

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#02 CANNON 2C-11HZ (518'FSL & 548'FEL, SEC.11)  
 Field: WELD COUNTY (KERR MCGEE) Well: CANNON 2C-11HZ  
 Facility: SEC.11-T2N-R66W Wellbore: CANNON 2C-11HZ PWB

Plot reference wellpath is CANNON 2C-11HZ (REV-8.0) PWP

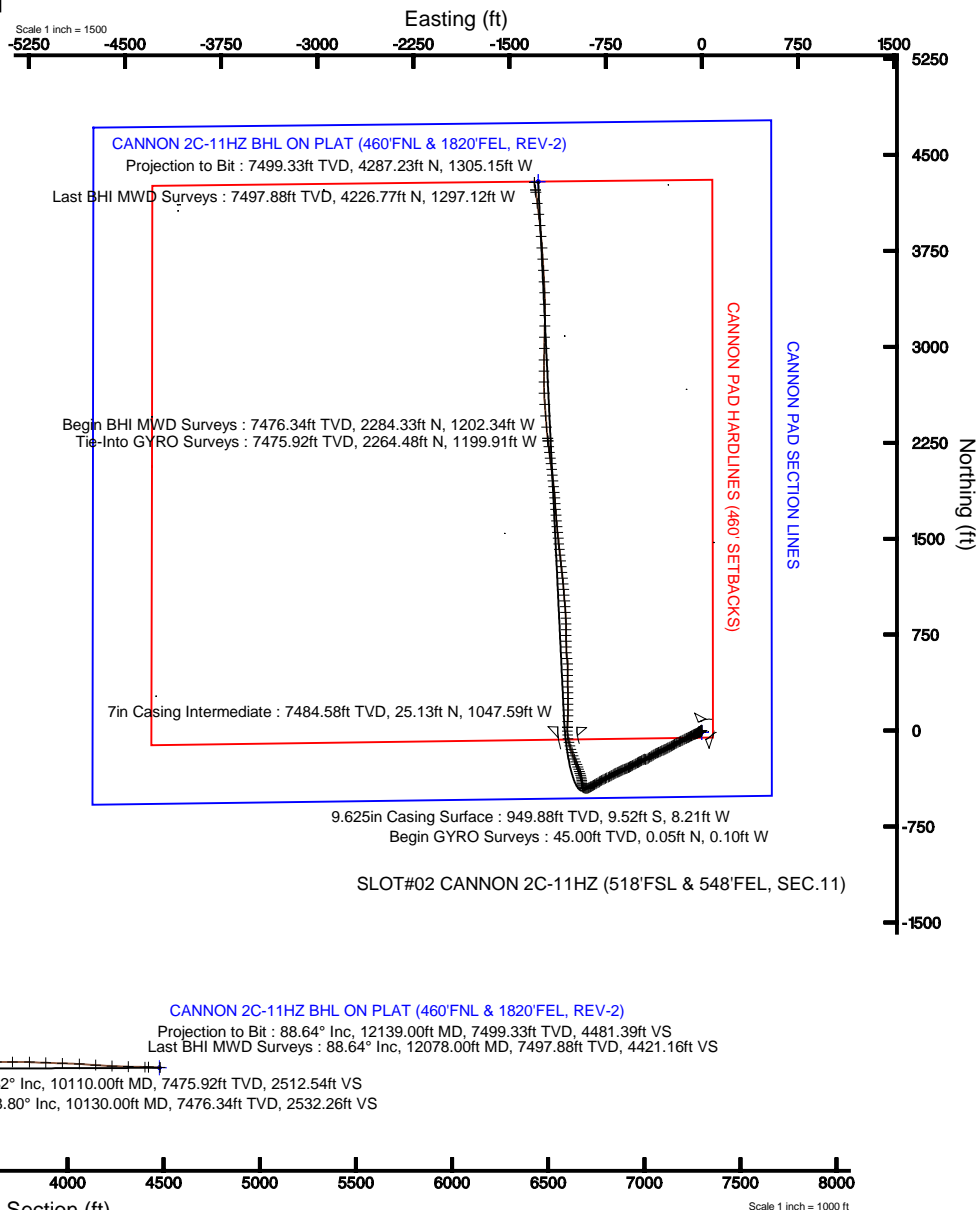
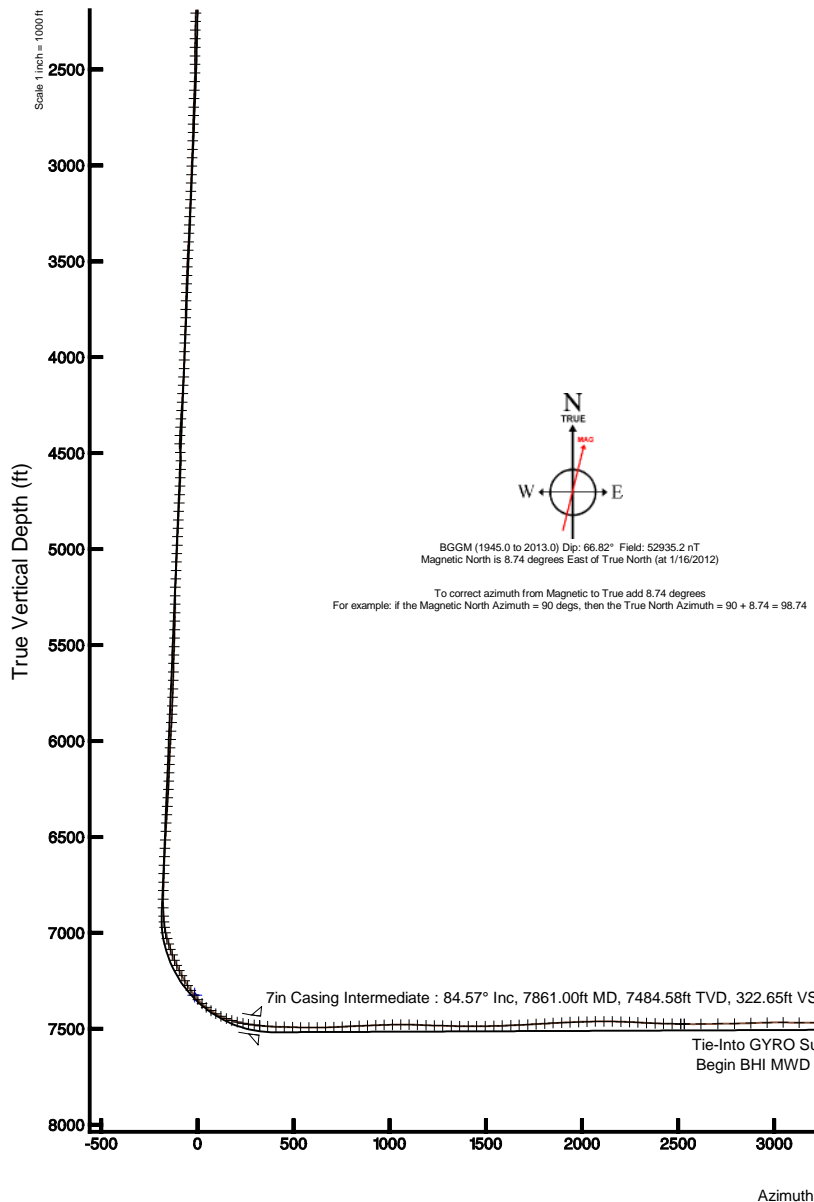
True vertical depths are referenced to XTREME 8 (RKB) Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet

Measured depths are referenced to XTREME 8 (RKB) North Reference: True north

XTREME 8 (RKB) to Mean Sea Level: 5074 feet Scale: True distance

Mean Sea Level to Mud line (At Slot: SLOT#02 CANNON 2C-11HZ (518'FSL & 548'FEL, SEC.11)): 0 feet Depths are in feet

Coordinates are in feet referenced to Slot Created by: wilsje02 on 2/27/2012





# Actual Wellpath Report

CANNON 2C-11HZ AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 CANNON 2C-11HZ (518'FSL & 548'FEL, SEC.11)
Area	COLORADO	Well	CANNON 2C-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CANNON 2C-11HZ AWB
Facility	SEC.11-T2N-R66W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 3.0.2
North Reference	True	User	Wilsjef02
Scale	0.999958	Report Generated	2/27/2012 at 09:39:35
Convergence at slot	0.49° East	Database/Source file	WellArchitectDB/CANNON_2C-11HZ_AWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	16.09	-0.00	3213348.51	1297326.40	40°08'49.326"N	104°44'12.494"W
Facility Reference Pt			3213348.65	1297310.31	40°08'49.167"N	104°44'12.494"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 8 (RKB) to Facility Vertical Datum	5074.00ft
Horizontal Reference Pt	Slot	XTREME 8 (RKB) to Mean Sea Level	5074.00ft
Vertical Reference Pt	XTREME 8 (RKB)	XTREME 8 (RKB) to Mud Line at Slot (SLOT#02 CANNON 2C-11HZ (518'FSL & 548'FEL, SEC.11))	5074.00ft
MD Reference Pt	XTREME 8 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	343.44°



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Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 CANNON 2C-11HZ (518'FSL & 548'FEL, SEC.11)
Area	COLORADO	Well	CANNON 2C-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CANNON 2C-11HZ AWB
Facility	SEC.11-T2N-R66W		

## WELLPATH DATA (262 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	294.030	0.00	0.00	0.00	0.00	40°08'49.326"N	104°44'12.494"W	0.00	
17.00	0.000	294.030	17.00	0.00	0.00	0.00	40°08'49.326"N	104°44'12.494"W	0.00	
45.00	0.454	294.030	45.00	0.07	0.05	-0.10	40°08'49.326"N	104°44'12.495"W	1.62	Begin GYRO Surveys
90.00	0.424	284.652	90.00	0.27	0.16	-0.43	40°08'49.328"N	104°44'12.499"W	0.17	
135.00	0.132	284.038	135.00	0.39	0.21	-0.64	40°08'49.328"N	104°44'12.502"W	0.65	
180.00	0.307	263.541	180.00	0.43	0.21	-0.81	40°08'49.328"N	104°44'12.504"W	0.42	
225.00	0.211	241.462	225.00	0.44	0.16	-1.00	40°08'49.328"N	104°44'12.507"W	0.30	
270.00	0.542	229.382	270.00	0.33	-0.02	-1.23	40°08'49.326"N	104°44'12.510"W	0.75	
315.00	0.947	227.742	314.99	0.09	-0.41	-1.67	40°08'49.322"N	104°44'12.516"W	0.90	
360.00	0.839	237.308	359.99	-0.17	-0.83	-2.22	40°08'49.318"N	104°44'12.523"W	0.41	
405.00	0.673	233.182	404.98	-0.35	-1.17	-2.71	40°08'49.314"N	104°44'12.529"W	0.39	
450.00	0.765	238.372	449.98	-0.52	-1.49	-3.18	40°08'49.311"N	104°44'12.535"W	0.25	
495.00	0.941	221.380	494.97	-0.79	-1.92	-3.68	40°08'49.307"N	104°44'12.541"W	0.68	
540.00	1.246	207.896	539.97	-1.34	-2.63	-4.15	40°08'49.300"N	104°44'12.547"W	0.88	
585.00	1.360	209.004	584.95	-2.06	-3.53	-4.64	40°08'49.291"N	104°44'12.554"W	0.26	
630.00	1.146	203.402	629.94	-2.78	-4.41	-5.08	40°08'49.282"N	104°44'12.559"W	0.55	
675.00	1.176	205.192	674.93	-3.47	-5.24	-5.45	40°08'49.274"N	104°44'12.564"W	0.10	
720.00	1.304	206.057	719.92	-4.19	-6.12	-5.87	40°08'49.266"N	104°44'12.570"W	0.29	
765.00	1.183	207.224	764.91	-4.90	-6.99	-6.31	40°08'49.257"N	104°44'12.575"W	0.27	
810.00	1.282	212.853	809.90	-5.57	-7.83	-6.80	40°08'49.249"N	104°44'12.582"W	0.35	
855.00	0.998	215.929	854.89	-6.13	-8.57	-7.30	40°08'49.241"N	104°44'12.588"W	0.65	
900.00	0.727	224.572	899.89	-6.51	-9.09	-7.73	40°08'49.236"N	104°44'12.594"W	0.67	
945.00	0.755	231.246	944.89	-6.76	-9.48	-8.16	40°08'49.232"N	104°44'12.599"W	0.20	
990.00	0.538	235.699	989.88	-6.94	-9.78	-8.57	40°08'49.229"N	104°44'12.604"W	0.49	
1035.00	0.529	238.526	1034.88	-7.05	-10.01	-8.92	40°08'49.227"N	104°44'12.609"W	0.06	
1080.00	0.894	256.804	1079.88	-7.09	-10.20	-9.44	40°08'49.225"N	104°44'12.616"W	0.95	
1125.00	0.757	268.883	1124.87	-6.99	-10.28	-10.08	40°08'49.224"N	104°44'12.624"W	0.49	
1170.00	0.457	265.157	1169.87	-6.87	-10.31	-10.55	40°08'49.224"N	104°44'12.630"W	0.67	
1215.00	0.429	254.149	1214.87	-6.83	-10.37	-10.89	40°08'49.224"N	104°44'12.634"W	0.20	
1260.00	0.118	255.820	1259.87	-6.83	-10.42	-11.10	40°08'49.223"N	104°44'12.637"W	0.69	
1305.00	0.388	253.364	1304.87	-6.83	-10.48	-11.29	40°08'49.222"N	104°44'12.639"W	0.60	
1350.00	0.751	247.160	1349.86	-6.86	-10.64	-11.71	40°08'49.221"N	104°44'12.645"W	0.82	
1395.00	0.976	247.128	1394.86	-6.93	-10.90	-12.34	40°08'49.218"N	104°44'12.653"W	0.50	
1440.00	0.710	267.624	1439.85	-6.91	-11.06	-12.97	40°08'49.217"N	104°44'12.661"W	0.88	
1485.00	0.768	279.726	1484.85	-6.71	-11.02	-13.54	40°08'49.217"N	104°44'12.668"W	0.37	
1530.00	0.693	275.026	1529.85	-6.47	-10.95	-14.11	40°08'49.218"N	104°44'12.676"W	0.21	
1575.00	0.432	268.051	1574.85	-6.33	-10.93	-14.55	40°08'49.218"N	104°44'12.681"W	0.60	
1620.00	0.643	261.097	1619.84	-6.25	-10.97	-14.97	40°08'49.218"N	104°44'12.687"W	0.49	
1665.00	0.951	262.246	1664.84	-6.16	-11.06	-15.59	40°08'49.217"N	104°44'12.695"W	0.69	
1710.00	0.766	261.095	1709.83	-6.06	-11.16	-16.26	40°08'49.216"N	104°44'12.703"W	0.41	
1755.00	0.698	261.742	1754.83	-5.98	-11.25	-16.83	40°08'49.215"N	104°44'12.711"W	0.15	
1800.00	0.283	257.277	1799.83	-5.94	-11.31	-17.21	40°08'49.214"N	104°44'12.716"W	0.93	
1845.00	0.876	255.461	1844.83	-5.92	-11.42	-17.65	40°08'49.213"N	104°44'12.721"W	1.32	
1890.00	0.905	260.775	1889.82	-5.86	-11.56	-18.33	40°08'49.212"N	104°44'12.730"W	0.19	
1935.00	0.996	262.601	1934.81	-5.75	-11.67	-19.07	40°08'49.211"N	104°44'12.740"W	0.21	
1980.00	1.070	248.679	1979.81	-5.73	-11.87	-19.85	40°08'49.209"N	104°44'12.750"W	0.58	
2025.00	1.148	238.020	2024.80	-5.88	-12.27	-20.62	40°08'49.205"N	104°44'12.760"W	0.49	
2070.00	2.964	237.569	2069.77	-6.32	-13.13	-21.99	40°08'49.196"N	104°44'12.777"W	4.04	
2115.00	4.333	235.407	2114.68	-7.16	-14.72	-24.37	40°08'49.181"N	104°44'12.808"W	3.06	
2160.00	5.197	233.942	2159.52	-8.37	-16.88	-27.42	40°08'49.159"N	104°44'12.847"W	1.94	
2205.00	5.873	231.010	2204.31	-9.93	-19.53	-30.85	40°08'49.133"N	104°44'12.891"W	1.63	
2250.00	5.948	239.821	2249.07	-11.36	-22.15	-34.66	40°08'49.107"N	104°44'12.940"W	2.02	
2295.00	6.048	240.988	2293.82	-12.42	-24.47	-38.75	40°08'49.084"N	104°44'12.993"W	0.35	
2340.00	6.113	249.479	2338.57	-13.09	-26.46	-43.06	40°08'49.064"N	104°44'13.049"W	2.00	
2385.00	6.315	251.438	2383.31	-13.35	-28.09	-47.65	40°08'49.048"N	104°44'13.108"W	0.65	
2430.00	6.588	249.768	2428.02	-13.60	-29.77	-52.42	40°08'49.032"N	104°44'13.169"W	0.74	
2475.00	6.896	249.535	2472.71	-13.95	-31.61	-57.38	40°08'49.014"N	104°44'13.233"W	0.69	
2520.00	7.144	245.326	2517.38	-14.53	-33.72	-62.45	40°08'48.993"N	104°44'13.298"W	1.27	
2565.00	7.715	241.922	2562.00	-15.52	-36.31	-67.66	40°08'48.967"N	104°44'13.365"W	1.60	
2610.00	8.221	239.433	2606.56	-16.91	-39.37	-73.09	40°08'48.937"N	104°44'13.435"W	1.36	



# Actual Wellpath Report

CANNON 2C-11HZ AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 CANNON 2C-11HZ (518'FSL & 548'FEL, SEC.11)
Area	COLORADO	Well	CANNON 2C-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CANNON 2C-11HZ AWB
Facility	SEC.11-T2N-R66W		

## WELLPATH DATA (262 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2655.00	9.584	240.169	2651.02	-18.54	-42.87	-79.11	40°08'48.902"N	104°44'13.513"W	3.04	
2700.00	10.592	242.474	2695.32	-20.19	-46.64	-86.03	40°08'48.865"N	104°44'13.602"W	2.41	
2745.00	11.262	243.052	2739.51	-21.77	-50.55	-93.61	40°08'48.826"N	104°44'13.700"W	1.51	
2790.00	11.624	244.118	2783.61	-23.30	-54.52	-101.61	40°08'48.787"N	104°44'13.802"W	0.93	
2835.00	12.524	245.968	2827.62	-24.67	-58.48	-110.15	40°08'48.748"N	104°44'13.912"W	2.18	
2880.00	12.680	247.385	2871.53	-25.82	-62.37	-119.16	40°08'48.710"N	104°44'14.028"W	0.77	
2925.00	12.918	244.349	2915.42	-27.14	-66.45	-128.25	40°08'48.669"N	104°44'14.146"W	1.59	
2970.00	13.203	242.059	2959.25	-28.95	-71.03	-137.33	40°08'48.624"N	104°44'14.262"W	1.31	
3015.00	13.038	241.349	3003.08	-31.03	-75.87	-146.32	40°08'48.576"N	104°44'14.378"W	0.51	
3060.00	12.989	245.233	3046.92	-32.81	-80.43	-155.37	40°08'48.531"N	104°44'14.495"W	1.95	
3105.00	13.374	245.604	3090.74	-34.24	-84.69	-164.70	40°08'48.489"N	104°44'14.615"W	0.88	
3150.00	13.733	244.015	3134.48	-35.83	-89.18	-174.24	40°08'48.445"N	104°44'14.738"W	1.15	
3195.00	13.842	243.793	3178.19	-37.60	-93.90	-183.87	40°08'48.398"N	104°44'14.862"W	0.27	
3240.00	12.978	242.345	3221.96	-39.48	-98.62	-193.18	40°08'48.351"N	104°44'14.982"W	2.06	
3285.00	12.934	241.884	3265.81	-41.46	-103.34	-202.10	40°08'48.305"N	104°44'15.096"W	0.25	
3330.00	13.122	242.916	3309.66	-43.40	-108.04	-211.09	40°08'48.258"N	104°44'15.212"W	0.66	
3375.00	13.092	241.332	3353.48	-45.40	-112.81	-220.11	40°08'48.211"N	104°44'15.328"W	0.80	
3420.00	12.808	239.229	3397.34	-47.70	-117.81	-228.86	40°08'48.162"N	104°44'15.441"W	1.22	
3465.00	12.479	240.170	3441.25	-50.04	-122.78	-237.37	40°08'48.113"N	104°44'15.551"W	0.86	
3510.00	13.437	241.191	3485.10	-52.26	-127.72	-246.17	40°08'48.064"N	104°44'15.664"W	2.19	
3555.00	12.336	241.474	3528.97	-54.37	-132.53	-254.97	40°08'48.016"N	104°44'15.777"W	2.45	
3600.00	11.973	241.900	3572.96	-56.30	-137.03	-263.31	40°08'47.972"N	104°44'15.885"W	0.83	
3645.00	10.984	242.710	3617.06	-58.03	-141.19	-271.24	40°08'47.931"N	104°44'15.987"W	2.23	
3690.00	11.029	243.855	3661.23	-59.55	-145.05	-278.91	40°08'47.893"N	104°44'16.086"W	0.50	
3735.00	10.757	245.379	3705.42	-60.85	-148.70	-286.60	40°08'47.857"N	104°44'16.185"W	0.88	
3780.00	11.240	248.819	3749.59	-61.80	-152.03	-294.50	40°08'47.824"N	104°44'16.286"W	1.81	
3825.00	11.741	246.388	3793.69	-62.71	-155.45	-302.79	40°08'47.790"N	104°44'16.393"W	1.55	
3870.00	12.001	243.840	3837.73	-64.06	-159.35	-311.18	40°08'47.751"N	104°44'16.501"W	1.30	
3915.00	11.631	242.475	3881.78	-65.70	-163.51	-319.40	40°08'47.710"N	104°44'16.607"W	1.03	
3960.00	11.951	244.346	3925.83	-67.30	-167.62	-327.63	40°08'47.670"N	104°44'16.713"W	1.11	
4005.00	11.022	245.647	3969.93	-68.62	-171.41	-335.75	40°08'47.632"N	104°44'16.817"W	2.14	
4050.00	12.594	247.219	4013.97	-69.73	-175.09	-344.19	40°08'47.596"N	104°44'16.926"W	3.57	
4095.00	12.174	243.970	4057.92	-71.05	-179.07	-352.98	40°08'47.556"N	104°44'17.039"W	1.81	
4140.00	13.781	239.055	4101.78	-73.16	-183.91	-361.84	40°08'47.509"N	104°44'17.153"W	4.33	
4185.00	12.783	238.428	4145.57	-75.78	-189.27	-370.68	40°08'47.456"N	104°44'17.267"W	2.24	
4230.00	13.217	239.237	4189.42	-78.33	-194.51	-379.34	40°08'47.404"N	104°44'17.379"W	1.05	
4275.00	13.880	238.041	4233.17	-81.03	-200.00	-388.34	40°08'47.350"N	104°44'17.495"W	1.60	
4320.00	14.275	237.879	4276.81	-83.95	-205.80	-397.62	40°08'47.292"N	104°44'17.614"W	0.88	
4365.00	14.683	239.060	4320.38	-86.85	-211.69	-407.21	40°08'47.234"N	104°44'17.738"W	1.12	
4410.00	15.059	240.467	4363.88	-89.58	-217.50	-417.18	40°08'47.177"N	104°44'17.866"W	1.16	
4455.00	15.212	242.337	4407.32	-92.03	-223.12	-427.50	40°08'47.121"N	104°44'17.999"W	1.14	
4500.00	14.210	243.837	4450.84	-94.09	-228.30	-437.69	40°08'47.070"N	104°44'18.130"W	2.38	
4545.00	13.302	24.178	4495.31	-91.04	-225.97	-440.57	40°08'47.093"N	104°44'18.167"W	57.45	
4590.00	12.857	245.103	4539.82	-87.79	-223.32	-443.03	40°08'47.119"N	104°44'18.199"W	54.41	
4635.00	11.880	244.332	4583.77	-89.25	-227.43	-451.75	40°08'47.078"N	104°44'18.311"W	2.20	
4680.00	11.946	242.782	4627.80	-90.85	-231.57	-460.06	40°08'47.038"N	104°44'18.418"W	0.73	
4725.00	12.204	241.754	4671.81	-92.67	-235.95	-468.40	40°08'46.994"N	104°44'18.526"W	0.75	
4770.00	12.474	241.767	4715.77	-94.62	-240.50	-476.87	40°08'46.949"N	104°44'18.635"W	0.60	
4815.00	12.174	241.112	4759.73	-96.62	-245.09	-485.30	40°08'46.904"N	104°44'18.743"W	0.74	
4860.00	12.262	241.460	4803.71	-98.62	-249.66	-493.66	40°08'46.859"N	104°44'18.851"W	0.26	
4905.00	12.158	239.161	4847.69	-100.78	-254.38	-501.92	40°08'46.812"N	104°44'18.957"W	1.10	
4950.00	12.555	241.633	4891.65	-102.95	-259.13	-510.29	40°08'46.765"N	104°44'19.065"W	1.47	
4995.00	12.925	242.868	4935.54	-104.88	-263.75	-519.08	40°08'46.720"N	104°44'19.178"W	1.02	
5040.00	13.651	244.331	4979.34	-106.64	-268.34	-528.34	40°08'46.674"N	104°44'19.298"W	1.78	
5085.00	13.601	243.135	5023.07	-108.43	-273.03	-537.85	40°08'46.628"N	104°44'19.420"W	0.64	
5130.00	12.853	241.415	5066.88	-110.42	-277.82	-546.96	40°08'46.581"N	104°44'19.537"W	1.88	
5175.00	12.518	241.317	5110.78	-112.48	-282.56	-555.64	40°08'46.534"N	104°44'19.649"W	0.75	
5220.00	12.262	240.082	5154.73	-114.61	-287.28	-564.06	40°08'46.487"N	104°44'19.757"W	0.82	
5265.00	11.378	245.440	5198.78	-116.33	-291.51	-572.24	40°08'46.445"N	104°44'19.863"W	3.13	
5310.00	10.997	248.362	5242.92	-117.33	-294.94	-580.26	40°08'46.411"N	104°44'19.966"W	1.52	



# Actual Wellpath Report

CANNON 2C-11HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 CANNON 2C-11HZ (518'FSL & 548'FEL, SEC.11)
Area	COLORADO	Well	CANNON 2C-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CANNON 2C-11HZ AWB
Facility	SEC.11-T2N-R66W		

WELLPATH DATA (262 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5355.00	11.536	252.061	5287.06	-117.82	-297.90	-588.53	40°08'46.382"N	104°44'20.073"W	2.00	
5400.00	10.887	249.427	5331.20	-118.23	-300.78	-596.79	40°08'46.354"N	104°44'20.179"W	1.84	
5445.00	11.313	247.573	5375.36	-118.98	-303.96	-604.85	40°08'46.322"N	104°44'20.283"W	1.23	
5490.00	10.821	245.335	5419.52	-120.02	-307.41	-612.77	40°08'46.288"N	104°44'20.385"W	1.45	
5535.00	10.836	245.743	5463.72	-121.18	-310.91	-620.47	40°08'46.254"N	104°44'20.484"W	0.17	
5580.00	10.922	243.105	5507.91	-122.52	-314.57	-628.13	40°08'46.217"N	104°44'20.582"W	1.12	
5625.00	11.120	244.450	5552.08	-123.96	-318.37	-635.84	40°08'46.180"N	104°44'20.682"W	0.72	
5670.00	11.395	245.419	5596.21	-125.26	-322.10	-643.80	40°08'46.143"N	104°44'20.784"W	0.74	
5715.00	11.508	245.387	5640.32	-126.51	-325.81	-651.92	40°08'46.106"N	104°44'20.889"W	0.25	
5760.00	11.173	244.551	5684.44	-127.81	-329.56	-659.94	40°08'46.069"N	104°44'20.992"W	0.83	
5805.00	10.775	245.106	5728.62	-129.09	-333.20	-667.69	40°08'46.033"N	104°44'21.092"W	0.92	
5850.00	11.431	243.097	5772.78	-130.50	-336.99	-675.49	40°08'45.996"N	104°44'21.192"W	1.69	
5895.00	11.848	241.336	5816.85	-132.27	-341.22	-683.52	40°08'45.954"N	104°44'21.296"W	1.22	
5940.00	12.007	240.753	5860.88	-134.27	-345.73	-691.65	40°08'45.909"N	104°44'21.401"W	0.44	
5985.00	13.060	239.817	5904.81	-136.50	-350.57	-700.13	40°08'45.862"N	104°44'21.510"W	2.38	
6030.00	14.488	240.276	5948.51	-138.98	-355.92	-709.42	40°08'45.809"N	104°44'21.629"W	3.18	
6075.00	15.318	241.647	5992.00	-141.47	-361.53	-719.54	40°08'45.753"N	104°44'21.760"W	2.00	
6120.00	14.855	243.634	6035.45	-143.67	-366.92	-729.94	40°08'45.700"N	104°44'21.893"W	1.54	
6165.00	14.748	245.212	6078.95	-145.47	-371.88	-740.30	40°08'45.651"N	104°44'22.027"W	0.93	
6210.00	14.901	244.557	6122.45	-147.19	-376.77	-750.73	40°08'45.603"N	104°44'22.161"W	0.50	
6255.00	14.507	244.259	6165.98	-148.98	-381.70	-761.03	40°08'45.554"N	104°44'22.294"W	0.89	
6300.00	14.211	243.772	6209.57	-150.81	-386.59	-771.06	40°08'45.506"N	104°44'22.423"W	0.71	
6345.00	13.982	241.274	6253.22	-152.88	-391.64	-780.78	40°08'45.456"N	104°44'22.548"W	1.44	
6390.00	14.082	238.602	6296.88	-155.43	-397.11	-790.23	40°08'45.402"N	104°44'22.670"W	1.46	
6435.00	13.931	239.558	6340.54	-158.13	-402.70	-799.57	40°08'45.346"N	104°44'22.790"W	0.61	
6480.00	13.829	238.053	6384.23	-160.86	-408.29	-808.80	40°08'45.291"N	104°44'22.909"W	0.83	
6525.00	13.554	239.942	6427.95	-163.52	-413.78	-817.93	40°08'45.237"N	104°44'23.027"W	1.17	
6570.00	12.620	239.651	6471.78	-165.92	-418.91	-826.74	40°08'45.186"N	104°44'23.140"W	2.08	
6615.00	12.821	239.850	6515.67	-168.26	-423.90	-835.30	40°08'45.137"N	104°44'23.250"W	0.46	
6660.00	12.747	239.109	6559.56	-170.67	-428.95	-843.87	40°08'45.087"N	104°44'23.361"W	0.40	
6705.00	11.752	240.063	6603.53	-172.95	-433.79	-852.10	40°08'45.039"N	104°44'23.467"W	2.26	
6750.00	11.352	242.812	6647.62	-174.83	-438.10	-860.02	40°08'44.997"N	104°44'23.568"W	1.51	
6795.00	10.641	242.225	6691.80	-176.46	-442.06	-867.63	40°08'44.957"N	104°44'23.667"W	1.60	
6840.00	9.248	245.827	6736.12	-177.74	-445.48	-874.61	40°08'44.924"N	104°44'23.756"W	3.39	
6885.00	8.798	244.367	6780.56	-178.77	-448.45	-881.01	40°08'44.894"N	104°44'23.839"W	1.12	
6930.00	7.510	243.951	6825.11	-179.79	-451.23	-886.75	40°08'44.867"N	104°44'23.913"W	2.87	
6975.00	9.888	263.202	6869.59	-179.62	-452.98	-893.23	40°08'44.849"N	104°44'23.996"W	8.28	
7020.00	12.101	270.765	6913.77	-177.56	-453.37	-901.79	40°08'44.846"N	104°44'24.106"W	5.86	
7050.00	14.037	273.256	6942.99	-175.39	-453.12	-908.57	40°08'44.848"N	104°44'24.194"W	6.72	
7080.00	14.382	284.910	6972.08	-172.22	-451.96	-915.80	40°08'44.860"N	104°44'24.287"W	9.59	
7110.00	15.317	302.035	7001.09	-167.30	-448.90	-922.76	40°08'44.890"N	104°44'24.376"W	14.90	
7140.00	16.978	332.666	7029.96	-160.01	-442.89	-928.14	40°08'44.949"N	104°44'24.446"W	28.59	
7170.00	17.446	345.647	7058.62	-151.21	-434.64	-931.27	40°08'45.031"N	104°44'24.486"W	12.87	
7200.00	19.303	350.749	7087.10	-141.79	-425.39	-933.18	40°08'45.122"N	104°44'24.511"W	8.18	
7230.00	20.780	354.709	7115.28	-131.66	-415.19	-934.47	40°08'45.223"N	104°44'24.527"W	6.68	
7260.00	22.998	353.275	7143.11	-120.66	-404.07	-935.65	40°08'45.333"N	104°44'24.542"W	7.60	
7290.00	24.661	354.452	7170.56	-108.74	-392.02	-936.94	40°08'45.452"N	104°44'24.559"W	5.77	
7320.00	26.700	352.813	7197.59	-95.95	-379.11	-938.39	40°08'45.579"N	104°44'24.578"W	7.20	
7350.00	27.440	344.410	7224.32	-82.38	-365.76	-941.09	40°08'45.711"N	104°44'24.613"W	12.97	
7380.00	29.722	343.822	7250.66	-68.03	-351.95	-945.02	40°08'45.848"N	104°44'24.663"W	7.66	
7410.00	32.412	341.630	7276.35	-52.55	-337.18	-949.63	40°08'45.994"N	104°44'24.722"W	9.73	
7440.00	34.921	340.948	7301.32	-35.94	-321.43	-954.96	40°08'46.149"N	104°44'24.791"W	8.46	
7470.00	38.259	339.699	7325.40	-18.09	-304.60	-960.99	40°08'46.316"N	104°44'24.869"W	11.40	
7500.00	41.484	339.932	7348.43	1.11	-286.55	-967.63	40°08'46.494"N	104°44'24.954"W	10.76	
7530.00	47.859	338.259	7369.75	22.12	-266.86	-975.16	40°08'46.689"N	104°44'25.051"W	21.61	
7560.00	51.974	337.154	7389.06	44.95	-245.63	-983.87	40°08'46.898"N	104°44'25.164"W	14.00	
7590.00	57.067	337.883	7406.47	69.25	-223.06	-993.21	40°08'47.121"N	104°44'25.284"W	17.09	
7620.00	60.178	338.190	7422.09	94.74	-199.31	-1002.79	40°08'47.356"N	104°44'25.407"W	10.41	
7650.00	64.952	340.931	7435.91	121.30	-174.37	-1012.07	40°08'47.603"N	104°44'25.527"W	17.86	
7680.00	67.513	343.088	7448.00	148.74	-148.26	-1020.54	40°08'47.861"N	104°44'25.636"W	10.78	





# Actual Wellpath Report

CANNON 2C-11HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 CANNON 2C-11HZ (518'FSL & 548'FEL, SEC.11)
Area	COLORADO	Well	CANNON 2C-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CANNON 2C-11HZ AWB
Facility	SEC.11-T2N-R66W		

WELLPATH DATA (262 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7710.00	72.511	343.736	7458.25	176.92	-121.25	-1028.58	40°08'48.128"N	104°44'25.739"W	16.78	
7740.00	77.124	345.081	7466.11	205.86	-93.37	-1036.36	40°08'48.403"N	104°44'25.839"W	15.97	
7770.00	79.428	350.008	7472.21	235.15	-64.69	-1042.69	40°08'48.686"N	104°44'25.921"W	17.82	
7800.00	81.659	354.962	7477.14	264.36	-35.37	-1046.55	40°08'48.976"N	104°44'25.971"W	17.91	
7830.00	82.832	359.976	7481.19	293.19	-5.68	-1047.86	40°08'49.270"N	104°44'25.988"W	17.02	
7860.00	84.532	1.003	7484.49	321.70	24.13	-1047.61	40°08'49.564"N	104°44'25.984"W	6.61	
7861.00†	84.569	1.034	7484.58	322.65	25.13	-1047.59	40°08'49.574"N	104°44'25.984"W	4.82	7" Casing Point
7905.00	86.186	2.410	7488.13	364.29	68.96	-1046.27	40°08'50.007"N	104°44'25.967"W	4.82	
7950.00	87.855	1.374	7490.47	406.91	113.88	-1044.79	40°08'50.451"N	104°44'25.948"W	4.36	
7995.00	88.944	0.547	7491.73	449.81	158.85	-1044.03	40°08'50.896"N	104°44'25.938"W	3.04	
8040.00	88.435	359.763	7492.76	492.90	203.84	-1043.91	40°08'51.340"N	104°44'25.937"W	2.08	
8085.00	89.088	359.797	7493.73	536.07	248.83	-1044.09	40°08'51.785"N	104°44'25.939"W	1.45	
8130.00	89.919	359.556	7494.12	579.27	293.83	-1044.34	40°08'52.229"N	104°44'25.942"W	1.92	
8175.00	90.523	359.108	7493.94	622.55	338.82	-1044.86	40°08'52.674"N	104°44'25.949"W	1.67	
8220.00	90.583	359.038	7493.51	665.89	383.81	-1045.59	40°08'53.119"N	104°44'25.959"W	0.20	
8265.00	92.566	0.509	7492.27	709.05	428.79	-1045.77	40°08'53.563"N	104°44'25.961"W	5.49	
8310.00	92.417	0.259	7490.32	752.06	473.75	-1045.47	40°08'54.007"N	104°44'25.957"W	0.65	
8355.00	93.142	359.402	7488.14	795.18	518.70	-1045.60	40°08'54.452"N	104°44'25.959"W	2.49	
8400.00	92.009	348.227	7486.11	839.33	563.32	-1050.44	40°08'54.893"N	104°44'26.021"W	24.94	
8445.00	92.237	358.776	7484.43	883.54	607.93	-1055.52	40°08'55.333"N	104°44'26.087"W	23.43	
8490.00	92.707	358.566	7482.49	926.92	652.88	-1056.57	40°08'55.778"N	104°44'26.100"W	1.14	
8535.00	91.099	359.320	7481.00	970.26	697.84	-1057.39	40°08'56.222"N	104°44'26.111"W	3.95	
8580.00	91.736	359.466	7479.89	1013.51	742.83	-1057.87	40°08'56.666"N	104°44'26.117"W	1.45	
8625.00	90.632	359.842	7478.96	1056.71	787.82	-1058.14	40°08'57.111"N	104°44'26.120"W	2.59	
8670.00	88.778	358.078	7479.19	1100.07	832.81	-1058.96	40°08'57.556"N	104°44'26.131"W	5.69	
8715.00	87.609	357.877	7480.61	1143.60	877.75	-1060.55	40°08'58.000"N	104°44'26.151"W	2.64	
8760.00	87.748	356.667	7482.43	1187.26	922.67	-1062.69	40°08'58.444"N	104°44'26.179"W	2.70	
8805.00	88.979	355.414	7483.71	1231.16	967.54	-1065.79	40°08'58.887"N	104°44'26.219"W	3.90	
8850.00	88.006	354.095	7484.90	1275.27	1012.33	-1069.91	40°08'59.330"N	104°44'26.272"W	3.64	
8895.00	88.133	355.786	7486.41	1319.34	1057.13	-1073.87	40°08'59.772"N	104°44'26.323"W	3.77	
8940.00	88.375	355.295	7487.79	1363.32	1101.97	-1077.37	40°09'00.216"N	104°44'26.368"W	1.22	
8985.00	90.057	354.794	7488.40	1407.39	1146.80	-1081.26	40°09'00.659"N	104°44'26.418"W	3.90	
9030.00	90.132	354.221	7488.33	1451.56	1191.59	-1085.56	40°09'01.101"N	104°44'26.474"W	1.28	
9075.00	91.536	353.098	7487.67	1495.84	1236.31	-1090.53	40°09'01.543"N	104°44'26.538"W	4.00	
9120.00	91.309	354.039	7486.56	1540.12	1281.01	-1095.57	40°09'01.985"N	104°44'26.603"W	2.15	
9165.00	91.970	353.783	7485.27	1584.35	1325.74	-1100.34	40°09'02.427"N	104°44'26.664"W	1.58	
9210.00	92.814	353.801	7483.39	1628.58	1370.44	-1105.20	40°09'02.869"N	104°44'26.727"W	1.88	
9255.00	92.202	352.994	7481.42	1672.86	1415.09	-1110.37	40°09'03.310"N	104°44'26.793"W	2.25	
9300.00	93.135	354.168	7479.33	1717.11	1459.76	-1115.40	40°09'03.751"N	104°44'26.858"W	3.33	
9345.00	93.726	354.429	7476.63	1761.22	1504.46	-1119.86	40°09'04.193"N	104°44'26.916"W	1.44	
9390.00	92.927	353.085	7474.02	1805.42	1549.12	-1124.75	40°09'04.634"N	104°44'26.979"W	3.47	
9435.00	93.528	354.196	7471.49	1849.64	1593.77	-1129.72	40°09'05.075"N	104°44'27.043"W	2.80	
9480.00	93.108	355.515	7468.88	1893.67	1638.51	-1133.75	40°09'05.518"N	104°44'27.095"W	3.07	
9525.00	92.394	356.333	7466.72	1937.56	1683.34	-1136.95	40°09'05.961"N	104°44'27.136"W	2.41	
9570.00	91.854	355.311	7465.06	1981.48	1728.19	-1140.22	40°09'06.404"N	104°44'27.178"W	2.57	
9615.00	91.072	355.844	7463.91	2025.46	1773.04	-1143.69	40°09'06.847"N	104°44'27.223"W	2.10	
9660.00	90.988	355.271	7463.10	2069.45	1817.90	-1147.18	40°09'07.290"N	104°44'27.268"W	1.29	
9705.00	90.093	354.807	7462.67	2113.53	1862.73	-1151.07	40°09'07.733"N	104°44'27.318"W	2.24	
9750.00	89.132	353.852	7462.98	2157.72	1907.51	-1155.51	40°09'08.176"N	104°44'27.375"W	3.01	
9795.00	88.215	353.554	7464.02	2201.98	1952.22	-1160.45	40°09'08.618"N	104°44'27.439"W	2.14	
9840.00	87.904	353.230	7465.54	2246.28	1996.90	-1165.62	40°09'09.059"N	104°44'27.505"W	1.00	
9885.00	86.442	352.850	7467.76	2290.60	2041.51	-1171.07	40°09'09.500"N	104°44'27.575"W	3.36	
9930.00	87.074	352.736	7470.31	2334.93	2086.08	-1176.71	40°09'09.941"N	104°44'27.648"W	1.43	
9975.00	87.826	352.495	7472.31	2379.31	2130.67	-1182.48	40°09'10.381"N	104°44'27.723"W	1.75	
10020.00	88.248	352.496	7473.85	2423.72	2175.25	-1188.36	40°09'10.822"N	104°44'27.798"W	0.94	
10065.00	88.825	352.494	7475.00	2468.15	2219.85	-1194.23	40°09'11.262"N	104°44'27.874"W	1.28	
10110.00	88.820	352.995	7475.92	2512.54	2264.48	-1199.91	40°09'11.703"N	104°44'27.947"W	1.11	Tie-Into GYRO Surveys
10130.00	88.800	353.100	7476.34	2532.26	2284.33	-1202.34	40°09'11.900"N	104°44'27.978"W	0.53	Begin BHI MWD Surveys
10218.00	91.350	355.530	7476.23	2618.67	2371.89	-1211.05	40°09'12.765"N	104°44'28.091"W	4.00	
10307.00	90.190	355.620	7475.03	2705.67	2460.61	-1217.92	40°09'13.642"N	104°44'28.179"W	1.31	



# Actual Wellpath Report

CANNON 2C-11HZ AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 CANNON 2C-11HZ (518'FSL & 548'FEL, SEC.11)
Area	COLORADO	Well	CANNON 2C-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CANNON 2C-11HZ AWB
Facility	SEC.11-T2N-R66W		

## WELLPATH DATA (262 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10396.00	91.360	355.800	7473.83	2792.63	2549.35	-1224.57	40°09'14.519"N	104°44'28.265"W	1.33	
10484.00	91.630	357.790	7471.53	2878.21	2637.18	-1229.49	40°09'15.386"N	104°44'28.328"W	2.28	
10572.00	92.060	359.740	7468.70	2963.04	2725.11	-1231.39	40°09'16.255"N	104°44'28.353"W	2.27	
10658.00	88.920	0.130	7467.96	3045.48	2811.10	-1231.49	40°09'17.105"N	104°44'28.354"W	3.68	
10746.00	89.820	1.190	7468.93	3129.53	2899.08	-1230.47	40°09'17.975"N	104°44'28.341"W	1.58	
10834.00	89.450	0.820	7469.49	3213.43	2987.07	-1228.93	40°09'18.844"N	104°44'28.321"W	0.59	
10922.00	89.140	1.650	7470.57	3297.21	3075.04	-1227.03	40°09'19.713"N	104°44'28.297"W	1.01	
11010.00	91.730	1.080	7469.90	3380.93	3163.00	-1224.94	40°09'20.583"N	104°44'28.270"W	3.01	
11093.00	88.600	0.700	7469.66	3460.10	3245.98	-1223.65	40°09'21.403"N	104°44'28.253"W	3.80	
11180.00	90.000	359.350	7470.73	3543.47	3332.97	-1223.61	40°09'22.262"N	104°44'28.253"W	2.24	
11270.00	89.880	357.450	7470.82	3630.42	3422.93	-1226.12	40°09'23.151"N	104°44'28.285"W	2.12	
11356.00	90.550	357.380	7470.50	3713.87	3508.84	-1230.00	40°09'24.000"N	104°44'28.335"W	0.78	
11446.00	87.970	356.270	7471.66	3801.41	3598.69	-1234.98	40°09'24.888"N	104°44'28.400"W	3.12	
11534.00	88.060	356.300	7474.71	3887.16	3686.45	-1240.68	40°09'25.755"N	104°44'28.473"W	0.11	
11623.00	88.030	355.750	7477.75	3973.97	3775.19	-1246.85	40°09'26.632"N	104°44'28.552"W	0.62	
11713.00	87.200	355.210	7481.49	4061.91	3864.83	-1253.93	40°09'27.518"N	104°44'28.644"W	1.10	
11799.00	85.780	354.210	7486.76	4146.09	3950.30	-1261.85	40°09'28.363"N	104°44'28.746"W	2.02	
11886.00	87.430	353.330	7491.91	4231.53	4036.63	-1271.27	40°09'29.216"N	104°44'28.867"W	2.15	
11972.00	88.490	351.270	7494.97	4316.45	4121.79	-1282.79	40°09'30.057"N	104°44'29.016"W	2.69	
12060.00	88.340	352.990	7497.40	4403.40	4208.93	-1294.83	40°09'30.919"N	104°44'29.171"W	1.96	
12078.00	88.640	352.430	7497.88	4421.16	4226.77	-1297.12	40°09'31.095"N	104°44'29.200"W	3.53	Last BHI MWD Surveys
12139.00	88.640	352.430	7499.33	4481.39	4287.23	-1305.15	40°09'31.692"N	104°44'29.304"W	0.00	Projection to Bit

## HOLE & CASING SECTIONS - Ref Wellbore: CANNON 2C-11HZ AWB Ref Wellpath: CANNON 2C-11HZ 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	17.00	950.00	933.00	17.00	949.88	0.00	0.00	-9.52	-8.21
9.625in Casing Surface	17.00	950.00	933.00	17.00	949.88	0.00	0.00	-9.52	-8.21
8.75in Open Hole	950.00	7876.00	6926.00	949.88	7485.93	-9.52	-8.21	40.07	-1047.26
7in Casing Intermediate	17.00	7861.00	7844.00	17.00	7484.58	0.00	0.00	25.13	-1047.59
6.125in Open Hole	7861.00	12139.00	4278.00	7484.58	7499.33	25.13	-1047.59	4287.23	-1305.15

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
CANNON PAD SECTION LINES		0.00	-15.99	0.00	3213348.65	1297310.41	40°08'49.168"N	104°44'12.494"W	polygon
CANNON PAD HARDLINES (460' SETBACKS)		7325.00	-15.99	0.00	3213348.65	1297310.41	40°08'49.168"N	104°44'12.494"W	polygon
CANNON 2C-11HZ BHL ON PLAT (460'FNL & 1820'FEL, REV-2)		7501.00	4292.56	-1276.29	3212035.38	1301607.62	40°09'31.745"N	104°44'28.932"W	point
CANNON 2C-11HZ BHL ON PLAT (460'FNL & 1820'FEL, REV-1)		7526.00	4292.56	-1276.29	3212035.38	1301607.62	40°09'31.745"N	104°44'28.932"W	point

## WELLPATH COMPOSITION - Ref Wellbore: CANNON 2C-11HZ AWB Ref Wellpath: CANNON 2C-11HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	945.00	Gyrodata standard - Continuous gyro	GYRO SURVEYS 12 1/4" HOLE <45-945>	CANNON 2C-11HZ AWB
945.00	7860.00	Gyrodata standard - Continuous gyro	GYRO SURVEYS 8 3/4" HOLE <990-7860>	CANNON 2C-11HZ AWB
7860.00	10110.00	Gyrodata standard - Continuous gyro	GYRO SURVEYS 6 1/8" HOLE <7905-10110>	CANNON 2C-11HZ AWB
10110.00	12078.00	OnTrak (MagCorr)	BHI MWD SURVEYS <10130-12078>	CANNON 2C-11HZ AWB
12078.00	12139.00	Blind Drilling (std)	Projection to bit	CANNON 2C-11HZ AWB



# Actual Wellpath Report

CANNON 2C-11HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 CANNON 2C-11HZ (518'FSL & 548'FEL, SEC.11)
Area	COLORADO	Well	CANNON 2C-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	CANNON 2C-11HZ AWB
Facility	SEC.11-T2N-R66W		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
45.00	0.454	294.030	45.00	Begin GYRO Surveys	
7861.00	84.569	1.034	7484.58	7" Casing Point	
10110.00	88.820	352.995	7475.92	Tie-Into GYRO Surveys	
10130.00	88.800	353.100	7476.34	Begin BHI MWD Surveys	
12078.00	88.640	352.430	7497.88	Last BHI MWD Surveys	
12139.00	88.640	352.430	7499.33	Projection to Bit	