

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34)
 Field: WELD COUNTY (KERR MCGEE) Well: COLFER 14N-34HZ
 Facility: SEC.34-T2N-R65W Wellbore: COLFER 14N-34HZ PWB

Plot reference wellpath is COLFER 14N-34HZ (PERMIT) PWP

True vertical depths are referenced to Rig on SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to Rig on SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34) (RKB)	North Reference: True north
Rig on SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34) (RKB) to Mean Sea Level: 4981 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: welljfo2 on 5/24/2012

Location Information

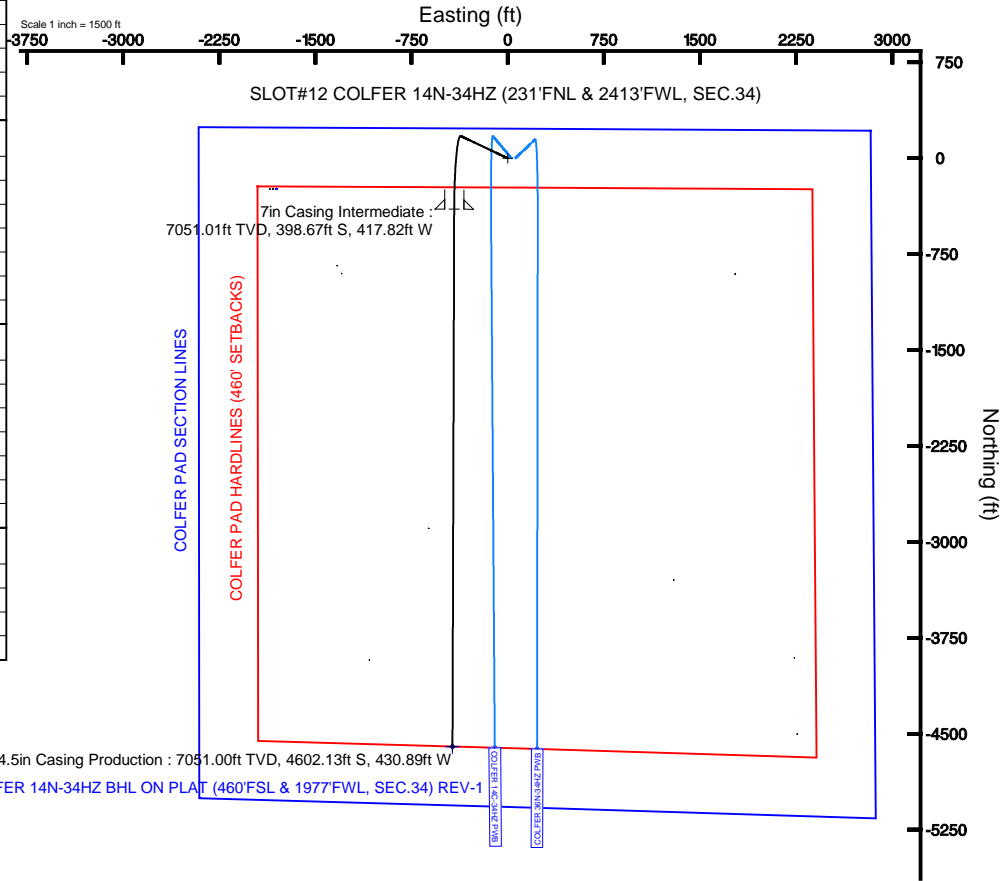
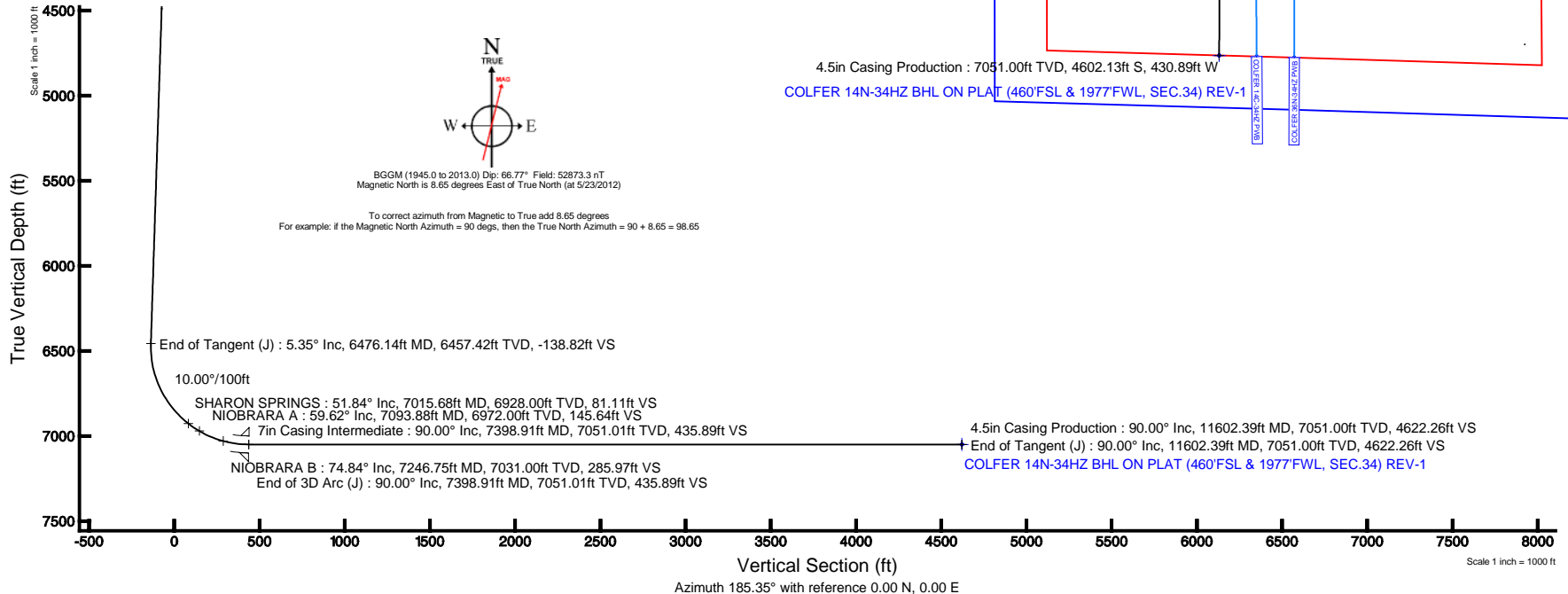
Facility Name	Grid East (US Ft)	Grid North (US Ft)	Latitude	Longitude		
SEC.34-T2N-R65W	3235789.929	1280756.144	40°08'03.589"N	104°39'25.538"W		
Slot	Local N (ft)	Local E (ft)	Grid East (US Ft)	Grid North (US Ft)	Latitude	Longitude
SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34)	240.30	1808.65	3237596.034	1281015.811	40°08'05.962"N	104°39'02.284"W
Rig on SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34) (RKB) to Mud line (At Slot: SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34))						4981ft
Mean Sea Level to Mud line (At Slot: SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34))						0ft
Rig on SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34) (RKB) to Mean Sea Level						4981ft

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	295.400	17.00	0.00	0.00	0.00	0.00
End of Tangent	2000.00	0.000	295.400	2000.00	0.00	0.00	0.00	0.00
End of Build (J)	2267.50	5.350	295.400	2267.11	5.35	-11.27	2.00	-4.28
End of Tangent (J)	6476.14	5.350	295.400	6457.42	173.67	-365.75	0.00	-138.82
End of 3D Arc (J)	7398.91	90.000	180.178	7051.01	-398.68	-417.82	10.00	435.89
End of Tangent (J)	11602.39	90.000	180.178	7051.00	-4602.13	-430.89	0.00	4622.26

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US Ft)	Grid North (US Ft)	Latitude	Longitude
COLFER PAD SECTION LINES	23.00	-240.06	-1808.59	3236789.91	1280756.25	40°08'03.589"N	104°39'25.538"W	
COLFER 14N-34HZ BHL ON PLAT (460'FSL & 1977'FWL, SEC.34) REV-1	11602.39	7051.00	-4602.13	-430.89	3237209.26	1276409.76	40°05'20.483"N	104°39'07.808"W
COLFER PAD HARD LINES (460' SETBACKS)	7051.00	-240.06	-1808.59	3236789.91	1280756.25	40°08'03.589"N	104°39'25.538"W	





Planned Wellpath Report

COLFER 14N-34HZ (PERMIT) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34)
Area	COLORADO	Well	COLFER 14N-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COLFER 14N-34HZ PWB
Facility	SEC.34-T2N-R65W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 3.0.2
North Reference	True	User	Wilsje02
Scale	0.99996	Report Generated	5/24/2012 at 08:01:58
Convergence at slot	0.55° East	Database/Source file	WellArchitectDB/COLFER_14N-34HZ_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	240.30	1808.65	3237596.03	1281015.61	40°06'05.962"N	104°39'02.264"W
Facility Reference Pt			3235789.83	1280758.14	40°06'03.588"N	104°39'25.539"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34) (RKB) to Facility Vertical Datum
Horizontal Reference Pt	Slot	Rig on SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34) (RKB) to Mean Sea Level
Vertical Reference Pt	Rig on SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34) (RKB)	Rig on SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34) (RKB) to Mud Line at Slot (SLOT#12 COLFER 14N-34HZ) (RKB)
MD Reference Pt	Rig on SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34) (RKB)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth



Planned Wellpath Report

COLFER 14N-34HZ (PERMIT) PWP

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Area	COLORADO	Well	COLFER 14N-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COLFER 14N-34HZ PWB
Facility	SEC.34-T2N-R65W		

WELLPATH DATA (128 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	295.400	0.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
17.00	0.000	295.400	17.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	Tie On
117.00†	0.000	295.400	117.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
217.00†	0.000	295.400	217.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
317.00†	0.000	295.400	317.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
417.00†	0.000	295.400	417.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
517.00†	0.000	295.400	517.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
617.00†	0.000	295.400	617.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
717.00†	0.000	295.400	717.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
817.00†	0.000	295.400	817.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
917.00†	0.000	295.400	917.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
1017.00†	0.000	295.400	1017.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
1100.00†	0.000	295.400	1100.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	FOX HILLS
1117.00†	0.000	295.400	1117.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
1217.00†	0.000	295.400	1217.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
1317.00†	0.000	295.400	1317.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
1417.00†	0.000	295.400	1417.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
1517.00†	0.000	295.400	1517.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
1617.00†	0.000	295.400	1617.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
1717.00†	0.000	295.400	1717.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
1817.00†	0.000	295.400	1817.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
1917.00†	0.000	295.400	1917.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	
2000.00	0.000	295.400	2000.00	0.00	0.00	0.00	40°06'05.962"N	104°39'02.264"W	0.00	End of Tangent
2017.00†	0.340	295.400	2017.00	-0.02	0.02	-0.05	40°06'05.962"N	104°39'02.265"W	2.00	
2117.00†	2.340	295.400	2116.97	-0.82	1.02	-2.16	40°06'05.972"N	104°39'02.292"W	2.00	
2217.00†	4.340	295.400	2216.79	-2.82	3.52	-7.42	40°06'05.997"N	104°39'02.359"W	2.00	
2267.50	5.350	295.400	2267.11	-4.28	5.35	-11.27	40°06'06.015"N	104°39'02.409"W	2.00	End of Build (I)
2317.00†	5.350	295.400	2316.40	-5.86	7.33	-15.44	40°06'06.034"N	104°39'02.463"W	0.00	
2417.00†	5.350	295.400	2415.96	-9.06	11.33	-23.87	40°06'06.074"N	104°39'02.571"W	0.00	
2517.00†	5.350	295.400	2515.52	-12.25	15.33	-32.29	40°06'06.114"N	104°39'02.680"W	0.00	
2617.00†	5.350	295.400	2615.09	-15.45	19.33	-40.71	40°06'06.153"N	104°39'02.788"W	0.00	
2717.00†	5.350	295.400	2714.65	-18.65	23.33	-49.13	40°06'06.193"N	104°39'02.896"W	0.00	
2817.00†	5.350	295.400	2814.22	-21.85	27.33	-57.56	40°06'06.232"N	104°39'03.005"W	0.00	
2917.00†	5.350	295.400	2913.78	-25.04	31.33	-65.98	40°06'06.272"N	104°39'03.113"W	0.00	
2924.25†	5.350	295.400	2921.00	-25.27	31.62	-66.59	40°06'06.274"N	104°39'03.121"W	0.00	PARKMAN
3017.00†	5.350	295.400	3013.35	-28.24	35.33	-74.40	40°06'06.311"N	104°39'03.221"W	0.00	
3117.00†	5.350	295.400	3112.91	-31.44	39.33	-82.82	40°06'06.351"N	104°39'03.330"W	0.00	
3217.00†	5.350	295.400	3212.48	-34.63	43.33	-91.25	40°06'06.390"N	104°39'03.438"W	0.00	
3317.00†	5.350	295.400	3312.04	-37.83	47.33	-99.67	40°06'06.430"N	104°39'03.547"W	0.00	
3417.00†	5.350	295.400	3411.60	-41.03	51.33	-108.09	40°06'06.469"N	104°39'03.655"W	0.00	
3517.00†	5.350	295.400	3511.17	-44.22	55.33	-116.51	40°06'06.509"N	104°39'03.763"W	0.00	
3617.00†	5.350	295.400	3610.73	-47.42	59.32	-124.94	40°06'06.548"N	104°39'03.872"W	0.00	
3717.00†	5.350	295.400	3710.30	-50.62	63.32	-133.36	40°06'06.588"N	104°39'03.980"W	0.00	
3817.00†	5.350	295.400	3809.86	-53.81	67.32	-141.78	40°06'06.627"N	104°39'04.089"W	0.00	
3917.00†	5.350	295.400	3909.43	-57.01	71.32	-150.21	40°06'06.667"N	104°39'04.197"W	0.00	



Planned Wellpath Report

COLFER 14N-34HZ (PERMIT) PWP
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REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP		Slot	SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34)
Area	COLORADO		Well	COLFER 14N-34HZ
Field	WELD COUNTY (KERR MCGEE)		Wellbore	COLFER 14N-34HZ PWB
Facility	SEC.34-T2N-R65W			

WELLPATH DATA (128 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4017.00†	5.350	295.400	4008.99	-60.21	75.32	-158.63	40°06'06.706"N	104°39'04.305"W	0.00	
4117.00†	5.350	295.400	4108.55	-63.40	79.32	-167.05	40°06'06.746"N	104°39'04.414"W	0.00	
4217.00†	5.350	295.400	4208.12	-66.60	83.32	-175.47	40°06'06.785"N	104°39'04.522"W	0.00	
4317.00†	5.350	295.400	4307.68	-69.80	87.32	-183.90	40°06'06.825"N	104°39'04.631"W	0.00	
4417.00†	5.350	295.400	4407.25	-72.99	91.32	-192.32	40°06'06.864"N	104°39'04.739"W	0.00	
4426.80†	5.350	295.400	4417.00	-73.31	91.71	-193.14	40°06'06.868"N	104°39'04.750"W	0.00	SUSSEX
4517.00†	5.350	295.400	4506.81	-76.19	95.32	-200.74	40°06'06.904"N	104°39'04.847"W	0.00	
4617.00†	5.350	295.400	4606.38	-79.39	99.32	-209.16	40°06'06.943"N	104°39'04.956"W	0.00	
4717.00†	5.350	295.400	4705.94	-82.58	103.32	-217.59	40°06'06.983"N	104°39'05.064"W	0.00	
4817.00†	5.350	295.400	4805.51	-85.78	107.32	-226.01	40°06'07.023"N	104°39'05.172"W	0.00	
4917.00†	5.350	295.400	4905.07	-88.98	111.32	-234.43	40°06'07.062"N	104°39'05.281"W	0.00	
5017.00†	5.350	295.400	5004.63	-92.17	115.32	-242.85	40°06'07.102"N	104°39'05.389"W	0.00	
5117.00†	5.350	295.400	5104.20	-95.37	119.32	-251.28	40°06'07.141"N	104°39'05.498"W	0.00	
5217.00†	5.350	295.400	5203.76	-98.57	123.31	-259.70	40°06'07.181"N	104°39'05.606"W	0.00	
5317.00†	5.350	295.400	5303.33	-101.76	127.31	-268.12	40°06'07.220"N	104°39'05.714"W	0.00	
5417.00†	5.350	295.400	5402.89	-104.96	131.31	-276.54	40°06'07.260"N	104°39'05.823"W	0.00	
5517.00†	5.350	295.400	5502.46	-108.16	135.31	-284.97	40°06'07.299"N	104°39'05.931"W	0.00	
5617.00†	5.350	295.400	5602.02	-111.36	139.31	-293.39	40°06'07.339"N	104°39'06.040"W	0.00	
5717.00†	5.350	295.400	5701.58	-114.55	143.31	-301.81	40°06'07.378"N	104°39'06.148"W	0.00	
5817.00†	5.350	295.400	5801.15	-117.75	147.31	-310.24	40°06'07.418"N	104°39'06.256"W	0.00	
5917.00†	5.350	295.400	5900.71	-120.95	151.31	-318.66	40°06'07.457"N	104°39'06.365"W	0.00	
6017.00†	5.350	295.400	6000.28	-124.14	155.31	-327.08	40°06'07.497"N	104°39'06.473"W	0.00	
6117.00†	5.350	295.400	6099.84	-127.34	159.31	-335.50	40°06'07.536"N	104°39'06.582"W	0.00	
6217.00†	5.350	295.400	6199.41	-130.54	163.31	-343.93	40°06'07.576"N	104°39'06.690"W	0.00	
6317.00†	5.350	295.400	6298.97	-133.73	167.31	-352.35	40°06'07.615"N	104°39'06.798"W	0.00	
6417.00†	5.350	295.400	6398.54	-136.93	171.31	-360.77	40°06'07.655"N	104°39'06.907"W	0.00	
6476.14	5.350	295.400	6457.42	-138.82	173.67	-365.75	40°06'07.678"N	104°39'06.971"W	0.00	End of Tangent (I)
6517.00†	5.169	249.666	6498.12	-138.68	173.85	-369.20	40°06'07.680"N	104°39'07.015"W	10.00	
6617.00†	12.750	202.165	6596.94	-126.13	162.03	-377.61	40°06'07.563"N	104°39'07.123"W	10.00	
6717.00†	22.314	192.091	6692.20	-96.64	133.18	-385.77	40°06'07.278"N	104°39'07.228"W	10.00	
6817.00†	32.137	187.929	6781.02	-51.10	88.16	-393.43	40°06'06.833"N	104°39'07.327"W	10.00	
6917.00†	42.037	185.570	6860.70	9.11	28.34	-400.37	40°06'06.242"N	104°39'07.416"W	10.00	
7015.68†	51.839	183.995	6928.00	81.11	-43.42	-406.30	40°06'05.533"N	104°39'07.493"W	10.00	
7017.00†	51.970	183.978	6928.81	82.14	-44.46	-406.37	40°06'05.523"N	104°39'07.493"W	10.00	SHARON SPRINGS
7093.88†	59.617	183.025	6972.00	145.64	-107.87	-410.22	40°06'04.896"N	104°39'07.543"W	10.00	NIOBRARA A
7117.00†	61.919	182.769	6983.29	165.80	-128.02	-411.24	40°06'04.697"N	104°39'07.556"W	10.00	
7217.00†	71.876	181.767	7022.48	257.53	-219.81	-414.85	40°06'03.790"N	104°39'07.603"W	10.00	
7246.75†	74.840	181.493	7031.00	285.97	-248.31	-415.66	40°06'03.508"N	104°39'07.613"W	10.00	NIOBRARA B
7317.00†	81.838	180.874	7045.19	354.54	-317.04	-417.07	40°06'02.829"N	104°39'07.631"W	10.00	
7398.91	90.000	180.178	7051.01	435.89	-398.68	-417.82	40°06'02.022"N	104°39'07.641"W	10.00	End of 3D Arc (J)
7417.00†	90.000	180.178	7051.01	453.90	-416.76	-417.88	40°06'01.843"N	104°39'07.641"W	0.00	
7517.00†	90.000	180.178	7051.01	553.50	-516.76	-418.19	40°06'00.855"N	104°39'07.645"W	0.00	
7617.00†	90.000	180.178	7051.01	653.09	-616.76	-418.50	40°05'59.867"N	104°39'07.649"W	0.00	
7717.00†	90.000	180.178	7051.01	752.68	-716.76	-418.81	40°05'58.879"N	104°39'07.653"W	0.00	
7817.00†	90.000	180.178	7051.01	852.28	-816.76	-419.12	40°05'57.891"N	104°39'07.657"W	0.00	



Planned Wellpath Report

COLFER 14N-34HZ (PERMIT) PWP
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REFERENCE WELLPATH IDENTIFICATION

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Area	COLORADO	Well	COLFER 14N-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COLFER 14N-34HZ PWB
Facility	SEC.34-T2N-R65W		

WELLPATH DATA (128 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TYD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7917.00†	90.000	180.178	7051.01	951.87	-916.76	-419.43	40°05'56.902"N	104°39'07.661"W	0.00	
8017.00†	90.000	180.178	7051.01	1051.46	-1016.76	-419.74	40°05'55.914"N	104°39'07.665"W	0.00	
8117.00†	90.000	180.178	7051.01	1151.06	-1116.76	-420.05	40°05'54.926"N	104°39'07.669"W	0.00	
8217.00†	90.000	180.178	7051.01	1250.65	-1216.76	-420.37	40°05'53.938"N	104°39'07.673"W	0.00	
8317.00†	90.000	180.178	7051.01	1350.24	-1316.76	-420.68	40°05'52.950"N	104°39'07.677"W	0.00	
8417.00†	90.000	180.178	7051.01	1449.83	-1416.76	-420.99	40°05'51.961"N	104°39'07.681"W	0.00	
8517.00†	90.000	180.178	7051.01	1549.43	-1516.76	-421.30	40°05'50.973"N	104°39'07.685"W	0.00	
8617.00†	90.000	180.178	7051.01	1649.02	-1616.76	-421.61	40°05'49.985"N	104°39'07.689"W	0.00	
8717.00†	90.000	180.178	7051.01	1748.61	-1716.76	-421.92	40°05'48.997"N	104°39'07.693"W	0.00	
8817.00†	90.000	180.178	7051.01	1848.21	-1816.76	-422.23	40°05'48.008"N	104°39'07.697"W	0.00	
8917.00†	90.000	180.178	7051.01	1947.80	-1916.76	-422.54	40°05'47.020"N	104°39'07.701"W	0.00	
9017.00†	90.000	180.178	7051.01	2047.39	-2016.76	-422.85	40°05'46.032"N	104°39'07.705"W	0.00	
9117.00†	90.000	180.178	7051.01	2146.99	-2116.76	-423.16	40°05'45.044"N	104°39'07.709"W	0.00	
9217.00†	90.000	180.178	7051.01	2246.58	-2216.75	-423.47	40°05'44.056"N	104°39'07.713"W	0.00	
9317.00†	90.000	180.178	7051.01	2346.17	-2316.75	-423.79	40°05'43.067"N	104°39'07.717"W	0.00	
9417.00†	90.000	180.178	7051.01	2445.76	-2416.75	-424.10	40°05'42.079"N	104°39'07.721"W	0.00	
9517.00†	90.000	180.178	7051.01	2545.36	-2516.75	-424.41	40°05'41.091"N	104°39'07.725"W	0.00	
9617.00†	90.000	180.178	7051.01	2644.95	-2616.75	-424.72	40°05'40.103"N	104°39'07.729"W	0.00	
9717.00†	90.000	180.178	7051.01	2744.54	-2716.75	-425.03	40°05'39.115"N	104°39'07.733"W	0.00	
9817.00†	90.000	180.178	7051.01	2844.14	-2816.75	-425.34	40°05'38.126"N	104°39'07.737"W	0.00	
9917.00†	90.000	180.178	7051.01	2943.73	-2916.75	-425.65	40°05'37.138"N	104°39'07.741"W	0.00	
10017.00†	90.000	180.178	7051.01	3043.32	-3016.75	-425.96	40°05'36.150"N	104°39'07.745"W	0.00	
10117.00†	90.000	180.178	7051.00	3142.92	-3116.75	-426.27	40°05'35.162"N	104°39'07.749"W	0.00	
10217.00†	90.000	180.178	7051.00	3242.51	-3216.75	-426.58	40°05'34.174"N	104°39'07.753"W	0.00	
10317.00†	90.000	180.178	7051.00	3342.10	-3316.75	-426.89	40°05'33.185"N	104°39'07.757"W	0.00	
10417.00†	90.000	180.178	7051.00	3441.70	-3416.75	-427.21	40°05'32.197"N	104°39'07.761"W	0.00	
10517.00†	90.000	180.178	7051.00	3541.29	-3516.75	-427.52	40°05'31.209"N	104°39'07.765"W	0.00	
10617.00†	90.000	180.178	7051.00	3640.88	-3616.75	-427.83	40°05'30.221"N	104°39'07.769"W	0.00	
10717.00†	90.000	180.178	7051.00	3740.47	-3716.75	-428.14	40°05'29.232"N	104°39'07.773"W	0.00	
10817.00†	90.000	180.178	7051.00	3840.07	-3816.75	-428.45	40°05'28.244"N	104°39'07.777"W	0.00	
10917.00†	90.000	180.178	7051.00	3939.66	-3916.75	-428.76	40°05'27.256"N	104°39'07.781"W	0.00	
11017.00†	90.000	180.178	7051.00	4039.25	-4016.75	-429.07	40°05'26.268"N	104°39'07.785"W	0.00	
11117.00†	90.000	180.178	7051.00	4138.85	-4116.75	-429.38	40°05'25.280"N	104°39'07.789"W	0.00	
11217.00†	90.000	180.178	7051.00	4238.44	-4216.75	-429.69	40°05'24.291"N	104°39'07.793"W	0.00	
11317.00†	90.000	180.178	7051.00	4338.03	-4316.74	-430.00	40°05'23.303"N	104°39'07.797"W	0.00	
11417.00†	90.000	180.178	7051.00	4437.63	-4416.74	-430.31	40°05'22.315"N	104°39'07.801"W	0.00	
11517.00†	90.000	180.178	7051.00	4537.22	-4516.74	-430.63	40°05'21.327"N	104°39'07.805"W	0.00	
11602.39	90.000	180.178	7051.00 ¹	4622.26	-4602.13	-430.89	40°05'20.483"N	104°39'07.808"W	0.00	End of Tangent (J)



Planned Wellpath Report
COLFER 14N-34HZ (PERMIT) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34)
Area	COLORADO	Well	COLFER 14N-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COLFER 14N-34HZ PWB
Facility	SEC.34-T2N-R65W		

HOLE & CASING SECTIONS - Ref Wellbore: COLFER 14N-34HZ PWB Ref Wellpath: COLFER 14N-34HZ (PERMIT) PWP									
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]
12.25in Open Hole	17.00	1300.00	1283.00	17.00	1300.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	1300.00	1283.00	17.00	1300.00	0.00	0.00	0.00	0.00
8.75in Open Hole	1300.00	7398.91	6098.91	1300.00	7051.01	0.00	0.00	-398.67	-417.82
7in Casing Intermediate	17.00	7398.91	7381.91	17.00	7051.01	0.00	0.00	-398.67	-417.82
6.125in Open Hole	7398.91	11602.39	4203.48	7051.01	7051.00	-398.67	-417.82	-4602.13	-430.89
4.5in Casing Production	17.00	11602.39	11585.39	17.00	7051.00	0.00	0.00	-4602.13	-430.89

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
COLFER PAD SECTION LINES		23.00	-240.06	-1808.59	3235789.91	1280758.25	40°06'03.589"N	104°39'25.538"W	polygon
1) COLFER 14N-34HZ BHL ON PLAT (460'FSL & 1977'FWL, SEC.34) REV-1	11602.39	7051.00	-4602.13	-430.89	3237209.26	1276409.76	40°05'20.483"N	104°39'07.808"W	point
COLFER PAD HARDLINES (460' SETBACKS)		7051.00	-240.06	-1808.59	3235789.91	1280758.25	40°06'03.589"N	104°39'25.538"W	polygon

SURVEY PROGRAM - Ref Wellbore: COLFER 14N-34HZ PWB Ref Wellpath: COLFER 14N-34HZ (PERMIT) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	11602.39	NaviTrak (Standard)		COLFER 14N-34HZ PWB



Planned Wellpath Report
COLFER 14N-34HZ (PERMIT) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#12 COLFER 14N-34HZ (231'FNL & 2413'FWL, SEC.34)
Area	COLORADO	Well	COLFER 14N-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	COLFER 14N-34HZ PWB
Facility	SEC.34-T2N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1100.00	0.000	295.400	1100.00	FOX HILLS
2924.25	5.350	295.400	2921.00	PARKMAN
4426.80	5.350	295.400	4417.00	SUSSEX
7015.68	51.839	183.995	6928.00	SHARON SPRINGS
7093.88	59.617	183.025	6972.00	NIOBRARA A
7246.75	74.840	181.493	7031.00	NIOBRARA B