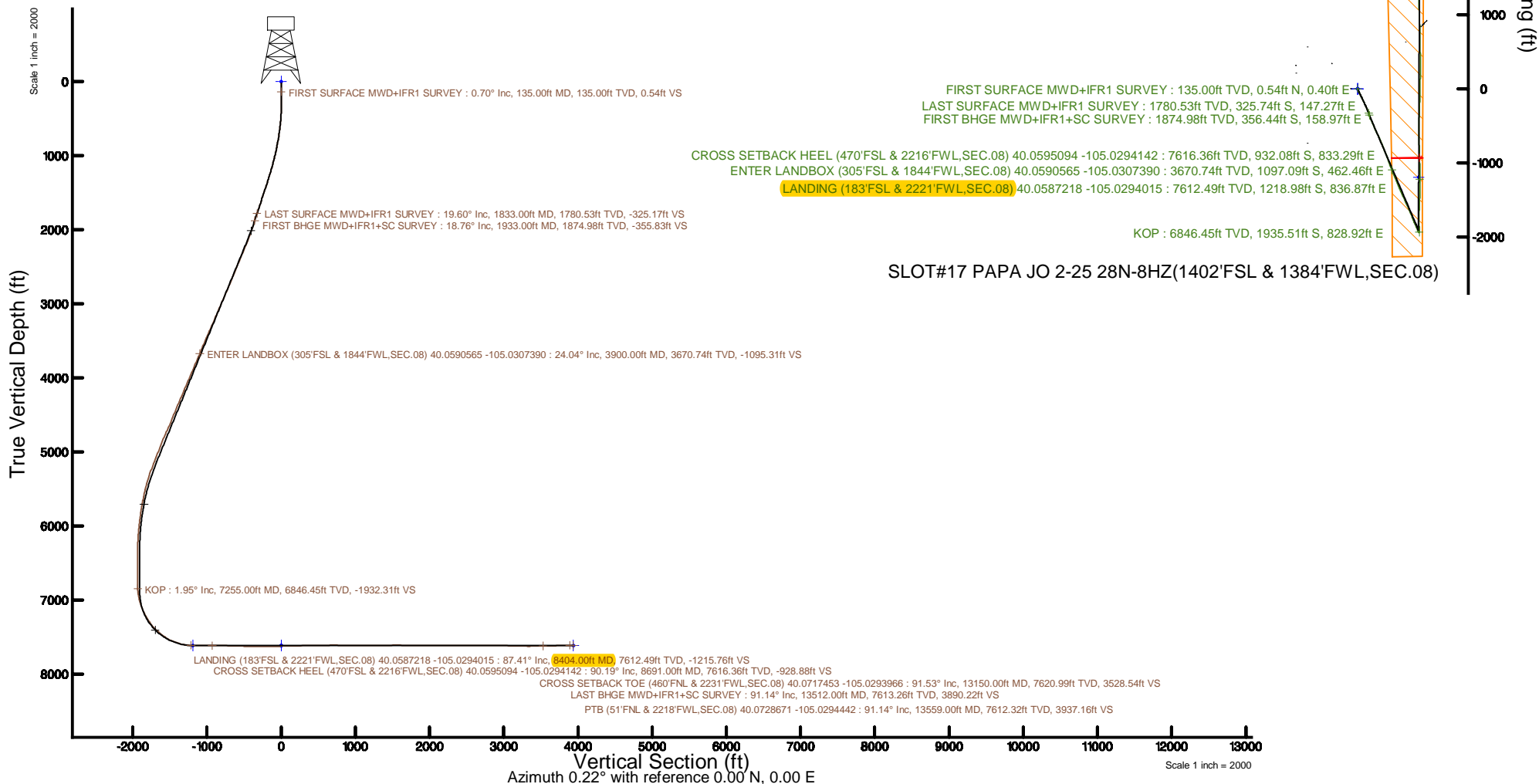


Location:	COLORADO	Slot:	SLOT#17 PAPA JO 2-25 28N-8HZ(1402FSL & 1384FWL_SEC.08)
Field:	WELD COUNTY (UTM/TRUE NORTH)	Well:	PAPA JO 2-25 28N-8HZ
Facility:	SEC.08-T1N-R68W	Wellbore:	PAPA JO 2-25 28N-8HZ PWB
Plot reference wellpath is PAPA JO 2-25 28N-8HZ PWP Rev.B.0			
True vertical depths are referenced to PD 564 (26) (RT)			
Measured depths are referenced to PD 564 (26) (RT)			
PD 564 (26) to Mean Sea Level: 5089 feet			
Mean Sea Level to Mud line (At Slot: SLOT#17 PAPA JO 2-25 28N-8HZ(1402FSL & 1384FWL_SEC.08)): 0 feet			
Coordinates are in feet referenced to Slot			
		Grid System: NAD83 / UTM Zone 13 North, US feet	
		* = Wellpath was transformed from a different geographic datum	
		North Reference: True north	
		Scale: True distance	
		Depths are in feet	
		Created by: painseer on 2018-01-11	
		Database: WA_DEN_Anadarko_Data	



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#17 PAPA JO 2-25 28N-8HZ(1402'FSL & 1384'FWL,SEC.08)
Area	COLORADO	Well	PAPA JO 2-25 28N-8HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	PAPA JO 2-25 28N-8HZ AWB
Facility	SEC.08-T1N-R68W		

REPORT SETUP INFORMATION

Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Painsetr
Scale	0.999600	Report Generated	1/11/2018 at 9:38 AM
Convergence at slot	0.03° West	Database/Source file	WA_DEN_Anadarko_Defn/PAPA_JO_2-25_28N-8HZ_AWP.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-842.21	-854.04	1631353.72	14549336.73	40°03'43.445"N	105°01'56.608"W
Facility Reference Pt			1632207.69	14550178.32	40°03'51.768"N	105°01'45.624"W
Field Reference Pt			1698235.31	14552047.82	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	PD 564 (26') (RT) to Facility Vertical Datum	5089.00ft
Horizontal Reference Pt	Slot	PD 564 (26') (RT) to Mean Sea Level	5089.00ft
Vertical Reference Pt	PD 564 (26') (RT)	PD 564 (26') (RT) to Mud Line at Slot (SLOT#17 PAPA JO 2-25 28N-8HZ(1402'FSL & 1384'FWL,SEC.08))	5089.00ft
MD Reference Pt	PD 564 (26') (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.22°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#17 PAPA JO 2-25 28N-8HZ(1402'FSL & 1384'FWL,SEC.08)
Area	COLORADO	Well	PAPA JO 2-25 28N-8HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	PAPA JO 2-25 28N-8HZ AWB
Facility	SEC.08-T1N-R68W		

WELLPATH DATA (190 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	36.410	0.00	0.00	0.00	0.00	1631353.72	14549336.73	40°03'43.445°N	105°01'56.608°W	0.00	
26.00	0.000	36.410	26.00	0.00	0.00	0.00	1631353.72	14549336.73	40°03'43.445°N	105°01'56.608°W	0.00	
135.00	0.700	36.410	135.00	0.54	0.54	0.40	1631354.12	14549337.27	40°03'43.450°N	105°01'56.603°W	0.64	FIRST SURFACE MWD+IFR1 SURVEY
167.00	0.830	35.970	166.99	0.88	0.88	0.65	1631354.37	14549337.61	40°03'43.454°N	105°01'56.600°W	0.41	
198.00	1.050	44.490	197.99	1.27	1.27	0.98	1631354.70	14549338.00	40°03'43.458°N	105°01'56.595°W	0.84	
230.00	0.830	18.740	229.99	1.70	1.69	1.26	1631354.98	14549338.42	40°03'43.462°N	105°01'56.592°W	1.47	
293.00	0.790	61.450	292.98	2.34	2.33	1.79	1631355.51	14549339.06	40°03'43.468°N	105°01'56.585°W	0.94	
324.00	0.570	95.030	323.98	2.43	2.42	2.13	1631355.85	14549339.15	40°03'43.469°N	105°01'56.581°W	1.44	
387.00	1.450	162.090	386.97	1.65	1.64	2.68	1631356.41	14549338.37	40°03'43.461°N	105°01'56.573°W	2.12	
419.00	2.680	167.450	418.95	0.53	0.52	2.97	1631356.69	14549337.25	40°03'43.450°N	105°01'56.570°W	3.89	
451.00	3.380	170.610	450.90	-1.13	-1.14	3.29	1631357.01	14549335.59	40°03'43.434°N	105°01'56.566°W	2.25	
482.00	4.090	170.170	481.84	-3.12	-3.13	3.63	1631357.35	14549333.60	40°03'43.414°N	105°01'56.561°W	2.29	
514.00	4.390	165.250	513.75	-5.42	-5.44	4.13	1631357.85	14549331.29	40°03'43.391°N	105°01'56.555°W	1.47	
545.00	5.190	164.730	544.64	-7.92	-7.94	4.80	1631358.52	14549328.79	40°03'43.367°N	105°01'56.546°W	2.58	
577.00	6.420	164.020	576.48	-11.03	-11.06	5.68	1631359.40	14549325.68	40°03'43.336°N	105°01'56.535°W	3.85	
609.00	6.770	161.820	608.26	-14.54	-14.57	6.76	1631360.47	14549322.17	40°03'43.301°N	105°01'56.521°W	1.35	
641.00	7.820	161.820	640.01	-18.40	-18.43	8.03	1631361.74	14549318.31	40°03'43.263°N	105°01'56.505°W	3.28	
673.00	8.830	157.960	671.67	-22.74	-22.77	9.63	1631363.34	14549313.96	40°03'43.220°N	105°01'56.484°W	3.61	
704.00	9.580	158.130	702.27	-27.33	-27.37	11.48	1631365.19	14549309.37	40°03'43.174°N	105°01'56.460°W	2.42	
736.00	9.540	159.010	733.82	-32.27	-32.32	13.42	1631367.13	14549304.42	40°03'43.126°N	105°01'56.435°W	0.47	
768.00	10.330	158.920	765.34	-37.41	-37.47	15.41	1631369.11	14549299.27	40°03'43.075°N	105°01'56.410°W	2.47	
800.00	10.720	154.440	796.81	-42.77	-42.84	17.72	1631371.42	14549293.91	40°03'43.022°N	105°01'56.380°W	2.83	
832.00	12.080	153.210	828.17	-48.43	-48.51	20.51	1631374.21	14549288.23	40°03'42.966°N	105°01'56.344°W	4.32	
863.00	12.610	152.950	858.46	-54.33	-54.42	23.52	1631377.21	14549282.33	40°03'42.907°N	105°01'56.306°W	1.72	
895.00	12.700	154.090	889.68	-60.59	-60.69	26.64	1631380.33	14549276.05	40°03'42.845°N	105°01'56.265°W	0.83	
927.00	13.140	155.050	920.87	-67.04	-67.16	29.71	1631383.40	14549269.59	40°03'42.781°N	105°01'56.226°W	1.53	
958.00	13.890	153.120	951.01	-73.54	-73.67	32.88	1631386.56	14549263.08	40°03'42.717°N	105°01'56.185°W	2.82	
990.00	14.240	153.650	982.05	-80.48	-80.62	36.36	1631390.04	14549256.13	40°03'42.648°N	105°01'56.140°W	1.17	
1022.00	14.280	155.580	1013.07	-87.59	-87.74	39.74	1631393.42	14549249.01	40°03'42.578°N	105°01'56.097°W	1.49	
1054.00	14.940	155.060	1044.03	-94.91	-95.08	43.11	1631396.79	14549241.68	40°03'42.505°N	105°01'56.053°W	2.10	
1085.00	16.080	154.000	1073.90	-102.38	-102.56	46.68	1631400.35	14549234.20	40°03'42.431°N	105°01'56.008°W	3.79	
1117.00	16.570	153.300	1104.61	-110.42	-110.62	50.67	1631404.34	14549226.14	40°03'42.352°N	105°01'55.956°W	1.65	
1149.00	16.960	153.650	1135.25	-118.67	-118.88	54.80	1631408.45	14549217.88	40°03'42.270°N	105°01'55.903°W	1.26	
1180.00	17.800	154.000	1164.84	-126.96	-127.19	58.88	1631412.53	14549209.57	40°03'42.188°N	105°01'55.851°W	2.73	
1212.00	18.110	154.350	1195.28	-135.82	-136.07	63.18	1631416.83	14549200.70	40°03'42.100°N	105°01'55.795°W	1.03	
1244.00	18.370	155.760	1225.67	-144.89	-145.15	67.40	1631421.04	14549191.62	40°03'42.011°N	105°01'55.741°W	1.60	
1276.00	18.630	153.650	1256.02	-154.05	-154.33	71.74	1631425.38	14549182.44	40°03'41.920°N	105°01'55.685°W	2.24	
1308.00	18.940	155.230	1286.31	-163.33	-163.62	76.18	1631429.82	14549173.15	40°03'41.828°N	105°01'55.628°W	1.86	
1339.00	19.380	153.650	1315.59	-172.49	-172.80	80.57	1631434.20	14549163.97	40°03'41.737°N	105°01'55.572°W	2.19	
1371.00	19.690	153.560	1345.75	-182.06	-182.38	85.33	1631438.95	14549154.39	40°03'41.643°N	105°01'55.511°W	0.97	
1403.00	19.780	153.390	1375.87	-191.70	-192.05	90.16	1631443.77	14549144.72	40°03'41.547°N	105°01'55.448°W	0.33	
1435.00	20.130	154.350	1405.95	-201.49	-201.86	94.97	1631448.58	14549134.92	40°03'41.450°N	105°01'55.387°W	1.50	
1466.00	20.040	155.320	1435.07	-211.11	-211.49	99.49	1631453.10	14549125.29	40°03'41.355°N	105°01'55.328°W	1.11	
1498.00	20.000	156.900	1465.13	-221.11	-221.51	103.93	1631457.53	14549115.28	40°03'41.256°N	105°01'55.271°W	1.69	
1529.00	19.730	156.550	1494.29	-230.77	-231.18	108.09	1631461.69	14549105.60	40°03'41.160°N	105°01'55.218°W	0.95	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#17 PAPA JO 2-25 28N-8HZ(1402'FSL & 1384'FWL,SEC.08)
Area	COLORADO	Well	PAPA JO 2-25 28N-8HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	PAPA JO 2-25 28N-8HZ AWP
Facility	SEC.08-T1N-R68W		

WELLPATH DATA (190 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
1561.00	19.640	156.460	1524.42	-240.64	-241.07	112.39	1631465.98	14549095.72	40°03'41.063"N	105°01'55.163"W	0.30	
1593.00	19.600	157.170	1554.56	-250.50	-250.95	116.62	1631470.20	14549085.84	40°03'40.965"N	105°01'55.108"W	0.76	
1625.00	19.420	156.380	1584.72	-260.30	-260.77	120.83	1631474.41	14549076.02	40°03'40.868"N	105°01'55.054"W	1.00	
1656.00	19.510	156.730	1613.95	-269.76	-270.25	124.94	1631478.52	14549066.55	40°03'40.774"N	105°01'55.001"W	0.48	
1688.00	19.640	158.130	1644.10	-279.65	-280.14	129.06	1631482.63	14549056.65	40°03'40.677"N	105°01'54.948"W	1.52	
1720.00	19.420	158.750	1674.26	-289.58	-290.09	132.99	1631486.55	14549046.71	40°03'40.578"N	105°01'54.898"W	0.94	
1752.00	19.690	157.870	1704.42	-299.52	-300.05	136.95	1631490.51	14549036.76	40°03'40.480"N	105°01'54.847"W	1.25	
1783.00	20.040	157.690	1733.57	-309.25	-309.80	140.93	1631494.49	14549027.01	40°03'40.384"N	105°01'54.795"W	1.15	
1815.00	20.260	158.570	1763.61	-319.47	-320.03	145.04	1631498.59	14549016.78	40°03'40.282"N	105°01'54.743"W	1.17	
1833.00	19.600	158.750	1780.53	-325.17	-325.74	147.27	1631500.82	14549011.07	40°03'40.226"N	105°01'54.714"W	3.68	LAST SURFACE MWD+IFR1 SURVEY
1933.00	18.760	159.540	1874.98	-355.83	-356.44	158.97	1631512.50	14548980.38	40°03'39.923"N	105°01'54.563"W	0.88	FIRST BHGE MWD+IFR1+SC SURVEY
2023.00	19.930	161.010	1959.90	-383.85	-384.51	169.02	1631522.54	14548952.32	40°03'39.645"N	105°01'54.434"W	1.41	
2112.00	21.410	159.400	2043.17	-413.36	-414.06	179.67	1631533.17	14548922.78	40°03'39.353"N	105°01'54.297"W	1.78	
2201.00	22.000	155.760	2125.86	-443.72	-444.46	192.23	1631545.72	14548892.38	40°03'39.053"N	105°01'54.136"W	1.65	
2291.00	23.740	156.980	2208.79	-475.72	-476.51	206.24	1631559.71	14548860.34	40°03'38.736"N	105°01'53.956"W	2.00	
2381.00	25.290	156.980	2290.67	-510.03	-510.88	220.84	1631574.29	14548825.98	40°03'38.396"N	105°01'53.768"W	1.72	
2470.00	24.300	157.360	2371.46	-544.37	-545.28	235.33	1631588.76	14548791.59	40°03'38.056"N	105°01'53.581"W	1.13	
2560.00	24.590	153.900	2453.40	-578.22	-579.19	250.69	1631604.11	14548757.69	40°03'37.721"N	105°01'53.384"W	1.62	
2649.00	24.540	153.830	2534.35	-611.38	-612.40	266.99	1631620.38	14548724.48	40°03'37.393"N	105°01'53.174"W	0.07	
2739.00	23.750	157.080	2616.47	-644.78	-645.87	282.29	1631635.67	14548691.02	40°03'37.062"N	105°01'52.977"W	1.72	
2828.00	24.750	154.380	2697.62	-678.03	-679.18	297.33	1631650.69	14548657.72	40°03'36.733"N	105°01'52.784"W	1.68	
2918.00	25.570	156.550	2779.08	-712.78	-713.99	313.21	1631666.54	14548622.92	40°03'36.389"N	105°01'52.580"W	1.37	
3008.00	24.390	157.070	2860.66	-747.66	-748.92	328.18	1631681.49	14548587.99	40°03'36.044"N	105°01'52.387"W	1.33	
3097.00	25.530	159.230	2941.35	-782.46	-783.78	342.14	1631695.44	14548553.14	40°03'35.699"N	105°01'52.208"W	1.64	
3187.00	24.190	159.480	3023.01	-817.81	-819.19	355.48	1631708.76	14548517.75	40°03'35.350"N	105°01'52.036"W	1.49	
3276.00	25.510	157.950	3103.77	-852.60	-854.03	369.07	1631722.33	14548482.91	40°03'35.005"N	105°01'51.862"W	1.65	
3366.00	24.040	157.020	3185.48	-887.39	-888.87	383.50	1631736.75	14548448.08	40°03'34.661"N	105°01'51.676"W	1.69	
3455.00	24.080	159.210	3266.75	-921.00	-922.53	397.02	1631750.25	14548414.42	40°03'34.328"N	105°01'51.502"W	1.00	
3545.00	26.550	161.720	3348.11	-957.22	-958.80	409.85	1631763.06	14548378.16	40°03'33.970"N	105°01'51.337"W	2.99	
3635.00	24.650	160.630	3429.27	-993.98	-995.61	422.38	1631775.58	14548341.37	40°03'33.606"N	105°01'51.176"W	2.17	
3724.00	25.420	158.250	3509.91	-1029.19	-1030.87	435.62	1631788.79	14548306.12	40°03'33.258"N	105°01'51.006"W	1.42	
3813.00	23.180	157.230	3591.02	-1063.03	-1064.76	449.48	1631802.63	14548272.23	40°03'32.923"N	105°01'50.827"W	2.56	
3900.00†	24.040	158.972	3670.74	-1095.31	-1097.09	462.46	1631815.60	14548239.91	40°03'32.603"N	105°01'50.660"W	1.27	ENTER LANDBOX (305'FSL & 1844'FWL,SEC.08) 40.0590565 -105.0307390
3903.00	24.070	159.030	3673.48	-1096.45	-1098.23	462.90	1631816.04	14548238.77	40°03'32.592"N	105°01'50.655"W	1.27	
3993.00	26.240	158.360	3754.94	-1132.03	-1133.87	476.81	1631829.93	14548203.14	40°03'32.240"N	105°01'50.476"W	2.43	
4082.00	24.000	157.910	3835.51	-1167.04	-1168.93	490.87	1631843.97	14548168.09	40°03'31.893"N	105°01'50.295"W	2.53	
4172.00	23.520	156.610	3917.88	-1200.43	-1202.38	504.89	1631857.97	14548134.66	40°03'31.563"N	105°01'50.115"W	0.79	
4261.00	25.360	158.400	3998.91	-1234.40	-1236.40	518.95	1631872.02	14548100.64	40°03'31.227"N	105°01'49.934"W	2.23	
4351.00	26.000	157.150	4080.02	-1270.44	-1272.50	533.71	1631886.76	14548064.55	40°03'30.870"N	105°01'49.744"W	0.93	
4440.00	23.840	156.690	4160.73	-1304.88	-1307.00	548.40	1631901.43	14548030.06	40°03'30.529"N	105°01'49.555"W	2.44	
4530.00	24.350	158.480	4242.89	-1338.79	-1340.96	562.41	1631915.42	14547996.10	40°03'30.193"N	105°01'49.375"W	0.99	
4619.00	26.690	155.780	4323.20	-1374.04	-1376.27	577.34	1631930.33	14547960.81	40°03'29.844"N	105°01'49.183"W	2.94	
4709.00	25.190	155.560	4404.13	-1409.85	-1412.14	593.56	1631946.53	14547924.95	40°03'29.490"N	105°01'48.975"W	1.67	
4798.00	22.830	154.400	4485.43	-1442.61	-1444.96	608.86	1631961.81	14547892.13	40°03'29.166"N	105°01'48.778"W	2.70	
4887.00	23.960	154.860	4567.11	-1474.48	-1476.89	623.99	1631976.93	14547860.21	40°03'28.850"N	105°01'48.583"W	1.29	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#17 PAPA JO 2-25 28N-8HZ(1402'FSL & 1384'FWL,SEC.08)
Area	COLORADO	Well	PAPA JO 2-25 28N-8HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	PAPA JO 2-25 28N-8HZ AWP
Facility	SEC.08-T1N-R68W		

WELLPATH DATA (190 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
5002.00	27.100	156.730	4670.87	-1519.62	-1522.10	644.27	1631997.18	14547815.01	40°03'28.403"N	105°01'48.322"W	2.82	
5092.00	26.300	156.060	4751.27	-1556.61	-1559.16	660.46	1632013.35	14547777.96	40°03'28.037"N	105°01'48.114"W	0.95	
5181.00	25.000	156.390	4831.50	-1591.81	-1594.41	675.99	1632028.86	14547742.71	40°03'27.689"N	105°01'47.914"W	1.47	
5270.00	22.780	155.290	4912.87	-1624.64	-1627.30	690.73	1632043.58	14547709.83	40°03'27.364"N	105°01'47.725"W	2.54	
5360.00	22.200	156.160	4996.02	-1655.96	-1658.68	704.88	1632057.72	14547678.46	40°03'27.053"N	105°01'47.543"W	0.74	
5449.00	22.710	157.480	5078.28	-1687.16	-1689.93	718.26	1632071.08	14547647.22	40°03'26.745"N	105°01'47.371"W	0.81	
5539.00	23.240	159.360	5161.14	-1719.78	-1722.60	731.17	1632083.98	14547614.56	40°03'26.422"N	105°01'47.205"W	1.01	
5628.00	22.030	158.890	5243.28	-1751.74	-1754.60	743.37	1632096.16	14547582.56	40°03'26.106"N	105°01'47.048"W	1.37	
5718.00	19.670	158.090	5327.38	-1781.49	-1784.41	755.11	1632107.88	14547552.77	40°03'25.811"N	105°01'46.897"W	2.64	
5807.00	17.310	156.570	5411.78	-1807.50	-1810.46	765.96	1632118.72	14547526.73	40°03'25.554"N	105°01'46.757"W	2.71	
5897.00	14.710	155.930	5498.28	-1830.19	-1833.18	775.95	1632128.69	14547504.01	40°03'25.329"N	105°01'46.629"W	2.90	
5986.00	12.890	156.110	5584.71	-1849.55	-1852.57	784.58	1632137.31	14547484.62	40°03'25.137"N	105°01'46.518"W	2.05	
6076.00	11.710	155.350	5672.64	-1867.00	-1870.05	792.45	1632145.18	14547467.14	40°03'24.965"N	105°01'46.417"W	1.32	
6166.00	10.090	155.750	5761.02	-1882.46	-1885.54	799.50	1632152.22	14547451.66	40°03'24.812"N	105°01'46.326"W	1.80	
6255.00	8.720	156.960	5848.82	-1895.75	-1898.86	805.34	1632158.05	14547438.34	40°03'24.680"N	105°01'46.251"W	1.56	
6345.00	7.160	157.400	5937.95	-1907.19	-1910.32	810.17	1632162.87	14547426.89	40°03'24.567"N	105°01'46.189"W	1.73	
6434.00	5.960	158.770	6026.37	-1916.61	-1919.75	813.98	1632166.67	14547417.46	40°03'24.474"N	105°01'46.140"W	1.36	
6524.00	4.910	160.000	6115.96	-1924.57	-1927.72	816.98	1632169.68	14547409.49	40°03'24.395"N	105°01'46.101"W	1.17	
6613.00	4.080	146.910	6204.69	-1930.79	-1933.95	820.02	1632172.71	14547403.26	40°03'24.333"N	105°01'46.062"W	1.48	
6703.00	2.440	128.610	6294.54	-1934.66	-1937.83	823.26	1632175.95	14547399.38	40°03'24.295"N	105°01'46.021"W	2.14	
6792.00	1.390	95.560	6383.50	-1935.93	-1939.12	825.82	1632178.50	14547398.09	40°03'24.282"N	105°01'45.988"W	1.67	
6881.00	0.810	98.910	6472.48	-1936.13	-1939.32	827.51	1632180.20	14547397.89	40°03'24.280"N	105°01'45.966"W	0.66	
6971.00	0.450	47.300	6562.47	-1935.98	-1939.18	828.40	1632181.09	14547398.03	40°03'24.281"N	105°01'45.955"W	0.71	
7061.00	0.660	21.450	6652.47	-1935.26	-1938.46	828.85	1632181.53	14547398.75	40°03'24.289"N	105°01'45.949"W	0.36	
7150.00	0.900	1.160	6741.46	-1934.08	-1937.28	829.05	1632181.74	14547399.93	40°03'24.300"N	105°01'45.946"W	0.41	
7240.00	0.900	350.350	6831.45	-1932.68	-1935.88	828.95	1632181.63	14547401.33	40°03'24.314"N	105°01'45.948"W	0.19	
7255.00†	1.949	359.142	6846.45	-1932.31	-1935.51	828.92	1632181.61	14547401.70	40°03'24.318"N	105°01'45.948"W	7.12	KOP
7330.00	7.280	4.570	6921.18	-1926.29	-1929.49	829.28	1632181.97	14547407.72	40°03'24.377"N	105°01'45.943"W	7.12	
7419.00	15.570	3.800	7008.34	-1908.72	-1911.92	830.53	1632183.22	14547425.28	40°03'24.551"N	105°01'45.927"W	9.32	
7509.00	21.320	358.250	7093.68	-1880.28	-1883.49	830.83	1632183.53	14547453.70	40°03'24.832"N	105°01'45.923"W	6.67	
7598.00	25.400	352.780	7175.38	-1845.17	-1848.36	827.93	1632180.65	14547488.81	40°03'25.179"N	105°01'45.961"W	5.19	
7687.00	31.450	359.210	7253.63	-1802.98	-1806.16	825.21	1632177.95	14547531.00	40°03'25.596"N	105°01'45.995"W	7.61	
7777.00	36.610	0.770	7328.20	-1752.63	-1755.81	825.25	1632178.00	14547581.32	40°03'26.094"N	105°01'45.995"W	5.81	
7867.00	46.450	2.110	7395.49	-1693.05	-1696.24	826.81	1632179.59	14547640.87	40°03'26.682"N	105°01'45.975"W	10.98	
7956.00	51.160	3.590	7454.09	-1626.18	-1629.38	830.17	1632182.97	14547707.71	40°03'27.343"N	105°01'45.932"W	5.44	
8046.00	56.600	2.010	7507.13	-1553.58	-1556.79	833.69	1632186.51	14547780.26	40°03'28.060"N	105°01'45.886"W	6.21	
8136.00	65.950	0.760	7550.34	-1474.76	-1477.98	835.55	1632188.41	14547859.04	40°03'28.839"N	105°01'45.862"W	10.46	
8225.00	72.420	359.910	7581.95	-1391.61	-1394.83	836.03	1632188.91	14547942.15	40°03'29.661"N	105°01'45.856"W	7.32	
8315.00	80.420	0.290	7603.06	-1304.20	-1307.42	836.19	1632189.10	14548029.53	40°03'30.525"N	105°01'45.854"W	8.90	
8404.00	87.410	0.590	7612.49	-1215.76	-1218.98	836.87	1632189.81	14548117.94	40°03'31.399"N	105°01'45.845"W	7.86	LANDING (183'FSL & 2221'FWL,SEC.08) 40.0587218 -105.0294015
8494.00	88.890	359.690	7615.39	-1125.81	-1129.03	837.09	1632190.06	14548207.85	40°03'32.288"N	105°01'45.842"W	1.92	
8583.00	89.690	358.920	7616.50	-1036.83	-1040.05	836.01	1632189.02	14548296.80	40°03'33.167"N	105°01'45.856"W	1.25	
8673.00	90.370	358.290	7616.45	-946.87	-950.07	833.81	1632186.86	14548386.74	40°03'34.056"N	105°01'45.884"W	1.03	
8691.00†	90.190	358.363	7616.36	-928.88	-932.08	833.29	1632186.34	14548404.72	40°03'34.234"N	105°01'45.891"W	1.08	CROSS SETBACK HEEL (470'FSL & 2216'FWL,SEC.08) 40.0595094 -105.0294142
8762.00	89.480	358.650	7616.57	-857.91	-861.11	831.44	1632184.51	14548475.67	40°03'34.935"N	105°01'45.915"W	1.08	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#17 PAPA JO 2-25 28N-8HZ(1402'FSL & 1384'FWL,SEC.08)
Area	COLORADO	Well	PAPA JO 2-25 28N-8HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	PAPA JO 2-25 28N-8HZ AWP
Facility	SEC.08-T1N-R68W		

WELLPATH DATA (190 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
8852.00	89.940	358.340	7617.02	-767.95	-771.14	829.07	1632182.18	14548565.60	40°03'35.824"N	105°01'45.945"W	0.62	
8941.00	88.340	359.650	7618.36	-678.99	-682.17	827.51	1632180.66	14548654.54	40°03'36.704"N	105°01'45.965"W	2.32	
9031.00	88.090	0.090	7621.16	-589.03	-592.21	827.31	1632180.49	14548744.46	40°03'37.592"N	105°01'45.968"W	0.56	
9121.00	88.180	359.500	7624.09	-499.08	-502.26	826.99	1632180.20	14548834.37	40°03'38.481"N	105°01'45.972"W	0.66	
9210.00	87.940	1.580	7627.10	-410.14	-413.32	827.83	1632181.07	14548923.28	40°03'39.360"N	105°01'45.961"W	2.35	
9299.00	89.820	2.340	7628.84	-321.20	-324.39	830.87	1632184.14	14549012.17	40°03'40.239"N	105°01'45.922"W	2.28	
9389.00	90.620	1.990	7628.50	-231.26	-234.46	834.27	1632187.57	14549102.06	40°03'41.128"N	105°01'45.878"W	0.97	
9478.00	91.080	1.580	7627.18	-142.30	-145.51	837.04	1632190.38	14549190.97	40°03'42.007"N	105°01'45.843"W	0.69	
9568.00	91.600	1.070	7625.07	-52.34	-55.56	839.12	1632192.49	14549280.89	40°03'42.896"N	105°01'45.816"W	0.81	
9658.00	92.250	0.790	7622.05	37.60	34.37	840.58	1632193.98	14549370.79	40°03'43.785"N	105°01'45.797"W	0.79	
9747.00	90.740	1.060	7619.73	126.56	123.33	842.02	1632195.45	14549459.71	40°03'44.664"N	105°01'45.779"W	1.72	
9837.00	90.920	0.500	7618.42	216.55	213.31	843.24	1632196.71	14549549.65	40°03'45.553"N	105°01'45.763"W	0.65	
9926.00	91.820	0.370	7616.30	305.52	302.28	843.92	1632197.41	14549638.59	40°03'46.432"N	105°01'45.754"W	1.02	
10016.00	90.310	359.530	7614.62	395.50	392.26	843.84	1632197.37	14549728.53	40°03'47.321"N	105°01'45.755"W	1.92	
10105.00	90.370	358.890	7614.10	484.48	481.25	842.61	1632196.17	14549817.48	40°03'48.201"N	105°01'45.771"W	0.72	
10195.00	91.790	358.280	7612.40	574.43	571.21	840.39	1632193.98	14549907.40	40°03'49.090"N	105°01'45.799"W	1.72	
10285.00	90.800	359.550	7610.36	664.38	661.16	838.69	1632192.31	14549997.33	40°03'49.979"N	105°01'45.821"W	1.79	
10374.00	88.980	359.410	7610.54	753.37	750.16	837.88	1632191.54	14550086.28	40°03'50.858"N	105°01'45.831"W	2.05	
10464.00	89.010	358.460	7612.11	843.33	840.13	836.21	1632189.90	14550176.22	40°03'51.747"N	105°01'45.853"W	1.06	
10554.00	89.420	358.030	7613.35	933.27	930.07	833.45	1632187.18	14550266.13	40°03'52.636"N	105°01'45.888"W	0.66	
10643.00	90.920	357.970	7613.08	1022.20	1019.02	830.35	1632184.11	14550355.04	40°03'53.515"N	105°01'45.928"W	1.69	
10733.00	89.850	359.580	7612.48	1112.16	1108.99	828.42	1632182.22	14550444.98	40°03'54.404"N	105°01'45.953"W	2.15	
10822.00	89.660	0.360	7612.86	1201.16	1197.99	828.37	1632182.20	14550533.94	40°03'55.284"N	105°01'45.954"W	0.90	
10912.00	89.970	0.040	7613.15	1291.16	1287.99	828.69	1632182.55	14550623.90	40°03'56.173"N	105°01'45.949"W	0.50	
11001.00	90.520	359.590	7612.77	1380.16	1376.99	828.40	1632182.29	14550712.86	40°03'57.053"N	105°01'45.953"W	0.80	
11091.00	91.390	359.270	7611.27	1470.13	1466.97	827.51	1632181.43	14550802.81	40°03'57.942"N	105°01'45.965"W	1.03	
11180.00	90.060	0.630	7610.14	1559.12	1555.96	827.43	1632181.39	14550891.76	40°03'58.821"N	105°01'45.966"W	2.14	
11270.00	88.670	2.350	7611.14	1649.09	1645.92	829.77	1632183.76	14550981.68	40°03'59.710"N	105°01'45.935"W	2.46	
11359.00	88.860	1.990	7613.06	1738.02	1734.83	833.14	1632187.16	14551070.56	40°04'00.589"N	105°01'45.892"W	0.46	
11449.00	89.350	1.890	7614.46	1827.97	1824.77	836.18	1632190.24	14551160.46	40°04'01.478"N	105°01'45.853"W	0.56	
11539.00	90.000	1.700	7614.97	1917.93	1914.72	839.00	1632193.09	14551250.38	40°04'02.367"N	105°01'45.817"W	0.75	
11628.00	91.050	1.770	7614.16	2006.89	2003.68	841.70	1632195.81	14551339.30	40°04'03.246"N	105°01'45.782"W	1.18	
11718.00	89.540	0.830	7613.70	2096.87	2093.65	843.74	1632197.89	14551429.23	40°04'04.135"N	105°01'45.756"W	1.98	
11807.00	90.710	0.820	7613.50	2185.87	2182.64	845.02	1632199.20	14551518.18	40°04'05.014"N	105°01'45.739"W	1.31	
11897.00	91.510	0.490	7611.76	2275.85	2272.61	846.05	1632200.26	14551608.12	40°04'05.903"N	105°01'45.726"W	0.96	
11987.00	89.820	0.300	7610.71	2365.84	2362.60	846.67	1632200.91	14551698.08	40°04'06.793"N	105°01'45.718"W	1.89	
12076.00	88.710	0.270	7611.86	2454.83	2451.59	847.11	1632201.39	14551787.03	40°04'07.672"N	105°01'45.712"W	1.25	
12166.00	89.320	0.070	7613.40	2544.81	2541.58	847.38	1632201.69	14551876.98	40°04'08.561"N	105°01'45.708"W	0.71	
12256.00	89.850	359.610	7614.05	2634.81	2631.57	847.13	1632201.47	14551966.94	40°04'09.451"N	105°01'45.712"W	0.78	
12345.00	89.290	359.950	7614.72	2723.80	2720.57	846.79	1632201.16	14552055.90	40°04'10.330"N	105°01'45.716"W	0.74	
12435.00	90.090	359.770	7615.21	2813.80	2810.57	846.57	1632200.97	14552145.86	40°04'11.219"N	105°01'45.719"W	0.91	
12524.00	90.620	359.610	7614.66	2902.79	2899.57	846.09	1632200.52	14552234.82	40°04'12.099"N	105°01'45.725"W	0.62	
12614.00	88.460	359.890	7615.38	2992.78	2989.56	845.69	1632200.16	14552324.78	40°04'12.988"N	105°01'45.730"W	2.42	
12703.00	88.460	359.690	7617.77	3081.75	3078.52	845.37	1632199.87	14552413.71	40°04'13.867"N	105°01'45.734"W	0.22	
12793.00	88.340	359.250	7620.29	3171.70	3168.48	844.53	1632199.07	14552503.64	40°04'14.756"N	105°01'45.745"W	0.51	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#17 PAPA JO 2-25 28N-8HZ(1402'FSL & 1384'FWL,SEC.08)
Area	COLORADO	Well	PAPA JO 2-25 28N-8HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	PAPA JO 2-25 28N-8HZ AWB
Facility	SEC.08-T1N-R68W		

WELLPATH DATA (190 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
12882.00	88.240	359.150	7622.94	3260.65	3257.44	843.29	1632197.86	14552592.55	40°04'15.636"N	105°01'45.761"W	0.16	
12972.00	90.430	359.020	7623.99	3350.62	3347.41	841.86	1632196.46	14552682.49	40°04'16.525"N	105°01'45.779"W	2.44	
13061.00	90.950	358.910	7622.91	3439.59	3436.39	840.25	1632194.88	14552771.44	40°04'17.404"N	105°01'45.800"W	0.60	
13150.00†	91.533	358.297	7620.99	3528.54	3525.34	838.08	1632192.75	14552860.35	40°04'18.283"N	105°01'45.828"W	0.95	CROSS SETBACK TOE (460'FNL & 2231'FWL,SEC.08) 40.0717453 -105.0293966
13151.00	91.540	358.290	7620.96	3529.53	3526.34	838.05	1632192.72	14552861.35	40°04'18.293"N	105°01'45.828"W	0.95	
13240.00	90.710	358.550	7619.21	3618.47	3615.29	835.60	1632190.30	14552950.27	40°04'19.172"N	105°01'45.860"W	0.98	
13330.00	91.790	358.180	7617.25	3708.40	3705.23	833.03	1632187.77	14553040.17	40°04'20.061"N	105°01'45.893"W	1.27	
13420.00	91.050	358.170	7615.02	3798.32	3795.16	830.16	1632184.93	14553130.06	40°04'20.949"N	105°01'45.929"W	0.82	
13512.00	91.140	357.560	7613.26	3890.22	3887.08	826.74	1632181.54	14553221.95	40°04'21.858"N	105°01'45.973"W	0.67	LAST BHGE MWD+IFR1+SC SURVEY
13559.00	91.140	357.560	7612.32	3937.16	3934.02	824.74	1632179.56	14553268.88	40°04'22.322"N	105°01'45.999"W	0.00	PTB (51'FNL & 2218'FWL,SEC.08) 40.0728671 -105.0294442

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.08-T1N-R68W	-2.00	1.11	-179.92	1631173.88	14549337.91	40°03'43.456"N	105°01'58.922"W	polygon
PAPA JO 2-25 28N-8HZ BHL REV-1(50'FNL & 2235'FWL,SEC.08)	7615.00	3935.07	842.15	1632196.96	14553269.91	40°04'22.332"N	105°01'45.775"W	point
PAPA JO 2-25 28N-8HZ HEEL REV-1(200'FSL & 2147'FWL,SEC.08)	7615.00	-1192.69	822.45	1632175.40	14548144.22	40°03'31.658"N	105°01'46.031"W	point
PAPA JO 2-25 28N-8HZ LANDBOX	7615.00	0.00	0.00	1631353.72	14549336.73	40°03'43.445"N	105°01'56.608"W	polygon
PAPA JO 2-25 28N-8HZ SETBACK 1	7615.00	0.00	0.00	1631353.72	14549336.73	40°03'43.445"N	105°01'56.608"W	polygon
PAPA JO 2-25 28N-8HZ SETBACK 2	7615.00	0.00	0.00	1631353.72	14549336.73	40°03'43.445"N	105°01'56.608"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: PAPA JO 2-25 28N-8HZ AWB				Ref Wellpath: PAPA JO 2-25 28N-8HZ AWP		
Start MD [ft]	End MD [ft]	Positional Uncertainty Model		Log Name/Comment		Wellbore
26.00	1833.00	Custom APC ISCWSA REV 2 MWD+IFR1 (approximation)		Custom APC ISCWSA Rev-2 MWD+IFR1 <135 - 1833>		PAPA JO 2-25 28N-8HZ AWB
1833.00	13512.00	Custom APC ISCWSA REV 2 MWD+IFR1+SC (approximation)		BHGE Custom APC ISCWSA Rev-2 MWD+IFR1+SC <1933 - 13512>		PAPA JO 2-25 28N-8HZ AWB
13512.00	13559.00	Blind Drilling (std)		Projection to bit		PAPA JO 2-25 28N-8HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#17 PAPA JO 2-25 28N-8HZ(1402'FSL & 1384'FWL,SEC.08)
Area	COLORADO	Well	PAPA JO 2-25 28N-8HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	PAPA JO 2-25 28N-8HZ AWB
Facility	SEC.08-T1N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
135.00	0.700	36.410	135.00	FIRST SURFACE MWD+IFR1 SURVEY
1833.00	19.600	158.750	1780.53	LAST SURFACE MWD+IFR1 SURVEY
1933.00	18.760	159.540	1874.98	FIRST BHGE MWD+IFR1+SC SURVEY
3900.00	24.040	158.972	3670.74	ENTER LANDBOX (305'FSL & 1844'FWL,SEC.08) 40.0590565 -105.0307390
7255.00	1.949	359.142	6846.45	KOP
8404.00	87.410	0.590	7612.49	LANDING (183'FSL & 2221'FWL,SEC.08) 40.0587218 -105.0294015
8691.00	90.190	358.363	7616.36	CROSS SETBACK HEEL (470'FSL & 2216'FWL,SEC.08) 40.0595094 -105.0294142
13150.00	91.533	358.297	7620.99	CROSS SETBACK TOE (460'FNL & 2231'FWL,SEC.08) 40.0717453 -105.0293966
13512.00	91.140	357.560	7613.26	LAST BHGE MWD+IFR1+SC SURVEY
13559.00	91.140	357.560	7612.32	PTB (51'FNL & 2218'FWL,SEC.08) 40.0728671 -105.0294442