	104°53'07.183"W	1.97	
16282.00	87.960	359.730	7506.82	9075.83	9076.87	543.20	1672490.80	14557312.25	40°05'02.104"N	104°53'07.188"W	0.18	
16370.00	88.830	358.690	7509.28	9163.78	9164.82	544.42	1672489.48	14557400.17	40°05'02.974"N	104°53'07.203"W	1.54	
16458.00	90.680	358.530	7509.66	9251.74	9252.79	546.55	1672487.23	14557488.10	40°05'03.843"N	104°53'07.231"W	2.11	
16545.00	91.510	358.920	7508.00	9338.70	9339.75	548.49	1672485.18	14557575.03	40°05'04.702"N	104°53'07.256"W	1.05	
16632.00	90.800	0.250	7506.24	9425.68	9426.73	549.12	1672484.44	14557661.97	40°05'05.562"N	104°53'07.264"W	1.73	
16720.00	91.290	0.320	7504.64	9513.66	9514.71	548.68	1672484.76	14557749.92	40°05'06.431"N	104°53'07.258"W	0.56	
16807.00	89.690	1.080	7503.89	9600.65	9601.70	547.62	1672485.71	14557836.87	40°05'07.291"N	104°53'07.244"W	2.04	
16895.00	89.750	1.330	7504.32	9688.63	9689.68	545.77	1672487.44	14557924.82	40°05'08.160"N	104°53'07.221"W	0.29	
16982.00	90.120	359.110	7504.42	9775.63	9776.67	545.43	1672487.66	14558011.78	40°05'09.020"N	104°53'07.216"W	2.59	
17070.00	90.220	358.830	7504.16	9863.61	9864.66	547.01	1672485.97	14558099.72	40°05'09.889"N	104°53'07.237"W	0.34	
17157.00	90.960	358.630	7503.27	9950.58	9951.63	548.94	1672483.92	14558186.66	40°05'10.749"N	104°53'07.262"W	0.88	
17245.00	89.510	359.010	7502.91	10038.55	10039.61	550.75	1672482.00	14558274.60	40°05'11.618"N	104°53'07.285"W	1.70	
17332.00	89.510	359.140	7503.65	10125.54	10126.60	552.16	1672480.48	14558361.55	40°05'12.478"N	104°53'07.303"W	0.15	
17420.00	89.720	359.130	7504.24	10213.52	10214.58	553.49	1672479.04	14558449.50	40°05'13.347"N	104°53'07.320"W	0.24	
17504.00	90.060	358.970	7504.40	10297.51	10298.57	554.88	1672477.53	14558533.45	40°05'14.177"N	104°53'07.338"W	0.45	LAST BHI MWD+IFR+MSA SURVEY
17552.00	90.060	358.970	7504.35	10345.50	10346.56	555.74	1672476.61	14558581.42	40°05'14.652"N	104°53'07.349"W	0.00	TOE / TD / PTB (43'FNL & 305'FWL, SEC.03) LAT:40.0874033 LONG:-104.8853748

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#08 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10)
Area	COLORADO	Well	JZM 30N-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	JZM 30N-3HZ AWB
Facility	SEC.10-T1N-R67W		

HOLE & CASING SECTIONS - Ref Wellbore: JZM 30N-3HZ AWB Ref Wellpath: JZM 30N-3HZ 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	17.00	2243.00	2226.00	17.00	2219.32	0.00	0.00	23.68	-290.07
5.5in Casing Production	17.00	17514.00	17497.00	17.00	7504.39	0.00	0.00	10308.57	-555.06

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.03-T1N-R67W	5066.00	43.51	3902.58	1676946.63	14548288.35	40°03'32.832"N	104°52'10.009"W	polygon
SEC.10-T1N-R67W	5066.00	43.51	3902.58	1676946.63	14548288.35	40°03'32.832"N	104°52'10.009"W	polygon
JZM 30N-3HZ HARDLINE BOX	5083.00	0.00	0.00	1673045.68	14548239.74	40°03'32.405"N	104°53'00.199"W	polygon
JZM 30N-3HZ BHL (50'FNL & 300'FWL,SEC.3,REV-2)	7497.00	10339.61	-561.25	1672471.12	14558574.47	40°05'14.583"N	104°53'07.420"W	point
JZM 30N-3HZ HL (951'FSL & 240'FWL,SEC.10,REV-1)	7497.00	684.67	-579.50	1672465.51	14548923.38	40°03'39.171"N	104°53'07.652"W	point
JZM 30N-3HZ BHL (50'FNL & 300'FWL,SEC.3,REV-1)	7568.00	10339.61	-561.25	1672471.12	14558574.47	40°05'14.583"N	104°53'07.420"W	point

WELLPATH COMPOSITION - Ref Wellbore: JZM 30N-3HZ AWB Ref Wellpath: JZM 30N-3HZ AWP					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	
17.00	2183.00	Custom APC_ISCWSA REV 2 MWD+IFR1 (approximation)	BHI MWD+IFR SURVEYS 13.5" HOLE <214-2183>	JZM 30N-3HZ AWB	
2183.00	17504.00	Custom APC_ISCWSA REV 2 MWD+IFR1+MSA (approximation)	BHI MWD+IFR+MSA SURVEYS 8.5" HOLE <2243-17504>	JZM 30N-3HZ AWB	
17504.00	17552.00	Blind Drilling (std)	Projection to bit	JZM 30N-3HZ AWB	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#08 JZM 30N-3HZ (266'FSL & 820'FWL,SEC.10)
Area	COLORADO	Well	JZM 30N-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	JZM 30N-3HZ AWB
Facility	SEC.10-T1N-R67W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
214.00	0.160	196.780	214.00	FIRST BHI MWD+IFR SURVEY
6908.00	5.546	358.884	6860.51	KOP
7313.00	36.233	358.093	7234.85	ENTERED LANDBOX (458'FSL & 227'FWL,SEC.10) LAT:40.0595293 LONG:-104.8855077
7414.00	42.096	356.763	7313.06	SSPG
7472.00	51.896	359.316	7353.02	NBRR
7752.00	75.768	1.944	7466.40	N470_B_CK
7925.00	87.142	2.071	7487.16	LANDING (989'FSL & 242'FWL,SEC.10) LAT:40.0609869 LONG:-104.8854550
17504.00	90.060	358.970	7504.40	LAST BHI MWD+IFR+MSA SURVEY
17552.00	90.060	358.970	7504.35	TOE / TD / PTB (43'FNL & 305'FWL,SEC.03) LAT:40.0874033 LONG:-104.8853748