

Location:	COLORADO	Slot:	SLOT#05 AGGREGATE STATE 15N-16HZ (2389'FSL & 970'FEL, SEC.09)
Field:	WELD COUNTY (KERR MCGEE)	Well:	AGGREGATE STATE 15N-16HZ
Facility:	SEC.09-T2N-R66W	Wellbore:	AGGREGATE STATE 15N-16HZ PWB

Plot reference wellpath is AGGREGATE STATE 15N-16HZ (REV-A.0) PWP

True vertical depths are referenced to ENSIGN 145 (13KB) (RKB)

Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet

Measured depths are referenced to ENSIGN 145 (13KB) (RKB)

North Reference: True north
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ENSIGN 145 (13KB) (RKB) to Mean Sea Level: 4937 feet

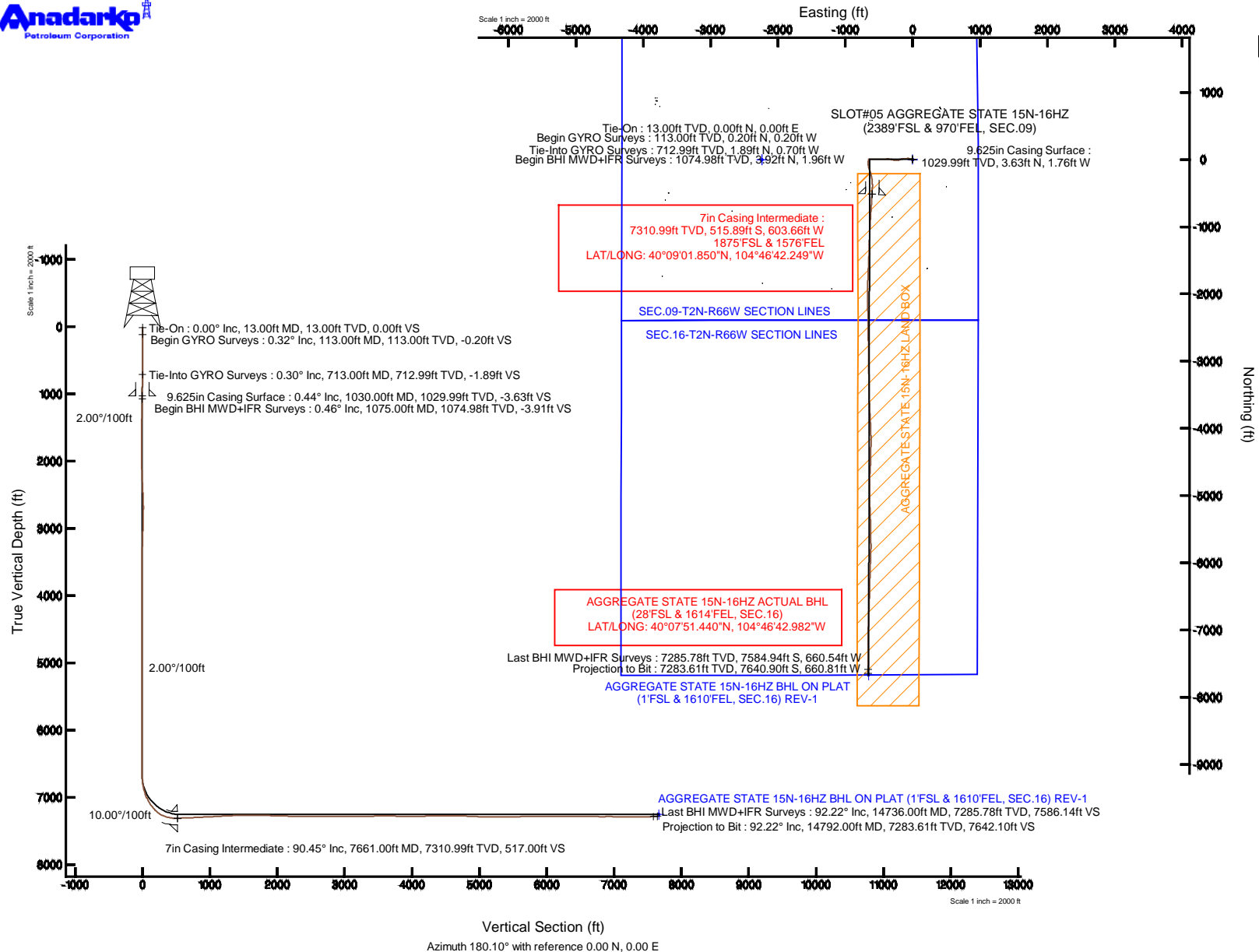
Scale: True distance

Mean Sea Level to Mud line (At Slot: SLOT#05 AGGREGATE STATE 15N-16HZ (2389'FSL & 970'FEL, SEC.09)): 0 feet

Depths are in feet

Coordinates are in feet referenced to Slot

Created by: precain on 21/May/2014



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 AGGREGATE STATE 15N-16HZ (2389'FSL & 970'FEL, SEC.09)
Area	COLORADO	Well	AGGREGATE STATE 15N-16HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	AGGREGATE STATE 15N-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	21/May/2014 at 16:11
Convergence at slot	n/a	Database/Source file	WellArchitectDB/AGGREGATE_STATE_15N-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	-768.66	-403.39	3202309.14	1299017.05	40°09'06.948"N	104°46'34.475"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	ENSIGN 145 (13'KB) (RKB) to Facility Vertical Datum	4937.00ft
Horizontal Reference Pt	Slot	ENSIGN 145 (13'KB) (RKB) to Mean Sea Level	4937.00ft
Vertical Reference Pt	ENSIGN 145 (13'KB) (RKB)	ENSIGN 145 (13'KB) (RKB) to Mud Line at Slot (SLOT#05 AGGREGATE STATE 15N-16HZ (2389'FSL & 970'FEL, SEC.09))	4937.00ft
MD Reference Pt	ENSIGN 145 (13'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	180.10°

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Area	COLORADO	Well	AGGREGATE STATE 15N-16HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	AGGREGATE STATE 15N-16HZ AWB
Facility	SEC.09-T2N-R66W		

### WELLPATH DATA (169 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	315.480	0.00	0.00	0.00	0.00	40°09'06.948"N	104°46'34.475"W	0.00	
13.00	0.000	315.480	13.00	0.00	0.00	0.00	40°09'06.948"N	104°46'34.475"W	0.00	Tie-On
113.00	0.320	315.480	113.00	-0.20	0.20	-0.20	40°09'06.950"N	104°46'34.478"W	0.32	Begin GYRO Surveys
213.00	0.360	113.230	213.00	-0.27	0.27	-0.10	40°09'06.951"N	104°46'34.476"W	0.67	
313.00	0.310	351.750	313.00	-0.42	0.42	0.15	40°09'06.952"N	104°46'34.473"W	0.59	
413.00	0.380	271.880	413.00	-0.70	0.70	-0.22	40°09'06.955"N	104°46'34.478"W	0.45	
513.00	0.200	305.430	513.00	-0.81	0.81	-0.70	40°09'06.956"N	104°46'34.484"W	0.24	
613.00	0.450	19.030	612.99	-1.28	1.28	-0.71	40°09'06.961"N	104°46'34.484"W	0.44	
713.00	0.300	333.750	712.99	-1.89	1.89	-0.70	40°09'06.967"N	104°46'34.484"W	0.32	Tie-Into GYRO Surveys
1075.00	0.460	324.350	1074.98	-3.91	3.92	-1.96	40°09'06.987"N	104°46'34.500"W	0.05	Begin BHI MWD+IFR Surveys
1168.00	1.610	330.730	1167.97	-5.36	5.36	-2.82	40°09'07.001"N	104°46'34.511"W	1.24	
1262.00	2.670	304.340	1261.90	-7.74	7.75	-5.27	40°09'07.025"N	104°46'34.543"W	1.51	
1355.00	4.150	286.690	1354.74	-9.92	9.94	-10.29	40°09'07.046"N	104°46'34.607"W	1.93	
1449.00	6.260	277.240	1448.35	-11.53	11.56	-18.63	40°09'07.062"N	104°46'34.715"W	2.42	
1542.00	8.000	280.680	1540.62	-13.34	13.40	-30.02	40°09'07.080"N	104°46'34.862"W	1.93	
1636.00	9.820	274.090	1633.49	-15.10	15.18	-44.45	40°09'07.098"N	104°46'35.047"W	2.22	
1729.00	11.590	271.510	1724.87	-15.88	15.99	-61.70	40°09'07.106"N	104°46'35.270"W	1.97	
1823.00	11.890	268.230	1816.90	-15.80	15.94	-80.82	40°09'07.106"N	104°46'35.516"W	0.78	
1916.00	12.280	266.890	1907.84	-14.93	15.11	-100.27	40°09'07.097"N	104°46'35.766"W	0.52	
2010.00	12.000	265.690	1999.74	-13.61	13.83	-119.99	40°09'07.085"N	104°46'36.020"W	0.40	
2103.00	11.640	261.770	2090.77	-11.51	11.77	-138.92	40°09'07.064"N	104°46'36.264"W	0.95	
2197.00	11.140	257.770	2182.92	-8.20	8.48	-157.18	40°09'07.032"N	104°46'36.499"W	0.99	
2290.00	10.470	256.820	2274.27	-4.33	4.65	-174.19	40°09'06.994"N	104°46'36.718"W	0.75	
2384.00	10.150	255.140	2366.75	-0.23	0.58	-190.51	40°09'06.954"N	104°46'36.928"W	0.47	
2477.00	9.560	249.560	2458.38	4.59	-4.22	-205.67	40°09'06.906"N	104°46'37.124"W	1.21	
2570.00	8.720	254.800	2550.20	9.16	-8.76	-219.71	40°09'06.861"N	104°46'37.304"W	1.27	
2660.00	8.180	263.420	2639.23	11.71	-11.28	-232.65	40°09'06.836"N	104°46'37.471"W	1.53	
2750.00	8.410	274.430	2728.29	11.96	-11.51	-245.57	40°09'06.834"N	104°46'37.638"W	1.78	
2840.00	8.770	281.340	2817.28	10.13	-9.65	-258.86	40°09'06.853"N	104°46'37.809"W	1.21	
2930.00	8.170	279.820	2906.30	7.71	-7.21	-271.89	40°09'06.877"N	104°46'37.976"W	0.71	
3020.00	7.750	278.450	2995.43	5.75	-5.23	-284.20	40°09'06.896"N	104°46'38.135"W	0.51	
3110.00	9.040	283.980	3084.47	3.17	-2.63	-297.06	40°09'06.922"N	104°46'38.301"W	1.69	
3200.00	8.990	279.330	3173.36	0.35	0.22	-310.86	40°09'06.950"N	104°46'38.478"W	0.81	
3290.00	9.320	284.040	3262.21	-2.53	3.13	-324.87	40°09'06.979"N	104°46'38.659"W	0.91	
3380.00	9.120	280.420	3351.05	-5.56	6.18	-338.95	40°09'07.009"N	104°46'38.840"W	0.68	
3470.00	8.780	274.020	3439.96	-7.31	7.96	-352.82	40°09'07.027"N	104°46'39.019"W	1.17	
3560.00	8.600	271.720	3528.92	-7.97	8.64	-366.40	40°09'07.033"N	104°46'39.194"W	0.43	
3650.00	8.800	268.190	3617.89	-7.93	8.62	-380.01	40°09'07.033"N	104°46'39.369"W	0.63	
3740.00	10.130	268.950	3706.66	-7.54	8.26	-394.80	40°09'07.030"N	104°46'39.559"W	1.48	
3830.00	10.300	268.690	3795.24	-7.18	7.93	-410.76	40°09'07.026"N	104°46'39.765"W	0.20	
3920.00	10.530	267.240	3883.75	-6.57	7.35	-427.02	40°09'07.021"N	104°46'39.974"W	0.39	
4010.00	9.880	269.390	3972.33	-6.06	6.87	-442.95	40°09'07.016"N	104°46'40.179"W	0.84	
4100.00	10.600	269.880	4060.90	-5.93	6.77	-458.95	40°09'07.015"N	104°46'40.385"W	0.81	
4190.00	11.650	269.270	4149.20	-5.77	6.64	-476.32	40°09'07.014"N	104°46'40.609"W	1.17	
4280.00	10.560	265.540	4237.52	-4.98	5.88	-493.63	40°09'07.006"N	104°46'40.832"W	1.45	

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Area	COLORADO	Well	AGGREGATE STATE 15N-16HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	AGGREGATE STATE 15N-16HZ AWP
Facility	SEC.09-T2N-R66W		

WELLPATH DATA (169 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4370.00	10.420	270.210	4326.01	-4.34	5.27	-509.99	40°09'07.000"N	104°46'41.043"W	0.96	
4460.00	10.300	269.890	4414.55	-4.32	5.29	-526.17	40°09'07.000"N	104°46'41.251"W	0.15	
4550.00	11.070	273.100	4502.99	-4.74	5.74	-542.85	40°09'07.005"N	104°46'41.466"W	1.08	
4640.00	9.890	270.550	4591.48	-5.26	6.28	-559.20	40°09'07.010"N	104°46'41.677"W	1.41	
4730.00	9.720	267.200	4680.17	-4.93	5.98	-574.52	40°09'07.007"N	104°46'41.874"W	0.66	
4820.00	9.380	269.600	4768.92	-4.48	5.56	-589.44	40°09'07.003"N	104°46'42.066"W	0.58	
4910.00	6.480	268.360	4858.05	-4.26	5.36	-601.86	40°09'07.001"N	104°46'42.226"W	3.23	
5000.00	6.070	268.810	4947.51	-4.00	5.12	-611.69	40°09'06.999"N	104°46'42.352"W	0.46	
5090.00	4.870	275.730	5037.10	-4.27	5.40	-620.25	40°09'07.001"N	104°46'42.463"W	1.52	
5180.00	4.100	276.760	5126.83	-5.01	6.16	-627.24	40°09'07.009"N	104°46'42.553"W	0.86	
5270.00	2.900	285.590	5216.66	-5.99	7.15	-632.63	40°09'07.019"N	104°46'42.622"W	1.46	
5360.00	2.490	273.470	5306.56	-6.72	7.88	-636.78	40°09'07.026"N	104°46'42.676"W	0.78	
5450.00	0.380	304.340	5396.53	-7.00	8.17	-638.98	40°09'07.029"N	104°46'42.704"W	2.41	
5540.00	0.800	287.170	5486.52	-7.35	8.52	-639.82	40°09'07.032"N	104°46'42.715"W	0.50	
5630.00	1.070	241.310	5576.51	-7.13	8.31	-641.16	40°09'07.030"N	104°46'42.732"W	0.86	
5720.00	0.930	256.050	5666.50	-6.55	7.73	-642.61	40°09'07.024"N	104°46'42.751"W	0.32	
5810.00	0.700	230.260	5756.49	-6.02	7.20	-643.74	40°09'07.019"N	104°46'42.765"W	0.47	
5990.00	0.770	233.620	5936.47	-4.60	5.78	-645.56	40°09'07.005"N	104°46'42.789"W	0.05	
6079.00	0.500	276.530	6025.47	-4.28	5.47	-646.42	40°09'07.002"N	104°46'42.800"W	0.59	
6259.00	1.230	307.870	6205.45	-5.56	6.74	-648.73	40°09'07.015"N	104°46'42.829"W	0.47	
6349.00	0.480	87.030	6295.44	-6.17	7.36	-649.12	40°09'07.021"N	104°46'42.834"W	1.80	
6529.00	0.490	282.130	6475.44	-6.37	7.56	-649.11	40°09'07.023"N	104°46'42.834"W	0.53	
6675.00	0.610	252.340	6621.43	-6.26	7.45	-650.47	40°09'07.022"N	104°46'42.852"W	0.21	
6709.00	1.130	251.190	6655.43	-6.10	7.29	-650.96	40°09'07.020"N	104°46'42.858"W	1.53	
6754.00	2.820	210.280	6700.40	-5.00	6.19	-651.93	40°09'07.009"N	104°46'42.871"W	4.67	
6799.00	4.940	194.000	6745.30	-2.16	3.35	-652.96	40°09'06.981"N	104°46'42.884"W	5.26	
6844.00	8.130	192.250	6790.00	2.83	-1.64	-654.10	40°09'06.932"N	104°46'42.899"W	7.10	
6889.00	10.670	193.070	6834.39	10.01	-8.80	-655.72	40°09'06.861"N	104°46'42.920"W	5.65	
6935.00	13.240	192.590	6879.39	19.30	-18.10	-657.83	40°09'06.769"N	104°46'42.947"W	5.59	
6980.00	16.890	187.360	6922.84	30.82	-29.61	-659.80	40°09'06.655"N	104°46'42.972"W	8.65	
7025.00	21.000	180.120	6965.40	45.38	-44.17	-660.65	40°09'06.511"N	104°46'42.983"W	10.51	
7070.00	24.540	178.950	7006.88	62.79	-61.58	-660.50	40°09'06.339"N	104°46'42.981"W	7.93	
7115.00	28.100	172.910	7047.22	82.66	-81.45	-659.02	40°09'06.143"N	104°46'42.962"W	9.89	
7160.00	32.030	167.820	7086.16	104.84	-103.64	-655.19	40°09'05.924"N	104°46'42.913"W	10.40	
7205.00	36.700	164.630	7123.30	129.48	-128.29	-649.10	40°09'05.680"N	104°46'42.834"W	11.12	
7250.00	40.810	160.440	7158.39	156.30	-155.13	-640.61	40°09'05.415"N	104°46'42.725"W	10.83	
7295.00	46.370	159.610	7190.97	185.43	-184.27	-630.00	40°09'05.127"N	104°46'42.588"W	12.42	
7340.00	51.950	165.290	7220.40	217.85	-216.72	-619.82	40°09'04.806"N	104°46'42.457"W	15.64	
7385.00	57.640	169.500	7246.34	253.70	-252.58	-611.85	40°09'04.452"N	104°46'42.354"W	14.77	
7430.00	65.370	171.480	7267.80	292.67	-291.56	-605.34	40°09'04.067"N	104°46'42.271"W	17.61	
7475.00	71.430	176.070	7284.36	334.22	-333.12	-600.84	40°09'03.656"N	104°46'42.213"W	16.47	
7520.00	75.410	178.680	7297.20	377.29	-376.19	-598.88	40°09'03.230"N	104°46'42.187"W	10.45	
7565.00	81.320	181.930	7306.28	421.34	-420.24	-599.13	40°09'02.795"N	104°46'42.191"W	14.92	
7622.00	89.340	182.940	7310.92	478.05	-476.95	-601.54	40°09'02.235"N	104°46'42.222"W	14.18	
7661.00†	90.453	183.286	7310.99	517.00	-515.89	-603.66	40°09'01.850"N	104°46'42.249"W	2.99	7" Casing Point

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Area	COLORADO	Well	AGGREGATE STATE 15N-16HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	AGGREGATE STATE 15N-16HZ AWB
Facility	SEC.09-T2N-R66W		

### WELLPATH DATA (169 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7711.00	91.880	183.730	7309.97	566.90	-565.79	-606.72	40°09'01.357"N	104°46'42.288"W	2.99	
7789.00	92.210	183.850	7307.18	644.69	-643.57	-611.87	40°09'00.588"N	104°46'42.355"W	0.45	
7883.00	92.650	183.770	7303.20	738.41	-737.28	-618.11	40°08'59.662"N	104°46'42.435"W	0.48	
7976.00	92.950	183.790	7298.66	831.11	-829.96	-624.24	40°08'58.746"N	104°46'42.514"W	0.32	
8070.00	93.480	183.120	7293.38	924.80	-923.64	-629.89	40°08'57.820"N	104°46'42.587"W	0.91	
8163.00	92.490	183.150	7288.54	1017.54	-1016.38	-634.97	40°08'56.904"N	104°46'42.652"W	1.07	
8257.00	93.330	182.680	7283.77	1111.30	-1110.13	-639.74	40°08'55.978"N	104°46'42.713"W	1.02	
8350.00	93.020	182.610	7278.62	1204.07	-1202.89	-644.03	40°08'55.061"N	104°46'42.769"W	0.34	
8444.00	92.580	181.920	7274.03	1297.89	-1296.71	-647.74	40°08'54.134"N	104°46'42.816"W	0.87	
8537.00	92.020	180.860	7270.29	1390.79	-1389.60	-649.99	40°08'53.216"N	104°46'42.845"W	1.29	
8630.00	90.800	182.160	7268.01	1483.73	-1482.54	-652.44	40°08'52.297"N	104°46'42.877"W	1.92	
8724.00	90.300	182.500	7267.10	1577.66	-1576.46	-656.27	40°08'51.369"N	104°46'42.926"W	0.64	
8817.00	88.820	182.210	7267.82	1670.58	-1669.37	-660.09	40°08'50.451"N	104°46'42.975"W	1.62	
8911.00	89.440	182.760	7269.24	1764.49	-1763.27	-664.16	40°08'49.523"N	104°46'43.028"W	0.88	
9003.00	88.330	181.780	7271.03	1856.40	-1855.18	-667.81	40°08'48.615"N	104°46'43.075"W	1.61	
9097.00	87.740	180.670	7274.26	1950.32	-1949.10	-669.81	40°08'47.687"N	104°46'43.100"W	1.34	
9187.00	88.300	178.790	7277.37	2040.26	-2039.04	-669.39	40°08'46.798"N	104°46'43.095"W	2.18	
9277.00	89.100	179.010	7279.41	2130.22	-2129.00	-667.66	40°08'45.909"N	104°46'43.073"W	0.92	
9367.00	89.750	178.940	7280.31	2220.20	-2218.98	-666.05	40°08'45.020"N	104°46'43.052"W	0.73	
9457.00	89.750	179.120	7280.71	2310.18	-2308.97	-664.53	40°08'44.131"N	104°46'43.032"W	0.20	
9547.00	89.500	179.160	7281.29	2400.17	-2398.96	-663.18	40°08'43.241"N	104°46'43.015"W	0.28	
9637.00	89.190	178.450	7282.32	2490.14	-2488.93	-661.30	40°08'42.352"N	104°46'42.991"W	0.86	
9727.00	89.350	179.310	7283.47	2580.11	-2578.90	-659.54	40°08'41.463"N	104°46'42.968"W	0.97	
9817.00	90.060	179.340	7283.93	2670.10	-2668.90	-658.48	40°08'40.574"N	104°46'42.954"W	0.79	
9907.00	89.840	179.150	7284.01	2760.09	-2758.89	-657.30	40°08'39.684"N	104°46'42.939"W	0.32	
9997.00	89.900	178.310	7284.22	2850.06	-2848.86	-655.30	40°08'38.795"N	104°46'42.913"W	0.94	
10087.00	89.350	179.320	7284.81	2940.03	-2938.84	-653.44	40°08'37.906"N	104°46'42.889"W	1.28	
10177.00	90.000	179.210	7285.32	3030.02	-3028.83	-652.29	40°08'37.017"N	104°46'42.874"W	0.73	
10267.00	90.330	179.620	7285.06	3120.02	-3118.83	-651.37	40°08'36.127"N	104°46'42.862"W	0.58	
10357.00	90.700	179.250	7284.25	3210.01	-3208.82	-650.48	40°08'35.238"N	104°46'42.851"W	0.58	
10447.00	91.010	178.870	7282.90	3299.98	-3298.80	-649.00	40°08'34.349"N	104°46'42.832"W	0.54	
10537.00	91.450	179.160	7280.97	3389.94	-3388.76	-647.46	40°08'33.460"N	104°46'42.812"W	0.59	
10627.00	92.000	179.420	7278.26	3479.89	-3478.71	-646.34	40°08'32.571"N	104°46'42.798"W	0.68	
10717.00	89.660	178.320	7276.96	3569.85	-3568.68	-644.57	40°08'31.682"N	104°46'42.775"W	2.87	
10807.00	89.780	177.870	7277.40	3659.80	-3658.63	-641.58	40°08'30.793"N	104°46'42.736"W	0.52	
10897.00	87.690	176.550	7279.39	3749.65	-3748.49	-637.20	40°08'29.905"N	104°46'42.680"W	2.75	
10987.00	88.180	177.080	7282.63	3839.45	-3838.30	-632.20	40°08'29.018"N	104°46'42.615"W	0.80	
11077.00	90.120	177.600	7283.96	3929.33	-3928.18	-628.02	40°08'28.129"N	104°46'42.562"W	2.23	
11167.00	90.900	177.450	7283.16	4019.23	-4018.10	-624.14	40°08'27.241"N	104°46'42.511"W	0.88	
11257.00	90.990	178.580	7281.68	4109.16	-4108.03	-621.02	40°08'26.352"N	104°46'42.471"W	1.26	
11347.00	91.320	180.380	7279.86	4199.13	-4198.00	-620.20	40°08'25.463"N	104°46'42.461"W	2.03	
11437.00	90.810	180.860	7278.19	4289.11	-4287.98	-621.18	40°08'24.574"N	104°46'42.473"W	0.78	
11527.00	90.250	182.520	7277.36	4379.07	-4377.93	-623.83	40°08'23.685"N	104°46'42.507"W	1.95	
11617.00	90.920	180.180	7276.44	4469.04	-4467.90	-625.95	40°08'22.796"N	104°46'42.535"W	2.70	
11707.00	90.160	183.430	7275.59	4558.98	-4557.84	-628.79	40°08'21.907"N	104°46'42.571"W	3.71	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 AGGREGATE STATE 15N-16HZ (2389'FSL & 970'FEL, SEC.09)
Area	COLORADO	Well	AGGREGATE STATE 15N-16HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	AGGREGATE STATE 15N-16HZ AWP
Facility	SEC.09-T2N-R66W		

### WELLPATH DATA (169 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11797.00	90.090	183.390	7275.40	4648.83	-4647.68	-634.14	40°08'21.019"N	104°46'42.640"W	0.09	
11887.00	88.070	182.320	7276.84	4738.71	-4737.55	-638.62	40°08'20.131"N	104°46'42.698"W	2.54	
11977.00	87.600	180.870	7280.24	4828.61	-4827.45	-641.12	40°08'19.243"N	104°46'42.730"W	1.69	
12067.00	86.860	179.810	7284.59	4918.50	-4917.34	-641.66	40°08'18.354"N	104°46'42.737"W	1.44	
12157.00	88.390	178.720	7288.32	5008.41	-5007.25	-640.50	40°08'17.466"N	104°46'42.722"W	2.09	
12246.00	88.630	178.470	7290.63	5097.35	-5096.19	-638.32	40°08'16.587"N	104°46'42.694"W	0.39	
12336.00	88.430	178.240	7292.94	5187.28	-5186.12	-635.74	40°08'15.698"N	104°46'42.660"W	0.34	
12426.00	89.780	176.780	7294.35	5277.17	-5276.02	-631.83	40°08'14.810"N	104°46'42.610"W	2.21	
12515.00	90.100	178.050	7294.44	5366.07	-5364.93	-627.82	40°08'13.931"N	104°46'42.558"W	1.47	
12605.00	91.740	178.750	7293.00	5456.02	-5454.88	-625.30	40°08'13.042"N	104°46'42.526"W	1.98	
12695.00	92.550	178.350	7289.63	5545.92	-5544.79	-623.03	40°08'12.154"N	104°46'42.497"W	1.00	
12785.00	91.200	179.830	7286.68	5635.85	-5634.72	-621.60	40°08'11.265"N	104°46'42.478"W	2.23	
12875.00	91.390	179.340	7284.65	5725.83	-5724.70	-620.95	40°08'10.376"N	104°46'42.470"W	0.58	
12965.00	90.190	181.430	7283.41	5815.81	-5814.68	-621.55	40°08'09.487"N	104°46'42.478"W	2.68	
13055.00	89.290	182.370	7283.82	5905.76	-5904.63	-624.54	40°08'08.598"N	104°46'42.516"W	1.45	
13145.00	90.250	182.160	7284.18	5995.70	-5994.56	-628.09	40°08'07.709"N	104°46'42.562"W	1.09	
13235.00	89.560	181.920	7284.33	6085.65	-6084.50	-631.30	40°08'06.820"N	104°46'42.603"W	0.81	
13325.00	91.230	181.790	7283.71	6175.60	-6174.45	-634.21	40°08'05.932"N	104°46'42.640"W	1.86	
13415.00	88.910	181.580	7283.60	6265.56	-6264.40	-636.86	40°08'05.043"N	104°46'42.675"W	2.59	
13505.00	89.500	181.010	7284.85	6355.53	-6354.37	-638.89	40°08'04.154"N	104°46'42.701"W	0.91	
13595.00	90.300	181.070	7285.00	6445.52	-6444.35	-640.52	40°08'03.264"N	104°46'42.722"W	0.89	
13685.00	89.290	182.480	7285.32	6535.47	-6534.31	-643.31	40°08'02.375"N	104°46'42.758"W	1.93	
13775.00	89.690	182.340	7286.13	6625.40	-6624.22	-647.10	40°08'01.487"N	104°46'42.806"W	0.47	
13865.00	89.560	182.060	7286.72	6715.34	-6714.15	-650.55	40°08'00.598"N	104°46'42.851"W	0.34	
13955.00	89.720	182.240	7287.28	6805.28	-6804.09	-653.93	40°07'59.709"N	104°46'42.894"W	0.27	
14045.00	90.680	181.640	7286.97	6895.23	-6894.04	-656.97	40°07'58.821"N	104°46'42.933"W	1.26	
14135.00	88.890	179.840	7287.30	6985.21	-6984.02	-658.14	40°07'57.931"N	104°46'42.948"W	2.82	
14225.00	89.940	180.600	7288.22	7075.21	-7074.01	-658.48	40°07'57.042"N	104°46'42.953"W	1.44	
14315.00	90.830	180.480	7287.62	7165.20	-7164.01	-659.33	40°07'56.153"N	104°46'42.964"W	1.00	
14405.00	88.830	180.760	7287.89	7255.19	-7254.00	-660.30	40°07'55.263"N	104°46'42.976"W	2.24	
14495.00	89.690	179.950	7289.05	7345.18	-7343.98	-660.86	40°07'54.374"N	104°46'42.983"W	1.31	
14585.00	90.280	179.690	7289.07	7435.18	-7433.98	-660.58	40°07'53.485"N	104°46'42.980"W	0.72	
14736.00	92.220	180.280	7285.78	7586.14	-7584.94	-660.54	40°07'51.993"N	104°46'42.979"W	1.34	Last BHI MWD+IFR Surveys
14792.00	92.220	180.280	7283.61	7642.10	-7640.90	-660.81	40°07'51.440"N	104°46'42.982"W	0.00	Projection to Bit

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 AGGREGATE STATE 15N-16HZ (2389'FSL & 970'FEL, SEC.09)
Area	COLORADO	Well	AGGREGATE STATE 15N-16HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	AGGREGATE STATE 15N-16HZ AWB
Facility	SEC.09-T2N-R66W		

HOLE & CASING SECTIONS - Ref Wellbore: AGGREGATE STATE 15N-16HZ AWB Ref Wellpath: AGGREGATE STATE 15N-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	13.00	1040.00	1027.00	13.00	1039.99	0.00	0.00	3.69	-1.81
9.625in Casing Surface	13.00	1030.00	1017.00	13.00	1029.99	0.00	0.00	3.63	-1.76
8.75in Open Hole	1040.00	7676.00	6636.00	1039.99	7310.81	3.69	-1.81	-530.87	-604.54
7in Casing Intermediate	13.00	7661.00	7648.00	13.00	7310.99	0.00	0.00	-515.89	-603.66
6.125in Open Hole	7676.00	14736.00	7060.00	7310.81	7285.78	-530.87	-604.54	-7584.94	-660.54

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		10.00	-2.43	-2236.02	3200073.31	1298996.37	40°09'06.923"N	104°47'03.271"W	polygon
SEC.16-T2N-R66W SECTION LINES		10.00	-2.43	-2236.02	3200073.31	1298996.37	40°09'06.923"N	104°47'03.271"W	polygon
AGGREGATE STATE 15N-16HZ BHL ON PLAT (1'FSL & 1610'FEL, SEC.16) REV-1		7257.00	-7665.51	-653.75	3201718.00	1291346.80	40°07'51.197"N	104°46'42.892"W	point
AGGREGATE STATE 15N-16HZ LAND BOX		7257.00	0.00	0.00	3202309.14	1299017.05	40°09'06.948"N	104°46'34.475"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: AGGREGATE STATE 15N-16HZ AWB Ref Wellpath: AGGREGATE STATE 15N-16HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	713.00	Generic gyro - continuous (Standard)	MS ENERGY GYRO SURVEYS <113-713>	AGGREGATE STATE 15N-16HZ AWB
713.00	7622.00	NaviTrak (IFR)	BHI MWD+IFR SURVEYS 8 3/4" HOLE <1075-7622>	AGGREGATE STATE 15N-16HZ AWB
7622.00	14736.00	NaviTrak (IFR)	BHI MWD+IFR SURVEYS 6 1/8" HOLE <7711-14736>	AGGREGATE STATE 15N-16HZ AWB
14736.00	14792.00	Blind Drilling (std)	Projection to bit	AGGREGATE STATE 15N-16HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 AGGREGATE STATE 15N-16HZ (2389'FSL & 970'FEL, SEC.09)
Area	COLORADO	Well	AGGREGATE STATE 15N-16HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	AGGREGATE STATE 15N-16HZ AWB
Facility	SEC.09-T2N-R66W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
13.00	0.000	315.480	13.00	Tie-On
113.00	0.320	315.480	113.00	Begin GYRO Surveys
713.00	0.300	333.750	712.99	Tie-Into GYRO Surveys
1075.00	0.460	324.350	1074.98	Begin BHI MWD+IFR Surveys
7661.00	90.453	183.286	7310.99	7" Casing Point
14736.00	92.220	180.280	7285.78	Last BHI MWD+IFR Surveys
14792.00	92.220	180.280	7283.61	Projection to Bit