

Actual Wellpath Report

CREAM 15N-A28HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#34 CREAM 15N-A28HZ (422'FNL & 1450'FEL, SEC.28)
Area	COLORADO	Well	CREAM 15N-A28HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CREAM 15N-A28HZ AWB <12651>
Facility	SEC.28-T3N-R65W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 4.1.1
North Reference	True	User	Precain
Scale	0.99961	Report Generated	7/29/2015 at 10:54:43 AM
Convergence at slot	0.22° East	Database/Source file	WellArchitectAPC/CREAM_15N-A28HZ_AWB_12651_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	2844.84	1756.70	1734109.33	14600660.81	40°12'09.104"N	104°39'52.024"W
Facility Reference Pt			1732363.88	14597810.60	40°11'40.992"N	104°40'14.664"W
Field Reference Pt			1698235.31	14552047.82	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	PRECISION 462 (20'KB) (RKB) to Facility Vertical Datum	4844.00ft
Horizontal Reference Pt	Slot	PRECISION 462 (20'KB) (RKB) to Mean Sea Level	4844.00ft
Vertical Reference Pt	PRECISION 462 (20'KB) (RKB)	PRECISION 462 (20'KB) (RKB) to Mud Line at Slot (SLOT#34 CREAM 15N-A28HZ (422'FNL & 1450'FEL, SEC.28))	4844.00ft
MD Reference Pt	PRECISION 462 (20'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	182.01°

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Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CREAM 15N-A28HZ AWP <12651>
Facility	SEC.28-T3N-R65W		

WELLPATH DATA (141 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	178.400	0.00	0.00	0.00	0.00	40°12'09.104"N	104°39'52.024"W	0.00	
20.00	0.000	178.400	20.00	0.00	0.00	0.00	40°12'09.104"N	104°39'52.024"W	0.00	Tie-On
99.00	0.500	178.400	99.00	0.34	-0.34	0.01	40°12'09.101"N	104°39'52.024"W	0.63	Begin CATHEDRAL MWD Surveys
163.00	0.200	142.100	163.00	0.71	-0.71	0.09	40°12'09.097"N	104°39'52.023"W	0.56	
221.00	0.400	200.100	221.00	0.98	-0.98	0.08	40°12'09.094"N	104°39'52.023"W	0.59	
278.00	0.300	181.900	278.00	1.32	-1.32	0.01	40°12'09.091"N	104°39'52.024"W	0.26	
335.00	0.900	320.200	334.99	1.13	-1.12	-0.29	40°12'09.093"N	104°39'52.028"W	2.00	
400.00	1.800	328.000	399.98	-0.09	0.13	-1.15	40°12'09.105"N	104°39'52.039"W	1.41	
463.00	3.100	339.300	462.92	-2.49	2.57	-2.28	40°12'09.129"N	104°39'52.053"W	2.19	
527.00	3.900	333.500	526.80	-6.00	6.13	-3.86	40°12'09.165"N	104°39'52.074"W	1.37	
591.00	4.700	337.500	590.62	-10.29	10.50	-5.84	40°12'09.208"N	104°39'52.099"W	1.33	
655.00	5.200	342.600	654.38	-15.42	15.69	-7.71	40°12'09.259"N	104°39'52.123"W	1.04	
719.00	6.200	333.600	718.06	-21.19	21.56	-10.11	40°12'09.317"N	104°39'52.154"W	2.09	
783.00	6.400	330.500	781.68	-27.27	27.76	-13.41	40°12'09.378"N	104°39'52.197"W	0.62	
846.00	7.600	325.000	844.21	-33.59	34.23	-17.52	40°12'09.442"N	104°39'52.250"W	2.18	
910.00	8.500	327.300	907.57	-40.86	41.67	-22.51	40°12'09.516"N	104°39'52.314"W	1.49	
974.00	9.100	324.300	970.82	-48.75	49.76	-28.02	40°12'09.596"N	104°39'52.385"W	1.18	
1036.00	10.300	325.700	1031.93	-57.10	58.33	-34.00	40°12'09.680"N	104°39'52.462"W	1.97	
1101.00	11.600	326.900	1095.75	-67.13	68.60	-40.84	40°12'09.782"N	104°39'52.550"W	2.03	
1172.00	12.500	326.400	1165.18	-79.22	80.98	-49.00	40°12'09.904"N	104°39'52.655"W	1.28	Tie-Into CATHEDRAL MWD Surveys
1279.00	13.220	329.110	1269.50	-98.90	101.13	-61.68	40°12'10.103"N	104°39'52.819"W	0.88	Begin BHI MWD+IFR Surveys
1372.00	13.960	330.540	1359.90	-117.40	120.02	-72.66	40°12'10.290"N	104°39'52.960"W	0.87	
1466.00	15.020	330.640	1450.90	-137.47	140.51	-84.21	40°12'10.492"N	104°39'53.109"W	1.13	
1559.00	15.860	332.210	1540.55	-158.79	162.25	-96.04	40°12'10.707"N	104°39'53.262"W	1.01	
1652.00	16.350	329.490	1629.90	-180.86	184.77	-108.61	40°12'10.930"N	104°39'53.424"W	0.97	
1746.00	16.510	325.210	1720.06	-202.71	207.14	-122.95	40°12'11.151"N	104°39'53.609"W	1.30	
1839.00	16.670	320.680	1809.20	-223.31	228.32	-138.95	40°12'11.360"N	104°39'53.815"W	1.40	
1932.00	16.340	317.920	1898.37	-242.73	248.34	-156.17	40°12'11.558"N	104°39'54.037"W	0.91	
2026.00	15.620	316.680	1988.73	-261.12	267.37	-173.71	40°12'11.746"N	104°39'54.263"W	0.85	
2119.00	15.330	317.100	2078.36	-278.63	285.48	-190.67	40°12'11.925"N	104°39'54.481"W	0.33	
2212.00	15.540	319.020	2168.01	-296.45	303.89	-207.21	40°12'12.107"N	104°39'54.694"W	0.59	
2306.00	16.060	322.700	2258.46	-315.72	323.74	-223.34	40°12'12.303"N	104°39'54.902"W	1.20	
2399.00	16.240	325.320	2347.79	-336.11	344.67	-238.54	40°12'12.510"N	104°39'55.098"W	0.81	
2492.00	16.320	325.500	2437.06	-357.04	366.13	-253.34	40°12'12.722"N	104°39'55.289"W	0.10	
2585.00	16.580	326.680	2526.25	-378.37	387.99	-268.03	40°12'12.938"N	104°39'55.478"W	0.46	
2678.00	15.390	328.280	2615.66	-399.46	409.57	-281.81	40°12'13.151"N	104°39'55.656"W	1.36	
2771.00	16.480	328.680	2705.08	-420.74	431.34	-295.15	40°12'13.366"N	104°39'55.828"W	1.18	
2864.00	17.320	332.260	2794.07	-443.79	454.86	-308.45	40°12'13.599"N	104°39'55.999"W	1.44	
2955.00	17.040	331.750	2881.01	-467.06	478.60	-321.07	40°12'13.833"N	104°39'56.162"W	0.35	
3044.00	16.550	330.680	2966.21	-489.16	501.14	-333.45	40°12'14.056"N	104°39'56.322"W	0.65	
3133.00	16.160	329.770	3051.61	-510.46	522.89	-345.89	40°12'14.271"N	104°39'56.482"W	0.52	
3223.00	14.840	328.810	3138.33	-530.70	543.57	-358.17	40°12'14.476"N	104°39'56.640"W	1.49	
3313.00	15.550	332.060	3225.19	-550.80	564.09	-369.79	40°12'14.678"N	104°39'56.790"W	1.23	
3403.00	15.440	330.620	3311.92	-571.48	585.18	-381.32	40°12'14.887"N	104°39'56.938"W	0.44	
3491.00	15.330	329.100	3396.76	-591.24	605.37	-393.04	40°12'15.086"N	104°39'57.090"W	0.47	

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Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CREAM 15N-A28HZ AWP <12651>
Facility	SEC.28-T3N-R65W		

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3581.00	16.820	331.030	3483.24	-612.40	626.98	-405.46	40°12'15.300"N	104°39'57.250"W	1.76	
3670.00	15.810	330.270	3568.66	-633.75	648.77	-417.71	40°12'15.515"N	104°39'57.407"W	1.16	
3760.00	16.050	326.380	3655.21	-654.29	669.78	-430.68	40°12'15.723"N	104°39'57.575"W	1.22	
3850.00	14.980	324.520	3741.92	-673.63	689.61	-444.32	40°12'15.919"N	104°39'57.750"W	1.31	
3940.00	15.710	332.060	3828.72	-693.42	709.85	-456.78	40°12'16.119"N	104°39'57.911"W	2.36	
4030.00	17.600	332.500	3914.94	-715.83	732.68	-468.77	40°12'16.344"N	104°39'58.066"W	2.10	
4120.00	17.540	332.400	4000.75	-739.46	756.77	-481.34	40°12'16.582"N	104°39'58.228"W	0.07	
4210.00	17.520	332.170	4086.57	-763.00	780.77	-493.94	40°12'16.820"N	104°39'58.390"W	0.08	
4300.00	16.780	331.160	4172.56	-785.91	804.13	-506.53	40°12'17.050"N	104°39'58.552"W	0.89	
4389.00	15.700	325.970	4258.02	-806.68	825.37	-519.47	40°12'17.260"N	104°39'58.719"W	2.03	
4479.00	15.470	324.970	4344.71	-826.10	845.29	-533.18	40°12'17.457"N	104°39'58.896"W	0.39	
4569.00	15.020	322.710	4431.54	-844.71	864.39	-547.13	40°12'17.646"N	104°39'59.076"W	0.83	
4658.00	13.620	324.360	4517.77	-861.93	882.09	-560.23	40°12'17.821"N	104°39'59.244"W	1.64	
4748.00	13.250	322.630	4605.31	-878.30	898.89	-572.66	40°12'17.987"N	104°39'59.405"W	0.61	
4838.00	11.140	328.380	4693.28	-893.51	914.50	-583.48	40°12'18.141"N	104°39'59.544"W	2.70	
4928.00	9.440	324.230	4781.83	-906.59	927.89	-592.35	40°12'18.273"N	104°39'59.658"W	2.06	
5018.00	7.120	318.770	4870.89	-916.49	938.07	-600.34	40°12'18.374"N	104°39'59.761"W	2.72	
5108.00	5.430	324.770	4960.34	-923.94	945.75	-606.48	40°12'18.450"N	104°39'59.840"W	2.01	
5198.00	3.520	330.600	5050.07	-929.69	951.63	-610.29	40°12'18.508"N	104°39'59.890"W	2.18	
5287.00	1.510	315.570	5138.98	-932.83	954.85	-612.45	40°12'18.540"N	104°39'59.917"W	2.36	
5377.00	0.610	166.030	5228.97	-933.19	955.23	-613.17	40°12'18.544"N	104°39'59.927"W	2.29	
5736.00	0.310	93.440	5587.96	-931.32	953.32	-611.74	40°12'18.525"N	104°39'59.908"W	0.17	
6095.00	0.630	50.680	5946.95	-932.60	954.51	-609.24	40°12'18.536"N	104°39'59.876"W	0.13	
6454.00	0.950	353.300	6305.92	-936.85	958.72	-608.06	40°12'18.578"N	104°39'59.861"W	0.23	
6544.00	0.970	181.630	6395.91	-936.82	958.70	-608.17	40°12'18.578"N	104°39'59.862"W	2.13	
6589.00	6.710	183.120	6440.79	-933.81	955.69	-608.32	40°12'18.548"N	104°39'59.864"W	12.76	
6634.00	12.540	184.970	6485.14	-926.30	948.19	-608.89	40°12'18.474"N	104°39'59.872"W	12.97	
6724.00	21.660	178.370	6571.08	-899.91	921.80	-609.27	40°12'18.213"N	104°39'59.876"W	10.34	
6814.00	27.710	176.610	6652.82	-862.46	884.27	-607.55	40°12'17.842"N	104°39'59.854"W	6.77	
6903.00	36.050	180.460	6728.33	-815.60	837.34	-606.54	40°12'17.379"N	104°39'59.841"W	9.64	
6993.00	45.920	184.480	6796.20	-756.67	778.48	-609.28	40°12'16.797"N	104°39'59.877"W	11.35	
7083.00	51.990	182.440	6855.28	-688.85	710.76	-613.32	40°12'16.128"N	104°39'59.929"W	6.96	
7173.00	57.830	182.470	6906.99	-615.25	637.21	-616.48	40°12'15.401"N	104°39'59.969"W	6.49	
7262.00	64.450	181.010	6949.93	-537.35	559.35	-618.81	40°12'14.631"N	104°40'00.000"W	7.58	
7352.00	74.570	180.710	6981.39	-453.17	475.16	-620.07	40°12'13.799"N	104°40'00.015"W	11.25	
7442.00	83.150	179.730	6998.76	-364.99	386.94	-620.39	40°12'12.928"N	104°40'00.020"W	9.59	
7487.00	85.740	179.800	7003.12	-320.24	342.16	-620.21	40°12'12.485"N	104°40'00.017"W	5.76	
7526.00	87.340	181.740	7005.47	-281.32	303.24	-620.73	40°12'12.100"N	104°40'00.024"W	6.44	
7564.00†	87.959	182.535	7007.03	-243.35	265.30	-622.15	40°12'11.726"N	104°40'00.042"W	2.65	7" Casing Point
7615.00	88.790	183.600	7008.48	-192.39	214.39	-624.88	40°12'11.223"N	104°40'00.077"W	2.65	
7705.00	90.240	183.910	7009.24	-102.43	124.59	-630.77	40°12'10.335"N	104°40'00.153"W	1.65	
7795.00	89.350	183.660	7009.56	-12.48	34.79	-636.71	40°12'09.448"N	104°40'00.230"W	1.03	
7884.00	89.320	182.640	7010.59	76.50	-54.07	-641.60	40°12'08.570"N	104°40'00.293"W	1.15	
7974.00	89.810	182.420	7011.28	166.49	-143.98	-645.58	40°12'07.681"N	104°40'00.344"W	0.60	
8064.00	89.440	182.260	7011.87	256.49	-233.90	-649.25	40°12'06.792"N	104°40'00.391"W	0.45	

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Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CREAM 15N-A28HZ AWP <12651>
Facility	SEC.28-T3N-R65W		

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8153.00	90.240	182.230	7012.12	345.49	-322.83	-652.74	40°12'05.914"N	104°40'00.436"W	0.90	
8242.00	89.230	181.230	7012.53	434.48	-411.79	-655.42	40°12'05.035"N	104°40'00.471"W	1.60	
8332.00	90.240	181.690	7012.94	524.47	-501.76	-657.72	40°12'04.146"N	104°40'00.500"W	1.23	
8422.00	89.470	181.580	7013.17	614.47	-591.72	-660.28	40°12'03.257"N	104°40'00.533"W	0.86	
8511.00	88.920	181.560	7014.42	703.46	-680.68	-662.72	40°12'02.377"N	104°40'00.565"W	0.62	
8601.00	89.750	181.620	7015.47	793.45	-770.64	-665.22	40°12'01.488"N	104°40'00.597"W	0.92	
8691.00	89.230	181.570	7016.27	883.44	-860.60	-667.72	40°12'00.599"N	104°40'00.629"W	0.58	
8781.00	89.500	182.080	7017.26	973.44	-950.55	-670.59	40°11'59.711"N	104°40'00.666"W	0.64	
8871.00	89.220	182.260	7018.27	1063.43	-1040.48	-674.00	40°11'58.822"N	104°40'00.710"W	0.37	
8961.00	89.530	181.990	7019.25	1153.43	-1130.41	-677.34	40°11'57.933"N	104°40'00.753"W	0.46	
9051.00	90.150	181.870	7019.50	1243.43	-1220.36	-680.37	40°11'57.044"N	104°40'00.792"W	0.70	
9141.00	90.120	182.780	7019.29	1333.42	-1310.28	-684.02	40°11'56.156"N	104°40'00.839"W	1.01	
9230.00	89.200	182.190	7019.82	1422.42	-1399.20	-687.88	40°11'55.277"N	104°40'00.889"W	1.23	
9320.00	88.950	182.120	7021.27	1512.40	-1489.12	-691.26	40°11'54.388"N	104°40'00.932"W	0.29	
9410.00	89.590	181.590	7022.42	1602.40	-1579.07	-694.17	40°11'53.500"N	104°40'00.970"W	0.92	
9500.00	89.100	182.460	7023.45	1692.39	-1669.00	-697.35	40°11'52.611"N	104°40'01.011"W	1.11	
9590.00	88.640	183.000	7025.22	1782.36	-1758.88	-701.64	40°11'51.723"N	104°40'01.066"W	0.79	
9679.00	89.530	182.920	7026.64	1871.34	-1847.75	-706.23	40°11'50.844"N	104°40'01.125"W	1.00	
9769.00	89.010	182.210	7027.79	1961.33	-1937.65	-710.26	40°11'49.956"N	104°40'01.177"W	0.98	
9859.00	88.640	183.140	7029.64	2051.30	-2027.53	-714.46	40°11'49.068"N	104°40'01.231"W	1.11	
9949.00	89.070	182.560	7031.43	2141.27	-2117.40	-718.93	40°11'48.180"N	104°40'01.289"W	0.80	
10038.00	89.900	183.220	7032.23	2230.26	-2206.29	-723.42	40°11'47.301"N	104°40'01.346"W	1.19	
10128.00	89.010	182.640	7033.09	2320.24	-2296.16	-728.02	40°11'46.413"N	104°40'01.406"W	1.18	
10218.00	88.150	182.180	7035.32	2410.21	-2386.05	-731.81	40°11'45.525"N	104°40'01.454"W	1.08	
10308.00	88.640	181.520	7037.84	2500.17	-2475.97	-734.71	40°11'44.636"N	104°40'01.492"W	0.91	
10398.00	88.950	181.430	7039.73	2590.15	-2565.92	-737.03	40°11'43.747"N	104°40'01.522"W	0.36	
10487.00	89.220	181.300	7041.16	2679.13	-2654.89	-739.15	40°11'42.868"N	104°40'01.549"W	0.34	
10577.00	90.330	181.070	7041.51	2769.12	-2744.86	-741.01	40°11'41.979"N	104°40'01.573"W	1.26	
10667.00	89.720	181.260	7041.47	2859.11	-2834.84	-742.84	40°11'41.090"N	104°40'01.596"W	0.71	
10757.00	88.790	182.240	7042.64	2949.10	-2924.79	-745.58	40°11'40.201"N	104°40'01.632"W	1.50	
10847.00	89.410	182.310	7044.05	3039.09	-3014.71	-749.16	40°11'39.313"N	104°40'01.678"W	0.69	
10936.00	90.000	182.120	7044.51	3128.08	-3103.64	-752.60	40°11'38.434"N	104°40'01.722"W	0.70	
11026.00	88.860	182.550	7045.41	3218.08	-3193.56	-756.26	40°11'37.545"N	104°40'01.769"W	1.35	
11116.00	89.380	182.350	7046.79	3308.06	-3283.47	-760.11	40°11'36.657"N	104°40'01.819"W	0.62	
11206.00	88.180	181.820	7048.71	3398.04	-3373.39	-763.38	40°11'35.768"N	104°40'01.861"W	1.46	
11296.00	88.710	182.690	7051.15	3488.01	-3463.28	-766.92	40°11'34.880"N	104°40'01.907"W	1.13	
11385.00	89.260	181.780	7052.72	3576.99	-3552.20	-770.39	40°11'34.001"N	104°40'01.951"W	1.19	
11475.00	88.360	181.770	7054.59	3666.97	-3642.14	-773.18	40°11'33.112"N	104°40'01.987"W	1.00	
11565.00	89.040	181.310	7056.64	3756.94	-3732.08	-775.60	40°11'32.224"N	104°40'02.018"W	0.91	
11655.00	89.160	180.630	7058.05	3846.92	-3822.06	-777.12	40°11'31.334"N	104°40'02.038"W	0.77	
11744.00	88.890	179.760	7059.56	3935.86	-3911.04	-777.42	40°11'30.455"N	104°40'02.042"W	1.02	
11834.00	89.470	179.450	7060.85	4025.77	-4001.03	-776.80	40°11'29.566"N	104°40'02.034"W	0.73	
11924.00	90.520	180.520	7060.86	4115.71	-4091.03	-776.78	40°11'28.676"N	104°40'02.033"W	1.67	
12014.00	89.750	181.390	7060.65	4205.69	-4181.01	-778.28	40°11'27.787"N	104°40'02.053"W	1.29	
12103.00	90.520	181.300	7060.44	4294.69	-4269.99	-780.37	40°11'26.908"N	104°40'02.079"W	0.87	

REFERENCE WELLPATH IDENTIFICATION										
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)					Slot	SLOT#34 CREAM 15N-A28HZ (422'FNL & 1450'FEL, SEC.28)			
Area	COLORADO					Well	CREAM 15N-A28HZ			
Field	WELD COUNTY (UTM/TRUE NORTH)					Wellbore	CREAM 15N-A28HZ AWB <12651>			
Facility	SEC.28-T3N-R65W									

WELLPATH DATA (141 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12193.00	89.230	181.810	7060.63	4384.68	-4359.95	-782.81	40°11'26.019"N	104°40'02.111"W	1.54	
12283.00	89.750	181.870	7061.43	4474.68	-4449.90	-785.70	40°11'25.130"N	104°40'02.148"W	0.58	
12373.00	89.470	181.490	7062.05	4564.67	-4539.86	-788.34	40°11'24.241"N	104°40'02.182"W	0.52	
12463.00	90.030	181.430	7062.44	4654.67	-4629.83	-790.63	40°11'23.352"N	104°40'02.212"W	0.63	
12599.00	90.670	180.570	7061.61	4790.64	-4765.80	-793.01	40°11'22.008"N	104°40'02.242"W	0.79	Last BHI MWD+IFR Surveys
12651.00	90.670	180.570	7061.00	4842.62	-4817.80	-793.52	40°11'21.494"N	104°40'02.249"W	0.00	Projection to Bit

HOLE & CASING SECTIONS - Ref Wellbore: CREAM 15N-A28HZ AWB <12651> Ref Wellpath: CREAM 15N-A28HZ 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	20.00	1217.00	1197.00	20.00	1209.09	0.00	0.00	89.24	-54.36	
9.625in Casing Surface	20.00	1207.00	1187.00	20.00	1199.34	0.00	0.00	87.38	-53.17	
8.75in Open Hole	1217.00	7574.00	6357.00	1209.09	7007.37	89.24	-54.36	255.31	-622.61	
7in Casing Intermediate	20.00	7564.00	7544.00	20.00	7007.03	0.00	0.00	265.30	-622.15	
6.125in Open Hole	7574.00	12651.00	5077.00	7007.37	7061.00	255.31	-622.61	-4817.80	-793.52	

TARGETS										
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape		
SEC.21-T3N-R65W LINES	0.00	-0.71	74.88	1734184.18	14600660.39	40°12'09.097"N	104°39'51.059"W	polygon		
SEC.28-T3N-R65W LINES	0.00	-0.71	74.88	1734184.18	14600660.39	40°12'09.097"N	104°39'51.059"W	polygon		
CREAM 15N-A28HZ BHL (50'FSL & 2281'FEL, SEC.28) REV-2	7060.00	-4817.80	-809.63	1733318.23	14595841.88	40°11'21.494"N	104°40'02.456"W	point		
CREAM 15N-A28HZ BHL ON PLAT (50'FSL & 2231'FEL, SEC.28) REV-1	7060.00	-4817.80	-759.63	1733368.21	14595842.06	40°11'21.494"N	104°40'01.812"W	point		
CREAM 15N-A28HZ LANDBOX	7060.00	0.00	0.00	1734109.33	14600660.81	40°12'09.104"N	104°39'52.024"W	polygon		

WELLPATH COMPOSITION - Ref Wellbore: CREAM 15N-A28HZ AWB <12651> Ref Wellpath: CREAM 15N-A28HZ AWP										
Start MD [ft]	End MD [ft]	Positional Uncertainty Model			Log Name/Comment			Wellbore		
20.00	1172.00	Custom APC_ISCWSA REV 2 MWD			CATHEDRAL ENERGY MWD SURVEYS <99-1172>			CREAM 15N-A28HZ AWB <12651>		
1172.00	7526.00	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)			BHI MWD+IFR SURVEYS 8 3/4" HOLE <1279-7526>			CREAM 15N-A28HZ AWB <12651>		
7526.00	12599.00	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)			BHI MWD+IFR SURVEYS 6 1/8" HOLE <7615-12599>			CREAM 15N-A28HZ AWB <12651>		
12599.00	12651.00	Blind Drilling (std)			Projection to bit			CREAM 15N-A28HZ AWB <12651>		

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#34 CREAM 15N-A28HZ (422'FNL & 1450'FEL, SEC.28)
Area	COLORADO	Well	CREAM 15N-A28HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	CREAM 15N-A28HZ AWB <12651>
Facility	SEC.28-T3N-R65W		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
20.00	0.000	178.400	20.00	Tie-On	
99.00	0.500	178.400	99.00	Begin CATHEDRAL MWD Surveys	
1172.00	12.500	326.400	1165.18	Tie-Into CATHEDRAL MWD Surveys	
1279.00	13.220	329.110	1269.50	Begin BHI MWD+IFR Surveys	
7564.00	87.959	182.535	7007.03	7" Casing Point	
12599.00	90.670	180.570	7061.61	Last BHI MWD+IFR Surveys	
12651.00	90.670	180.570	7061.00	Projection to Bit	