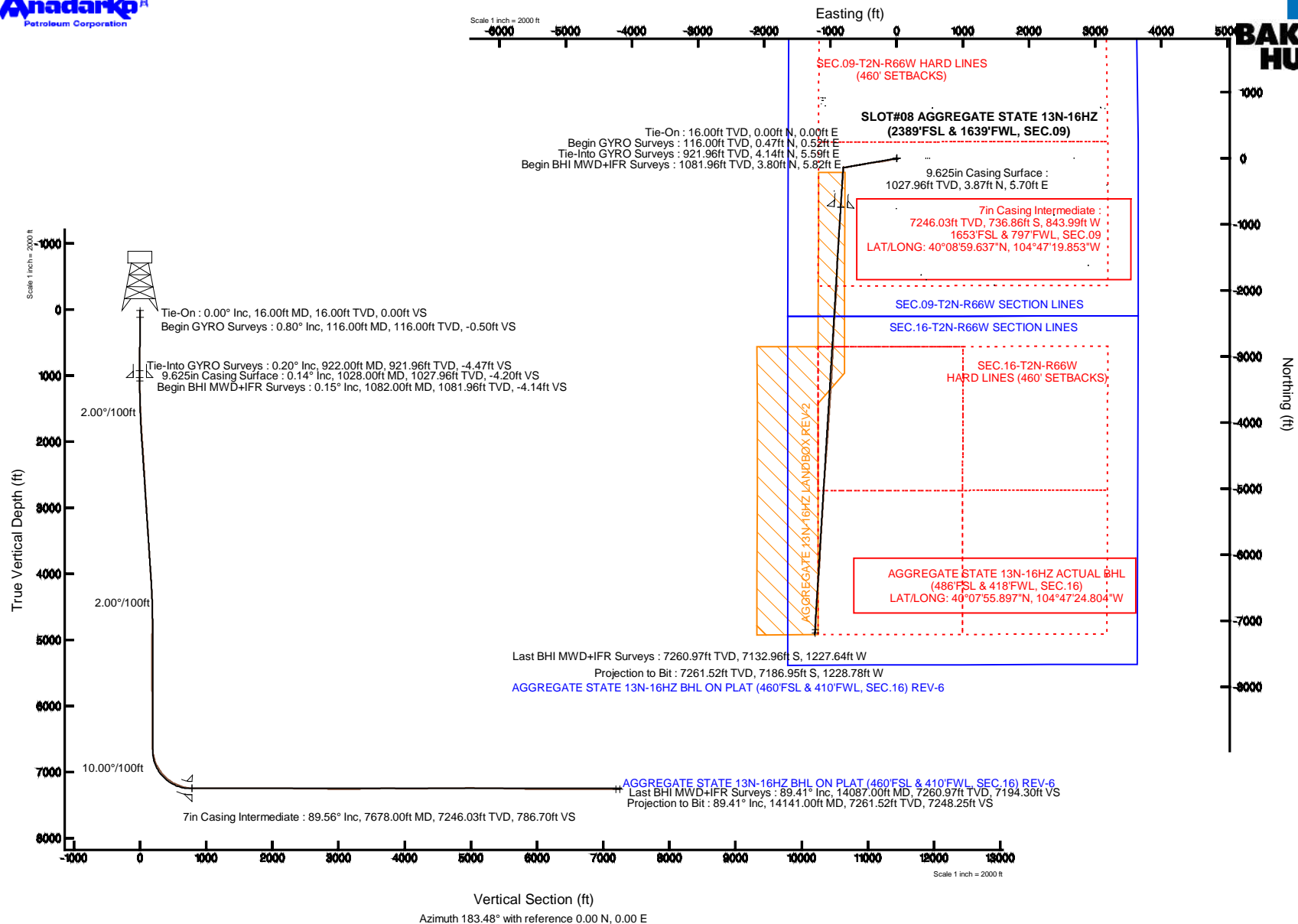


Location:	COLORADO	Slot:	SLOT#08 AGGREGATE STATE 13N-16HZ (2389'FSL & 1639'FWL, SEC.09)
Field:	WELD COUNTY (KERR MCGEE)	Well:	AGGREGATE STATE 13N-16HZ
Facility:	SEC.09-T2N-R66W	Wellbore:	AGGREGATE STATE 13N-16HZ PWB

True vertical depths are referenced to XTREME 20 (16KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 20 (16KB) (RKB)	North Reference: True north
XTREME 20 (16KB) (RKB) to Mean Sea Level: 4920 feet	Scale: True distance
Mean Sea Level to Mud line (As Slot: SLOTF08 AGGREGATE STATE 13N-16HZ (2389FSL & 1639FSL, SEC.09)) : 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by ccrean on 22/May/2014

**BAKER
HUGHES**

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 AGGREGATE STATE 13N-16HZ (2389'FSL & 1639'FWL, SEC.09)
Area	COLORADO	Well	AGGREGATE STATE 13N-16HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	AGGREGATE STATE 13N-16HZ AWB
Facility	SEC.09-T2N-R66W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Precain
Scale	0.999958	Report Generated	22/May/2014 at 12:03
Convergence at slot	n/a	Database/Source file	WellArchitectDB/AGGREGATE_STATE_13N-16HZ_AWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-771.41	-3083.03	3199629.73	1298992.39	40°09'06.919"N	104°47'08.984"W
Facility Reference Pt			3202706.22	1299788.95	40°09'14.544"N	104°46'29.280"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	XTREME 20 (16'KB) (RKB) to Facility Vertical Datum	4920.00ft
Horizontal Reference Pt	Slot	XTREME 20 (16'KB) (RKB) to Mean Sea Level	4920.00ft
Vertical Reference Pt	XTREME 20 (16'KB) (RKB)	XTREME 20 (16'KB) (RKB) to Mud Line at Slot (SLOT#08 AGGREGATE STATE 13N-16HZ (2389'FSL & 1639'FWL, SEC.09))	4920.00ft
MD Reference Pt	XTREME 20 (16'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	183.48°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 AGGREGATE STATE 13N-16HZ (2389'FSL & 1639'FWL, SEC.09)
Area	COLORADO	Well	AGGREGATE STATE 13N-16HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	AGGREGATE STATE 13N-16HZ AWP
Facility	SEC.09-T2N-R66W		

WELLPATH DATA (168 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	47.970	0.00	0.00	0.00	0.00	40°09'06.919"N	104°47'08.984"W	0.00	
16.00	0.000	47.970	16.00	0.00	0.00	0.00	40°09'06.919"N	104°47'08.984"W	0.00	Tie-On
116.00	0.800	47.970	116.00	-0.50	0.47	0.52	40°09'06.924"N	104°47'08.977"W	0.80	Begin GYRO Surveys
216.00	0.230	149.000	215.99	-0.83	0.76	1.14	40°09'06.927"N	104°47'08.969"W	0.87	
316.00	0.910	31.500	315.99	-1.37	1.27	1.66	40°09'06.932"N	104°47'08.963"W	1.04	
416.00	0.300	138.770	415.99	-1.88	1.75	2.25	40°09'06.936"N	104°47'08.955"W	1.04	
516.00	0.760	42.160	515.98	-2.21	2.04	2.86	40°09'06.939"N	104°47'08.947"W	0.85	
616.00	0.480	12.020	615.98	-3.14	2.94	3.40	40°09'06.948"N	104°47'08.940"W	0.42	
716.00	0.730	81.050	715.97	-3.70	3.45	4.11	40°09'06.953"N	104°47'08.931"W	0.72	
816.00	0.620	47.630	815.97	-4.22	3.92	5.14	40°09'06.958"N	104°47'08.918"W	0.40	
916.00	0.150	160.680	915.96	-4.49	4.16	5.58	40°09'06.960"N	104°47'08.912"W	0.69	
922.00	0.200	174.480	921.96	-4.47	4.14	5.59	40°09'06.960"N	104°47'08.912"W	1.08	Tie-Into GYRO Surveys
1082.00	0.150	107.580	1081.96	-4.14	3.80	5.82	40°09'06.957"N	104°47'08.909"W	0.12	Begin BHI MWD+IFR Surveys
1175.00	1.570	242.070	1174.95	-3.45	3.17	4.81	40°09'06.950"N	104°47'08.922"W	1.80	
1269.00	3.160	248.800	1268.87	-1.70	1.62	1.25	40°09'06.935"N	104°47'08.968"W	1.71	
1363.00	4.600	250.250	1362.65	0.87	-0.59	-4.71	40°09'06.913"N	104°47'09.045"W	1.54	
1457.00	7.110	254.820	1456.15	4.22	-3.38	-13.88	40°09'06.886"N	104°47'09.163"W	2.71	
1552.00	9.010	256.680	1550.21	8.25	-6.64	-26.79	40°09'06.853"N	104°47'09.329"W	2.02	
1644.00	10.050	257.090	1640.94	12.60	-10.09	-41.62	40°09'06.819"N	104°47'09.520"W	1.13	
1735.00	11.060	257.650	1730.40	17.22	-13.73	-57.89	40°09'06.783"N	104°47'09.730"W	1.12	
1827.00	11.730	254.910	1820.59	22.60	-18.05	-75.54	40°09'06.741"N	104°47'09.957"W	0.94	
1919.00	13.050	257.030	1910.44	28.52	-22.82	-94.69	40°09'06.693"N	104°47'10.203"W	1.52	
2011.00	14.550	257.480	1999.78	34.65	-27.66	-116.10	40°09'06.646"N	104°47'10.479"W	1.63	
2102.00	15.480	259.390	2087.68	40.75	-32.37	-139.19	40°09'06.599"N	104°47'10.777"W	1.16	
2194.00	16.450	259.670	2176.13	46.85	-36.97	-164.08	40°09'06.554"N	104°47'11.097"W	1.06	
2285.00	15.130	258.570	2263.69	52.98	-41.63	-188.39	40°09'06.508"N	104°47'11.410"W	1.49	
2377.00	16.390	260.330	2352.23	59.02	-46.19	-212.96	40°09'06.463"N	104°47'11.727"W	1.46	
2469.00	16.910	262.520	2440.37	64.52	-50.11	-239.02	40°09'06.424"N	104°47'12.062"W	0.89	
2561.00	16.570	263.270	2528.48	69.39	-53.39	-265.32	40°09'06.391"N	104°47'12.401"W	0.44	
2652.00	16.520	262.940	2615.71	74.05	-56.50	-291.04	40°09'06.361"N	104°47'12.732"W	0.12	
2744.00	16.270	264.290	2703.97	78.50	-59.39	-316.85	40°09'06.332"N	104°47'13.064"W	0.50	
2836.00	16.770	263.020	2792.17	82.97	-62.29	-342.84	40°09'06.303"N	104°47'13.399"W	0.67	
2927.00	17.660	261.770	2879.09	88.16	-65.86	-369.54	40°09'06.268"N	104°47'13.743"W	1.06	
3019.00	17.050	261.620	2966.90	93.76	-69.82	-396.69	40°09'06.229"N	104°47'14.093"W	0.66	
3111.00	16.050	261.430	3055.09	99.19	-73.68	-422.61	40°09'06.191"N	104°47'14.426"W	1.09	
3202.00	16.530	260.210	3142.44	104.78	-77.76	-447.81	40°09'06.151"N	104°47'14.751"W	0.65	
3294.00	15.280	258.420	3230.91	110.94	-82.42	-472.58	40°09'06.104"N	104°47'15.070"W	1.46	
3386.00	15.350	256.840	3319.65	117.57	-87.62	-496.32	40°09'06.053"N	104°47'15.376"W	0.46	
3477.00	14.760	260.120	3407.53	123.70	-92.36	-519.46	40°09'06.006"N	104°47'15.674"W	1.14	
3569.00	14.720	261.900	3496.50	128.75	-96.01	-542.58	40°09'05.970"N	104°47'15.971"W	0.49	
3660.00	15.100	260.550	3584.43	133.72	-99.59	-565.72	40°09'05.935"N	104°47'16.269"W	0.57	
3752.00	14.380	259.220	3673.41	139.22	-103.69	-588.76	40°09'05.894"N	104°47'16.566"W	0.86	
3843.00	15.600	260.230	3761.31	144.81	-107.88	-611.92	40°09'05.853"N	104°47'16.864"W	1.37	
3935.00	15.220	261.120	3850.00	150.23	-111.85	-636.05	40°09'05.814"N	104°47'17.175"W	0.49	
4027.00	15.680	259.850	3938.68	155.74	-115.90	-660.22	40°09'05.774"N	104°47'17.486"W	0.62	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 AGGREGATE STATE 13N-16HZ (2389'FSL & 1639'FWL, SEC.09)
Area	COLORADO	Well	AGGREGATE STATE 13N-16HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	AGGREGATE STATE 13N-16HZ AWB
Facility	SEC.09-T2N-R66W		

WELLPATH DATA (168 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4119.00	14.130	258.200	4027.58	161.63	-120.39	-683.45	40°09'05.729"N	104°47'17.786"W	1.75	
4211.00	13.720	258.590	4116.87	167.39	-124.84	-705.13	40°09'05.685"N	104°47'18.065"W	0.46	
4295.00	13.420	259.340	4198.53	172.33	-128.62	-724.48	40°09'05.648"N	104°47'18.314"W	0.41	
4381.00	10.030	255.230	4282.72	177.12	-132.37	-741.53	40°09'05.611"N	104°47'18.534"W	4.06	
4466.00	8.750	254.610	4366.58	181.52	-135.98	-754.92	40°09'05.575"N	104°47'18.706"W	1.51	
4551.00	7.960	267.050	4450.69	184.27	-138.00	-767.04	40°09'05.555"N	104°47'18.862"W	2.31	
4637.00	6.600	274.530	4535.99	184.85	-137.91	-777.91	40°09'05.556"N	104°47'19.002"W	1.92	
4722.00	6.370	275.880	4620.45	184.56	-137.04	-787.47	40°09'05.565"N	104°47'19.125"W	0.32	
4807.00	4.410	279.230	4705.07	184.04	-136.04	-795.39	40°09'05.575"N	104°47'19.227"W	2.33	
4892.00	3.760	281.970	4789.85	183.30	-134.93	-801.34	40°09'05.585"N	104°47'19.304"W	0.80	
4977.00	1.890	288.700	4874.75	182.52	-133.91	-805.39	40°09'05.596"N	104°47'19.356"W	2.23	
5062.00	0.740	18.360	4959.73	181.62	-132.94	-806.55	40°09'05.605"N	104°47'19.371"W	2.38	
5233.00	0.650	25.600	5130.72	179.65	-131.01	-805.78	40°09'05.624"N	104°47'19.361"W	0.07	
5403.00	0.830	16.820	5300.70	177.56	-128.96	-805.01	40°09'05.644"N	104°47'19.351"W	0.12	
5573.00	0.550	140.480	5470.70	176.96	-128.42	-804.13	40°09'05.650"N	104°47'19.340"W	0.72	
5743.00	1.200	190.440	5640.68	179.33	-130.80	-803.94	40°09'05.626"N	104°47'19.327"W	0.56	
5913.00	1.260	147.140	5810.64	182.60	-134.12	-803.25	40°09'05.594"N	104°47'19.328"W	0.53	
6084.00	1.240	135.980	5981.60	185.36	-137.03	-800.94	40°09'05.565"N	104°47'19.299"W	0.14	
6254.00	0.260	203.630	6151.59	186.97	-138.70	-799.82	40°09'05.548"N	104°47'19.284"W	0.69	
6424.00	0.250	115.410	6321.59	187.47	-139.21	-799.64	40°09'05.543"N	104°47'19.282"W	0.21	
6509.00	0.810	121.880	6406.58	187.82	-139.61	-798.96	40°09'05.539"N	104°47'19.273"W	0.66	
6594.00	0.700	258.780	6491.58	188.24	-140.03	-798.96	40°09'05.535"N	104°47'19.273"W	1.65	
6679.00	0.450	257.720	6576.57	188.46	-140.20	-799.79	40°09'05.533"N	104°47'19.284"W	0.29	
6722.00	0.310	228.550	6619.57	188.59	-140.31	-800.04	40°09'05.532"N	104°47'19.287"W	0.55	
6765.00	3.670	188.910	6662.54	190.04	-141.75	-800.35	40°09'05.518"N	104°47'19.291"W	7.99	
6808.00	9.510	186.130	6705.24	194.97	-146.65	-800.94	40°09'05.470"N	104°47'19.299"W	13.60	
6850.00	14.380	185.350	6746.32	203.65	-155.30	-801.80	40°09'05.384"N	104°47'19.310"W	11.60	
6893.00	14.860	185.170	6787.93	214.50	-166.10	-802.79	40°09'05.277"N	104°47'19.322"W	1.12	
6935.00	16.750	184.300	6828.34	225.93	-177.50	-803.73	40°09'05.165"N	104°47'19.335"W	4.54	
6978.00	22.140	185.250	6868.87	240.24	-191.76	-804.94	40°09'05.024"N	104°47'19.350"W	12.56	
7020.00	27.900	185.830	6906.91	257.98	-209.43	-806.66	40°09'04.849"N	104°47'19.372"W	13.73	
7063.00	31.220	184.820	6944.31	279.18	-230.55	-808.62	40°09'04.641"N	104°47'19.397"W	7.81	
7105.00	34.190	184.300	6979.65	301.87	-253.17	-810.42	40°09'04.417"N	104°47'19.421"W	7.10	
7148.00	38.820	183.730	7014.20	327.44	-278.68	-812.20	40°09'04.165"N	104°47'19.444"W	10.80	
7191.00	44.770	182.820	7046.25	356.09	-307.28	-813.83	40°09'03.882"N	104°47'19.464"W	13.91	
7234.00	46.680	184.070	7076.26	386.87	-338.01	-815.68	40°09'03.579"N	104°47'19.488"W	4.91	
7276.00	50.090	184.820	7104.15	418.26	-369.31	-818.12	40°09'03.269"N	104°47'19.520"W	8.23	
7319.00	53.340	185.290	7130.79	452.00	-402.93	-821.10	40°09'02.937"N	104°47'19.558"W	7.61	
7361.00	59.900	185.030	7153.89	487.03	-437.84	-824.25	40°09'02.592"N	104°47'19.599"W	15.63	
7404.00	63.980	184.060	7174.11	524.96	-475.65	-827.25	40°09'02.218"N	104°47'19.637"W	9.69	
7446.00	65.390	183.850	7192.07	562.93	-513.53	-829.86	40°09'01.844"N	104°47'19.671"W	3.39	
7489.00	68.970	183.410	7208.74	602.56	-553.08	-832.37	40°09'01.453"N	104°47'19.703"W	8.38	
7531.00	72.350	183.480	7222.65	642.18	-592.63	-834.75	40°09'01.062"N	104°47'19.734"W	8.05	
7574.00	76.930	183.460	7234.04	683.63	-634.01	-837.26	40°09'00.654"N	104°47'19.766"W	10.65	
7616.00	81.870	183.190	7241.76	724.90	-675.21	-839.65	40°09'00.246"N	104°47'19.797"W	11.78	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 AGGREGATE STATE 13N-16HZ (2389'FSL & 1639'FWL, SEC.09)
Area	COLORADO	Well	AGGREGATE STATE 13N-16HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	AGGREGATE STATE 13N-16HZ AWB
Facility	SEC.09-T2N-R66W		

WELLPATH DATA (168 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7651.00	86.880	184.180	7245.19	759.72	-709.96	-841.89	40°08'59.903"N	104°47'19.826"W	14.59	
7678.00†	89.560	184.733	7246.03	786.70	-736.86	-843.99	40°08'59.637"N	104°47'19.853"W	10.14	7" Casing Point
7692.00	90.950	185.020	7245.97	800.70	-750.81	-845.18	40°08'59.499"N	104°47'19.868"W	10.14	
7783.00	91.290	183.640	7244.19	891.67	-841.53	-852.05	40°08'58.603"N	104°47'19.957"W	1.56	
7875.00	89.840	184.230	7243.28	983.66	-933.30	-858.36	40°08'57.696"N	104°47'20.038"W	1.70	
7966.00	89.780	183.760	7243.58	1074.65	-1024.08	-864.70	40°08'56.799"N	104°47'20.119"W	0.52	
8058.00	90.670	184.530	7243.22	1166.65	-1115.84	-871.35	40°08'55.892"N	104°47'20.205"W	1.28	
8149.00	88.910	182.850	7243.55	1257.64	-1206.64	-877.21	40°08'54.995"N	104°47'20.280"W	2.67	
8242.00	88.950	183.200	7245.29	1350.62	-1299.50	-882.12	40°08'54.077"N	104°47'20.343"W	0.38	
8333.00	90.240	184.100	7245.93	1441.61	-1390.31	-887.91	40°08'53.180"N	104°47'20.418"W	1.73	
8425.00	90.030	182.950	7245.72	1533.61	-1482.13	-893.56	40°08'52.272"N	104°47'20.491"W	1.27	
8517.00	89.630	181.830	7245.99	1625.59	-1574.05	-897.40	40°08'51.364"N	104°47'20.540"W	1.29	
8608.00	90.000	181.120	7246.28	1716.54	-1665.02	-899.74	40°08'50.465"N	104°47'20.570"W	0.88	
8700.00	90.340	181.740	7246.01	1808.48	-1756.99	-902.04	40°08'49.556"N	104°47'20.600"W	0.77	
8791.00	90.980	181.450	7244.96	1899.42	-1847.95	-904.57	40°08'48.657"N	104°47'20.632"W	0.77	
8883.00	90.210	181.870	7244.01	1991.37	-1939.90	-907.24	40°08'47.749"N	104°47'20.667"W	0.95	
8975.00	88.890	183.330	7244.73	2083.35	-2031.80	-911.41	40°08'46.840"N	104°47'20.720"W	2.14	
9067.00	88.800	184.070	7246.58	2175.33	-2123.59	-917.35	40°08'45.933"N	104°47'20.797"W	0.81	
9158.00	88.550	183.750	7248.69	2266.30	-2214.35	-923.55	40°08'45.036"N	104°47'20.877"W	0.45	
9250.00	88.690	184.120	7250.90	2358.27	-2306.11	-929.86	40°08'44.130"N	104°47'20.958"W	0.43	
9341.00	88.730	183.780	7252.95	2449.25	-2396.87	-936.13	40°08'43.233"N	104°47'21.038"W	0.38	
9432.00	89.410	183.690	7254.43	2540.23	-2487.66	-942.05	40°08'42.336"N	104°47'21.115"W	0.75	
9524.00	89.530	183.210	7255.28	2632.23	-2579.49	-947.59	40°08'41.428"N	104°47'21.186"W	0.54	
9616.00	89.560	182.920	7256.01	2724.22	-2671.36	-952.51	40°08'40.520"N	104°47'21.249"W	0.32	
9708.00	89.010	182.620	7257.16	2816.21	-2763.24	-956.96	40°08'39.612"N	104°47'21.307"W	0.68	
9800.00	88.610	181.390	7259.07	2908.16	-2855.17	-960.17	40°08'38.704"N	104°47'21.348"W	1.41	
9892.00	89.780	182.840	7260.36	3000.12	-2947.09	-963.57	40°08'37.795"N	104°47'21.392"W	2.03	
9977.00	89.350	183.030	7261.01	3085.11	-3031.98	-967.92	40°08'36.957"N	104°47'21.448"W	0.55	
10062.00	89.960	182.260	7261.52	3170.10	-3116.88	-971.84	40°08'36.118"N	104°47'21.498"W	1.16	
10146.00	91.820	183.290	7260.21	3254.08	-3200.77	-975.91	40°08'35.289"N	104°47'21.550"W	2.53	
10232.00	92.000	183.000	7257.35	3340.03	-3286.59	-980.62	40°08'34.440"N	104°47'21.611"W	0.40	
10317.00	91.480	183.970	7254.77	3424.99	-3371.39	-985.79	40°08'33.602"N	104°47'21.677"W	1.29	
10402.00	91.260	183.690	7252.73	3509.96	-3456.18	-991.47	40°08'32.765"N	104°47'21.751"W	0.42	
10487.00	91.440	183.700	7250.73	3594.94	-3540.98	-996.94	40°08'31.927"N	104°47'21.821"W	0.21	
10572.00	90.210	184.480	7249.51	3679.92	-3625.75	-1003.00	40°08'31.089"N	104°47'21.899"W	1.71	
10657.00	89.840	183.880	7249.47	3764.92	-3710.53	-1009.20	40°08'30.251"N	104°47'21.979"W	0.83	
10742.00	89.440	183.400	7250.01	3849.91	-3795.35	-1014.60	40°08'29.413"N	104°47'22.048"W	0.74	
10827.00	89.970	184.440	7250.44	3934.91	-3880.15	-1020.41	40°08'28.575"N	104°47'22.123"W	1.37	
10912.00	89.130	183.570	7251.11	4019.90	-3964.94	-1026.34	40°08'27.737"N	104°47'22.199"W	1.42	
10997.00	90.180	183.670	7251.62	4104.90	-4049.77	-1031.71	40°08'26.899"N	104°47'22.268"W	1.24	
11082.00	89.810	183.240	7251.63	4189.90	-4134.61	-1036.83	40°08'26.060"N	104°47'22.334"W	0.67	
11167.00	90.920	184.610	7251.09	4274.89	-4219.41	-1042.65	40°08'25.222"N	104°47'22.409"W	2.07	
11252.00	90.580	184.230	7249.98	4359.87	-4304.15	-1049.20	40°08'24.385"N	104°47'22.493"W	0.60	
11337.00	90.830	184.000	7248.93	4444.86	-4388.92	-1055.30	40°08'23.547"N	104°47'22.572"W	0.40	
11422.00	90.890	184.500	7247.65	4529.84	-4473.68	-1061.60	40°08'22.710"N	104°47'22.653"W	0.59	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 AGGREGATE STATE 13N-16HZ (2389'FSL & 1639'FWL, SEC.09)
Area	COLORADO	Well	AGGREGATE STATE 13N-16HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	AGGREGATE STATE 13N-16HZ AWP
Facility	SEC.09-T2N-R66W		

WELLPATH DATA (168 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11507.00	91.010	183.880	7246.24	4614.82	-4558.44	-1067.81	40°08'21.872"N	104°47'22.733"W	0.74	
11592.00	90.700	184.430	7244.98	4699.81	-4643.21	-1073.96	40°08'21.034"N	104°47'22.812"W	0.74	
11678.00	90.670	183.890	7243.95	4785.79	-4728.97	-1080.20	40°08'20.187"N	104°47'22.892"W	0.63	
11763.00	90.520	184.680	7243.07	4870.78	-4813.73	-1086.55	40°08'19.349"N	104°47'22.974"W	0.95	
11848.00	90.550	184.280	7242.27	4955.76	-4898.47	-1093.19	40°08'18.512"N	104°47'23.060"W	0.47	
11933.00	88.980	183.500	7242.62	5040.76	-4983.27	-1098.96	40°08'17.674"N	104°47'23.134"W	2.06	
12018.00	89.160	183.140	7244.00	5125.74	-5068.11	-1103.88	40°08'16.835"N	104°47'23.197"W	0.47	
12103.00	89.160	182.270	7245.25	5210.73	-5153.01	-1107.89	40°08'15.996"N	104°47'23.249"W	1.02	
12188.00	89.160	183.390	7246.49	5295.71	-5237.89	-1112.09	40°08'15.158"N	104°47'23.303"W	1.32	
12273.00	88.860	182.990	7247.96	5380.70	-5322.75	-1116.82	40°08'14.319"N	104°47'23.364"W	0.59	
12358.00	89.160	184.000	7249.43	5465.68	-5407.58	-1122.00	40°08'13.481"N	104°47'23.430"W	1.24	
12444.00	88.300	183.660	7251.34	5551.66	-5493.36	-1127.74	40°08'12.633"N	104°47'23.504"W	1.08	
12529.00	88.090	183.150	7254.01	5636.62	-5578.17	-1132.79	40°08'11.795"N	104°47'23.569"W	0.65	
12613.00	89.290	184.870	7255.93	5720.59	-5661.94	-1138.66	40°08'10.967"N	104°47'23.645"W	2.50	
12698.00	88.950	183.790	7257.24	5805.57	-5746.68	-1145.08	40°08'10.130"N	104°47'23.727"W	1.33	
12784.00	89.100	182.860	7258.70	5891.55	-5832.53	-1150.06	40°08'09.281"N	104°47'23.791"W	1.10	
12868.00	89.100	181.990	7260.02	5975.53	-5916.44	-1153.62	40°08'08.452"N	104°47'23.837"W	1.04	
12954.00	89.870	182.170	7260.80	6061.50	-6002.38	-1156.74	40°08'07.603"N	104°47'23.877"W	0.92	
13039.00	90.000	183.740	7260.89	6146.49	-6087.26	-1161.12	40°08'06.764"N	104°47'23.933"W	1.85	
13124.00	89.100	183.180	7261.56	6231.49	-6172.10	-1166.25	40°08'05.926"N	104°47'23.999"W	1.25	
13209.00	89.930	183.840	7262.28	6316.48	-6256.94	-1171.45	40°08'05.087"N	104°47'24.066"W	1.25	
13294.00	89.500	185.490	7262.70	6401.46	-6341.65	-1178.37	40°08'04.250"N	104°47'24.155"W	2.01	
13379.00	89.010	184.500	7263.81	6486.42	-6426.32	-1185.77	40°08'03.413"N	104°47'24.251"W	1.30	
13464.00	89.780	184.430	7264.70	6571.40	-6511.06	-1192.38	40°08'02.576"N	104°47'24.336"W	0.91	
13549.00	90.400	184.290	7264.57	6656.39	-6595.81	-1198.85	40°08'01.738"N	104°47'24.419"W	0.75	
13635.00	90.430	184.060	7263.95	6742.38	-6681.58	-1205.11	40°08'00.891"N	104°47'24.499"W	0.27	
13719.00	90.580	183.530	7263.21	6826.38	-6765.40	-1210.67	40°08'00.063"N	104°47'24.571"W	0.66	
13804.00	90.180	183.240	7262.64	6911.38	-6850.24	-1215.68	40°07'59.224"N	104°47'24.636"W	0.58	
13889.00	90.670	182.700	7262.01	6996.37	-6935.13	-1220.09	40°07'58.385"N	104°47'24.692"W	0.86	
13974.00	90.760	182.780	7260.95	7081.36	-7020.02	-1224.15	40°07'57.546"N	104°47'24.744"W	0.14	
14059.00	89.560	181.150	7260.72	7166.32	-7104.97	-1227.07	40°07'56.707"N	104°47'24.782"W	2.38	
14087.00	89.410	181.210	7260.97	7194.30	-7132.96	-1227.64	40°07'56.430"N	104°47'24.789"W	0.58	Last BHI MWD+IFR Surveys
14141.00	89.410	181.210	7261.52	7248.25	-7186.95	-1228.78	40°07'55.897"N	104°47'24.804"W	0.00	Projection to Bit

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 AGGREGATE STATE 13N-16HZ (2389'FSL & 1639'FWL, SEC.09)
Area	COLORADO	Well	AGGREGATE STATE 13N-16HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	AGGREGATE STATE 13N-16HZ AWB
Facility	SEC.09-T2N-R66W		

HOLE & CASING SECTIONS - Ref Wellbore: AGGREGATE STATE 13N-16HZ AWB Ref Wellpath: AGGREGATE STATE 13N-16HZ 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]
13.5in Open Hole	16.00	1038.00	1022.00	16.00	1037.96	0.00	0.00	3.85	5.72
9.625in Casing Surface	16.00	1028.00	1012.00	16.00	1027.96	0.00	0.00	3.87	5.70
8.75in Open Hole	1038.00	7697.00	6659.00	1037.96	7245.88	3.85	5.72	-755.79	-845.61
7in Casing Intermediate	16.00	7678.00	7662.00	16.00	7246.03	0.00	0.00	-736.86	-843.99
6.125in Open Hole	7697.00	14141.00	6444.00	7245.88	7261.52	-755.79	-845.61	-7186.95	-1228.78

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.09-T2N-R66W SECTION LINES		-7.00	0.41	443.62	3200073.31	1298996.37	40°09'06.923"N	104°47'03.271"W	polygon
SEC.16-T2N-R66W SECTION LINES		-7.00	0.41	443.62	3200073.31	1298996.37	40°09'06.923"N	104°47'03.271"W	polygon
SEC.09-T2N-R66W HARD LINES (460' SETBACKS)		0.00	0.00	0.00	3199629.73	1298992.39	40°09'06.919"N	104°47'08.984"W	polygon
SEC.16-T2N-R66W HARD LINES (460' SETBACKS)		0.00	0.00	0.00	3199629.73	1298992.39	40°09'06.919"N	104°47'08.984"W	polygon
AGGREGATE 13N-16HZ LANDBOX REV-2		7210.00	0.00	0.00	3199629.73	1298992.39	40°09'06.919"N	104°47'08.984"W	polygon
AGGREGATE STATE 13N-16HZ BHL (460'FSL & 360'FWL, SEC.16) REV-2		7210.00	-7212.28	-1288.48	3198399.43	1291770.29	40°07'55.646"N	104°47'25.573"W	point
AGGREGATE STATE 13N-16HZ BHL ON PLAT (460'FSL & 410'FWL, SEC.16) REV-1		7210.00	-7212.28	-1238.48	3198449.43	1291770.69	40°07'55.646"N	104°47'24.929"W	point
AGGREGATE STATE 13N-16HZ BHL (460'FSL & 210'FWL, SEC.16) REV-5		7250.00	-7212.28	-1438.48	3198249.44	1291769.08	40°07'55.646"N	104°47'27.504"W	point
AGGREGATE STATE 13N-16HZ BHL (460'FSL & 320'FWL, SEC.17) REV-4		7250.00	-7212.28	-1968.48	3197719.48	1291764.81	40°07'55.646"N	104°47'34.327"W	point
AGGREGATE STATE 13N-16HZ BHL (460'FSL & 360'FWL, SEC.16) REV-3		7250.00	-7212.28	-1288.48	3198399.43	1291770.29	40°07'55.646"N	104°47'25.573"W	point
AGGREGATE STATE 13N-16HZ BHL ON PLAT (460'FSL & 410'FWL, SEC.16) REV-6		7250.00	-7212.28	-1238.48	3198449.43	1291770.69	40°07'55.646"N	104°47'24.929"W	point

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 AGGREGATE STATE 13N-16HZ (2389'FSL & 1639'FWL, SEC.09)
Area	COLORADO	Well	AGGREGATE STATE 13N-16HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	AGGREGATE STATE 13N-16HZ AWB
Facility	SEC.09-T2N-R66W		

WELLPATH COMPOSITION - Ref Wellbore: AGGREGATE STATE 13N-16HZ AWB Ref Wellpath: AGGREGATE STATE 13N-16HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	922.00	Generic gyro - continuous (Standard)	MS ENERGY SERVICES GYRO SURVEYS <116-922>	AGGREGATE STATE 13N-16HZ AWB
922.00	7651.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1082-7651>	AGGREGATE STATE 13N-16HZ AWB
7651.00	14087.00	NaviTrak (MAGCORR,IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7692-14087>	AGGREGATE STATE 13N-16HZ AWB
14087.00	14141.00	Blind Drilling (std)	Projection to bit	AGGREGATE STATE 13N-16HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#08 AGGREGATE STATE 13N-16HZ (2389'FSL & 1639'FWL, SEC.09)
Area	COLORADO	Well	AGGREGATE STATE 13N-16HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	AGGREGATE STATE 13N-16HZ AWB
Facility	SEC.09-T2N-R66W		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
16.00	0.000	47.970	16.00	Tie-On	
116.00	0.800	47.970	116.00	Begin GYRO Surveys	
922.00	0.200	174.480	921.96	Tie-Into GYRO Surveys	
1082.00	0.150	107.580	1081.96	Begin BHI MWD+IFR Surveys	
7678.00	89.560	184.733	7246.03	7" Casing Point	
14087.00	89.410	181.210	7260.97	Last BHI MWD+IFR Surveys	
14141.00	89.410	181.210	7261.52	Projection to Bit	