

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33)  
 Field: WELD COUNTY (KERR MCGEE) Well: GITTLEIN 4C-28HZ  
 Facility: SEC.33-T2N-R65W Wellbore: GITTLEIN 4C-28HZ PWB

Plot reference wellpath is GITTLEIN 4C-28HZ (PERMIT) PWB

True vertical depths are referenced to Rig on SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to Rig on SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33) (RKB)	North Reference: True north
Rig on SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33) (RKB) to Mean Sea Level: 4934 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wjlsj02 on 8/13/2012

## Location Information

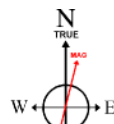
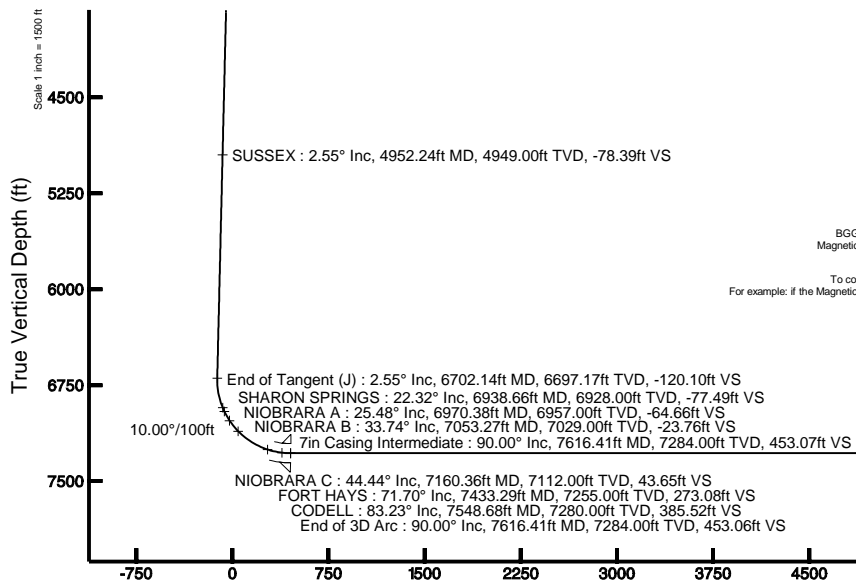
Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SEC.33-T2N-R65W		3231045.236	1276079.076	40°05'17.790"N	104°40'27.156"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33)	0.71	60.16	3231105.381	1276080.344	40°05'17.797"N	104°40'26.382"W
Rig on SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33) (RKB) to Mud line (At Slot: SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33))	4934ft					
Mean Sea Level to Mud line (At Slot: SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33))	0ft					
Rig on SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33) (RKB) to Mean Sea Level	4934ft					

## 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	235.800	17.00	0.00	0.00	0.00	0.00
End of Tangent	1600.00	0.000	235.800	1600.00	0.00	0.00	0.00	0.00
End of Build (J)	1727.50	2.550	235.800	1727.46	-1.59	-2.35	2.00	-1.52
End of Tangent (J)	6702.14	2.550	235.800	6697.17	-126.00	-185.40	0.00	-120.10
End of 3D Arc	7616.41	90.000	359.829	7284.00	446.71	-208.77	10.00	453.06
End of 3D Arc	14445.36	90.000	359.831	7284.00	7275.64	-229.06	0.00	7279.24

## Targets

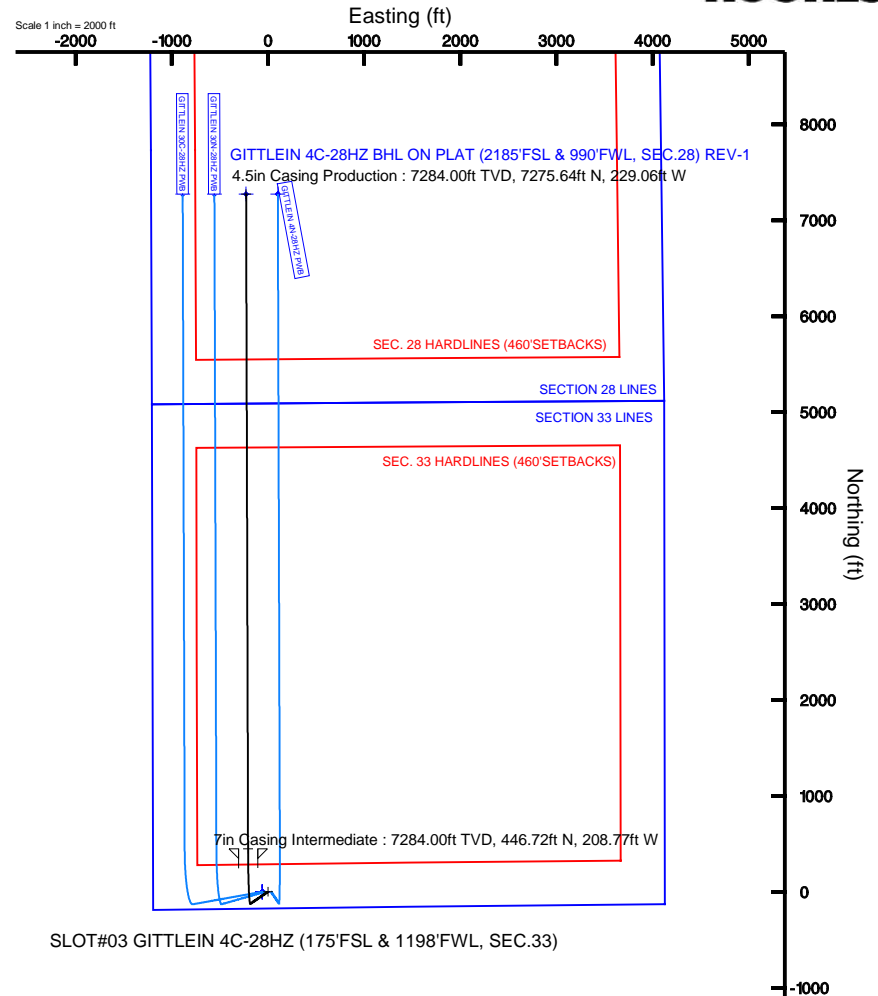
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
GITTLEIN 4 PAD SECTION 28 LINES		0.00	-0.71	-60.16	3231045.24	1276079.08	40°05'17.790"N	104°40'27.156"W
GITTLEIN 4 PAD SECTION 33 LINES		0.00	-0.71	-60.16	3231045.24	1276079.08	40°05'17.790"N	104°40'27.156"W
GITTLEIN 4C-28HZ BHL ON PLAT (2185'FSL & 990'FWL, SEC.28) REV-1	14445.36	7284.00	7275.64	-229.06	3230808.57	1283353.23	40°06'29.698"N	104°40'29.330"W
GITTLEIN 4 PAD SEC. 28 HARDLINES (460'SETBACKS)		7300.00	-0.71	-60.16	3231045.24	1276079.08	40°05'17.790"N	104°40'27.156"W
GITTLEIN 4 PAD SEC. 33 HARDLINES (460'SETBACKS)		7300.00	-0.71	-60.16	3231045.24	1276079.08	40°05'17.790"N	104°40'27.156"W



BGGM (1945.0 to 2014.0) Dip: 66.76° Field: 52818.7 nT  
 Magnetic North is 8.68 degrees East of True North (at 8/13/2012)

To correct azimuth from Magnetic to True add 8.68 degrees  
 For example: if the Magnetic North Azimuth = 90 degs, then the True North Azimuth = 90 + 8.68 = 98.68

Vertical Section (ft)  
 Azimuth 358.20° with reference 0.00 N, 0.00 E



SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33)

4.5in Casing Production : 90.00° Inc, 14445.36ft MD, 7284.00ft TVD, 7279.24ft VS  
 End of 3D Arc : 90.00° Inc, 14445.36ft MD, 7284.00ft TVD, 7279.24ft VS  
 GITTLEIN 4C-28HZ BHL ON PLAT (2185'FSL & 990'FWL, SEC.28) REV-1

Scale 1 inch = 1500 ft



## Planned Wellpath Report

GITTLEIN 4C-28HZ (PERMIT) PWP

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### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33)
Area	COLORADO	Well	GITTLEIN 4C-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	GITTLEIN 4C-28HZ PWB
Facility	SEC.33-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	0.999961	Report Generated	8/13/2012 at 14:04:02
Convergence at slot	0.53° East	Database/Source file	WellArchitectDB/GITTLEIN_4C-28HZ_PWB.xml

### WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.71	60.16	3231105.38	1276080.34	40°05'17.797"N	104°40'26.382"W
Facility Reference Pt			3231045.24	1276079.08	40°05'17.790"N	104°40'27.156"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#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33) (RKB) to Facility Vertical Datum
Horizontal Reference Pt	Slot	Rig on SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33) (RKB) to Mean Sea Level
Vertical Reference Pt	Rig on SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33) (RKB)	Rig on SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33) (RKB) to Mud Line at Slot (SLOT#03 GITTLEIN 4C-
MD Reference Pt	Rig on SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33) (RKB)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth



# Planned Wellpath Report

GITTLEIN 4C-28HZ (PERMIT) PWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33)
Area	COLORADO	Well	GITTLEIN 4C-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	GITTLEIN 4C-28HZ PWB
Facility	SEC.33-T2N-R65W		

WELLPATH DATA (159 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	235.800	0.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	
17.00	0.000	235.800	17.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	Tie On
117.00†	0.000	235.800	117.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	
217.00†	0.000	235.800	217.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	
317.00†	0.000	235.800	317.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	
417.00†	0.000	235.800	417.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	
517.00†	0.000	235.800	517.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	
617.00†	0.000	235.800	617.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	
717.00†	0.000	235.800	717.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	
756.00†	0.000	235.800	756.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	FOX HILLS
817.00†	0.000	235.800	817.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	
917.00†	0.000	235.800	917.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	
1017.00†	0.000	235.800	1017.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	
1117.00†	0.000	235.800	1117.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	
1217.00†	0.000	235.800	1217.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	
1317.00†	0.000	235.800	1317.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	
1417.00†	0.000	235.800	1417.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	
1517.00†	0.000	235.800	1517.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	
1600.00	0.000	235.800	1600.00	0.00	0.00	0.00	40°05'17.797"N	104°40'26.382"W	0.00	End of Tangent
1617.00†	0.340	235.800	1617.00	-0.03	-0.03	-0.04	40°05'17.797"N	104°40'26.383"W	2.00	
1717.00†	2.340	235.800	1716.97	-1.28	-1.34	-1.98	40°05'17.784"N	104°40'26.407"W	2.00	
1727.50	2.550	235.800	1727.46	-1.52	-1.59	-2.35	40°05'17.781"N	104°40'26.412"W	2.00	End of Build (J)
1817.00†	2.550	235.800	1816.87	-3.65	-3.83	-5.64	40°05'17.759"N	104°40'26.455"W	0.00	
1917.00†	2.550	235.800	1916.77	-6.04	-6.33	-9.32	40°05'17.734"N	104°40'26.502"W	0.00	
2017.00†	2.550	235.800	2016.67	-8.42	-8.83	-13.00	40°05'17.710"N	104°40'26.549"W	0.00	
2117.00†	2.550	235.800	2116.57	-10.80	-11.34	-16.68	40°05'17.685"N	104°40'26.597"W	0.00	
2217.00†	2.550	235.800	2216.47	-13.19	-13.84	-20.36	40°05'17.660"N	104°40'26.644"W	0.00	
2317.00†	2.550	235.800	2316.37	-15.57	-16.34	-24.04	40°05'17.636"N	104°40'26.691"W	0.00	
2417.00†	2.550	235.800	2416.28	-17.96	-18.84	-27.72	40°05'17.611"N	104°40'26.739"W	0.00	
2517.00†	2.550	235.800	2516.18	-20.34	-21.34	-31.40	40°05'17.586"N	104°40'26.786"W	0.00	
2617.00†	2.550	235.800	2616.08	-22.72	-23.84	-35.08	40°05'17.561"N	104°40'26.833"W	0.00	
2717.00†	2.550	235.800	2715.98	-25.11	-26.34	-38.76	40°05'17.537"N	104°40'26.881"W	0.00	
2817.00†	2.550	235.800	2815.88	-27.49	-28.84	-42.44	40°05'17.512"N	104°40'26.928"W	0.00	
2917.00†	2.550	235.800	2915.78	-29.87	-31.34	-46.12	40°05'17.487"N	104°40'26.975"W	0.00	
3017.00†	2.550	235.800	3015.68	-32.26	-33.84	-49.80	40°05'17.463"N	104°40'27.023"W	0.00	
3117.00†	2.550	235.800	3115.58	-34.64	-36.34	-53.48	40°05'17.438"N	104°40'27.070"W	0.00	
3217.00†	2.550	235.800	3215.48	-37.03	-38.84	-57.16	40°05'17.413"N	104°40'27.117"W	0.00	
3317.00†	2.550	235.800	3315.38	-39.41	-41.34	-60.84	40°05'17.388"N	104°40'27.165"W	0.00	
3417.00†	2.550	235.800	3415.28	-41.79	-43.85	-64.52	40°05'17.364"N	104°40'27.212"W	0.00	
3517.00†	2.550	235.800	3515.19	-44.18	-46.35	-68.20	40°05'17.339"N	104°40'27.259"W	0.00	
3617.00†	2.550	235.800	3615.09	-46.56	-48.85	-71.88	40°05'17.314"N	104°40'27.307"W	0.00	
3717.00†	2.550	235.800	3714.99	-48.94	-51.35	-75.56	40°05'17.290"N	104°40'27.354"W	0.00	
3817.00†	2.550	235.800	3814.89	-51.33	-53.85	-79.24	40°05'17.265"N	104°40'27.401"W	0.00	
3917.00†	2.550	235.800	3914.79	-53.71	-56.35	-82.92	40°05'17.240"N	104°40'27.449"W	0.00	
4017.00†	2.550	235.800	4014.69	-56.10	-58.85	-86.59	40°05'17.215"N	104°40'27.496"W	0.00	

**REFERENCE WELLPATH IDENTIFICATION**

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33)
Area	COLORADO	Well	GITTLEIN 4C-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	GITTLEIN 4C-28HZ PWB
Facility	SEC.33-T2N-R65W		

**WELLPATH DATA (159 stations) † = interpolated/extrapolated station**

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4117.00†	2.550	235.800	4114.59	-58.48	-61.35	-90.27	40°05'17.191"N	104°40'27.543"W	0.00	
4217.00†	2.550	235.800	4214.49	-60.86	-63.85	-93.95	40°05'17.166"N	104°40'27.591"W	0.00	
4317.00†	2.550	235.800	4314.39	-63.25	-66.35	-97.63	40°05'17.141"N	104°40'27.638"W	0.00	
4417.00†	2.550	235.800	4414.29	-65.63	-68.85	-101.31	40°05'17.117"N	104°40'27.686"W	0.00	
4517.00†	2.550	235.800	4514.20	-68.01	-71.35	-104.99	40°05'17.092"N	104°40'27.733"W	0.00	
4617.00†	2.550	235.800	4614.10	-70.40	-73.85	-108.67	40°05'17.067"N	104°40'27.780"W	0.00	
4717.00†	2.550	235.800	4714.00	-72.78	-76.36	-112.35	40°05'17.042"N	104°40'27.828"W	0.00	
4817.00†	2.550	235.800	4813.90	-75.17	-78.86	-116.03	40°05'17.018"N	104°40'27.875"W	0.00	
4917.00†	2.550	235.800	4913.80	-77.55	-81.36	-119.71	40°05'16.993"N	104°40'27.922"W	0.00	
4952.24†	2.550	235.800	4949.00	-78.39	-82.24	-121.01	40°05'16.984"N	104°40'27.939"W	0.00	SUSSEX
5017.00†	2.550	235.800	5013.70	-79.93	-83.86	-123.39	40°05'16.968"N	104°40'27.970"W	0.00	
5117.00†	2.550	235.800	5113.60	-82.32	-86.36	-127.07	40°05'16.944"N	104°40'28.017"W	0.00	
5217.00†	2.550	235.800	5213.50	-84.70	-88.86	-130.75	40°05'16.919"N	104°40'28.064"W	0.00	
5317.00†	2.550	235.800	5313.40	-87.08	-91.36	-134.43	40°05'16.894"N	104°40'28.112"W	0.00	
5417.00†	2.550	235.800	5413.30	-89.47	-93.86	-138.11	40°05'16.869"N	104°40'28.159"W	0.00	
5517.00†	2.550	235.800	5513.21	-91.85	-96.36	-141.79	40°05'16.845"N	104°40'28.206"W	0.00	
5617.00†	2.550	235.800	5613.11	-94.24	-98.86	-145.47	40°05'16.820"N	104°40'28.254"W	0.00	
5717.00†	2.550	235.800	5713.01	-96.62	-101.36	-149.15	40°05'16.795"N	104°40'28.301"W	0.00	
5817.00†	2.550	235.800	5812.91	-99.00	-103.86	-152.83	40°05'16.771"N	104°40'28.348"W	0.00	
5917.00†	2.550	235.800	5912.81	-101.39	-106.36	-156.51	40°05'16.746"N	104°40'28.396"W	0.00	
6017.00†	2.550	235.800	6012.71	-103.77	-108.87	-160.19	40°05'16.721"N	104°40'28.443"W	0.00	
6117.00†	2.550	235.800	6112.61	-106.15	-111.37	-163.87	40°05'16.696"N	104°40'28.490"W	0.00	
6217.00†	2.550	235.800	6212.51	-108.54	-113.87	-167.55	40°05'16.672"N	104°40'28.538"W	0.00	
6317.00†	2.550	235.800	6312.41	-110.92	-116.37	-171.23	40°05'16.647"N	104°40'28.585"W	0.00	
6417.00†	2.550	235.800	6412.31	-113.31	-118.87	-174.91	40°05'16.622"N	104°40'28.632"W	0.00	
6517.00†	2.550	235.800	6512.22	-115.69	-121.37	-178.59	40°05'16.598"N	104°40'28.680"W	0.00	
6617.00†	2.550	235.800	6612.12	-118.07	-123.87	-182.27	40°05'16.573"N	104°40'28.727"W	0.00	
6702.14	2.550	235.800	6697.17	-120.10	-126.00	-185.40	40°05'16.552"N	104°40'28.767"W	0.00	End of Tangent (J)
6717.00†	2.115	271.437	6712.02	-120.26	-126.18	-185.95	40°05'16.550"N	104°40'28.774"W	10.00	
6817.00†	10.277	348.083	6811.44	-111.36	-117.38	-189.65	40°05'16.637"N	104°40'28.822"W	10.00	
6917.00†	20.166	354.061	6907.81	-85.32	-91.44	-193.28	40°05'16.893"N	104°40'28.869"W	10.00	
6938.66†	22.320	354.671	6928.00	-77.49	-83.63	-194.05	40°05'16.971"N	104°40'28.879"W	10.00	SHARON SPRINGS
6970.38†	25.480	355.387	6957.00	-64.66	-70.83	-195.16	40°05'17.097"N	104°40'28.893"W	10.00	NIOBRARA A
7017.00†	30.127	356.182	6998.22	-42.94	-49.15	-196.74	40°05'17.311"N	104°40'28.913"W	10.00	
7053.27†	33.745	356.662	7029.00	-23.76	-30.01	-197.94	40°05'17.500"N	104°40'28.929"W	10.00	NIOBRARA B
7117.00†	40.106	357.317	7079.92	14.50	8.21	-199.93	40°05'17.878"N	104°40'28.954"W	10.00	
7160.36†	44.435	357.672	7112.00	43.65	37.34	-201.20	40°05'18.166"N	104°40'28.971"W	10.00	NIOBRARA C
7217.00†	50.092	358.060	7150.42	85.24	78.89	-202.74	40°05'18.577"N	104°40'28.991"W	10.00	
7317.00†	60.082	358.612	7207.58	167.13	160.76	-205.10	40°05'19.386"N	104°40'29.021"W	10.00	
7417.00†	70.073	359.062	7249.67	257.70	251.31	-206.92	40°05'20.281"N	104°40'29.044"W	10.00	
7433.29†	71.701	359.130	7255.00	273.08	266.70	-207.16	40°05'20.433"N	104°40'29.047"W	10.00	FORT HAYS
7517.00†	80.066	359.459	7275.40	354.18	347.81	-208.16	40°05'21.234"N	104°40'29.060"W	10.00	
7548.68†	83.232	359.578	7280.00	385.52	379.14	-208.42	40°05'21.544"N	104°40'29.064"W	10.00	CODELL
7616.41	90.000	359.829	7284.00	453.06	446.71	-208.77	40°05'22.211"N	104°40'29.068"W	10.00	End of 3D Arc
7617.00†	90.000	359.829	7284.00	453.65	447.31	-208.77	40°05'22.217"N	104°40'29.068"W	0.00	



# Planned Wellpath Report

GITTLEIN 4C-28HZ (PERMIT) PWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33)
Area	COLORADO	Well	GITTLEIN 4C-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	GITTLEIN 4C-28HZ PWB
Facility	SEC.33-T2N-R65W		

WELLPATH DATA (159 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7717.00†	90.000	359.829	7284.00	553.61	547.31	-209.07	40°05'23.206"N	104°40'29.072"W	0.00	
7817.00†	90.000	359.829	7284.00	653.57	647.31	-209.37	40°05'24.194"N	104°40'29.076"W	0.00	
7917.00†	90.000	359.829	7284.00	753.53	747.31	-209.67	40°05'25.182"N	104°40'29.080"W	0.00	
8017.00†	90.000	359.829	7284.00	853.49	847.31	-209.97	40°05'26.170"N	104°40'29.084"W	0.00	
8117.00†	90.000	359.829	7284.00	953.45	947.30	-210.26	40°05'27.158"N	104°40'29.087"W	0.00	
8217.00†	90.000	359.829	7284.00	1053.41	1047.30	-210.56	40°05'28.147"N	104°40'29.091"W	0.00	
8317.00†	90.000	359.829	7284.00	1153.37	1147.30	-210.86	40°05'29.135"N	104°40'29.095"W	0.00	
8417.00†	90.000	359.829	7284.00	1253.33	1247.30	-211.16	40°05'30.123"N	104°40'29.099"W	0.00	
8517.00†	90.000	359.829	7284.00	1353.29	1347.30	-211.46	40°05'31.111"N	104°40'29.103"W	0.00	
8617.00†	90.000	359.829	7284.00	1453.25	1447.30	-211.75	40°05'32.099"N	104°40'29.107"W	0.00	
8717.00†	90.000	359.829	7284.00	1553.21	1547.30	-212.05	40°05'33.088"N	104°40'29.110"W	0.00	
8817.00†	90.000	359.829	7284.00	1653.17	1647.30	-212.35	40°05'34.076"N	104°40'29.114"W	0.00	
8917.00†	90.000	359.829	7284.00	1753.13	1747.30	-212.65	40°05'35.064"N	104°40'29.118"W	0.00	
9017.00†	90.000	359.829	7284.00	1853.09	1847.30	-212.95	40°05'36.052"N	104°40'29.122"W	0.00	
9117.00†	90.000	359.829	7284.00	1953.05	1947.30	-213.24	40°05'37.041"N	104°40'29.126"W	0.00	
9217.00†	90.000	359.829	7284.00	2053.01	2047.30	-213.54	40°05'38.029"N	104°40'29.130"W	0.00	
9317.00†	90.000	359.829	7284.00	2152.97	2147.30	-213.84	40°05'39.017"N	104°40'29.134"W	0.00	
9417.00†	90.000	359.829	7284.00	2252.92	2247.30	-214.14	40°05'40.005"N	104°40'29.137"W	0.00	
9517.00†	90.000	359.829	7284.00	2352.88	2347.30	-214.44	40°05'40.993"N	104°40'29.141"W	0.00	
9617.00†	90.000	359.829	7284.00	2452.84	2447.30	-214.73	40°05'41.982"N	104°40'29.145"W	0.00	
9717.00†	90.000	359.829	7284.00	2552.80	2547.30	-215.03	40°05'42.970"N	104°40'29.149"W	0.00	
9817.00†	90.000	359.829	7284.00	2652.76	2647.30	-215.33	40°05'43.958"N	104°40'29.153"W	0.00	
9917.00†	90.000	359.830	7284.00	2752.72	2747.30	-215.63	40°05'44.946"N	104°40'29.157"W	0.00	
10017.00†	90.000	359.830	7284.00	2852.68	2847.30	-215.92	40°05'45.934"N	104°40'29.160"W	0.00	
10117.00†	90.000	359.830	7284.00	2952.64	2947.30	-216.22	40°05'46.923"N	104°40'29.164"W	0.00	
10217.00†	90.000	359.830	7284.00	3052.60	3047.30	-216.52	40°05'47.911"N	104°40'29.168"W	0.00	
10317.00†	90.000	359.830	7284.00	3152.56	3147.29	-216.82	40°05'48.899"N	104°40'29.172"W	0.00	
10417.00†	90.000	359.830	7284.00	3252.52	3247.29	-217.11	40°05'49.887"N	104°40'29.176"W	0.00	
10517.00†	90.000	359.830	7284.00	3352.48	3347.29	-217.41	40°05'50.876"N	104°40'29.180"W	0.00	
10617.00†	90.000	359.830	7284.00	3452.44	3447.29	-217.71	40°05'51.864"N	104°40'29.183"W	0.00	
10717.00†	90.000	359.830	7284.00	3552.40	3547.29	-218.01	40°05'52.852"N	104°40'29.187"W	0.00	
10817.00†	90.000	359.830	7284.00	3652.36	3647.29	-218.30	40°05'53.840"N	104°40'29.191"W	0.00	
10917.00†	90.000	359.830	7284.00	3752.32	3747.29	-218.60	40°05'54.828"N	104°40'29.195"W	0.00	
11017.00†	90.000	359.830	7284.00	3852.27	3847.29	-218.90	40°05'55.817"N	104°40'29.199"W	0.00	
11117.00†	90.000	359.830	7284.00	3952.23	3947.29	-219.19	40°05'56.805"N	104°40'29.203"W	0.00	
11217.00†	90.000	359.830	7284.00	4052.19	4047.29	-219.49	40°05'57.793"N	104°40'29.206"W	0.00	
11317.00†	90.000	359.830	7284.00	4152.15	4147.29	-219.79	40°05'58.781"N	104°40'29.210"W	0.00	
11417.00†	90.000	359.830	7284.00	4252.11	4247.29	-220.08	40°05'59.769"N	104°40'29.214"W	0.00	
11517.00†	90.000	359.830	7284.00	4352.07	4347.29	-220.38	40°06'00.758"N	104°40'29.218"W	0.00	
11617.00†	90.000	359.830	7284.00	4452.03	4447.29	-220.68	40°06'01.746"N	104°40'29.222"W	0.00	
11717.00†	90.000	359.830	7284.00	4551.99	4547.29	-220.98	40°06'02.734"N	104°40'29.226"W	0.00	
11817.00†	90.000	359.830	7284.00	4651.95	4647.29	-221.27	40°06'03.722"N	104°40'29.229"W	0.00	
11917.00†	90.000	359.830	7284.00	4751.91	4747.29	-221.57	40°06'04.710"N	104°40'29.233"W	0.00	
12017.00†	90.000	359.830	7284.00	4851.87	4847.29	-221.87	40°06'05.699"N	104°40'29.237"W	0.00	
12117.00†	90.000	359.830	7284.00	4951.83	4947.29	-222.16	40°06'06.687"N	104°40'29.241"W	0.00	



# Planned Wellpath Report

GITTLEIN 4C-28HZ (PERMIT) PWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33)
Area	COLORADO	Well	GITTLEIN 4C-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	GITTLEIN 4C-28HZ PWB
Facility	SEC.33-T2N-R65W		

WELLPATH DATA (159 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12217.00†	90.000	359.830	7284.00	5051.79	5047.29	-222.46	40°06'07.675"N	104°40'29.245"W	0.00	
12317.00†	90.000	359.830	7284.00	5151.75	5147.29	-222.76	40°06'08.663"N	104°40'29.249"W	0.00	
12417.00†	90.000	359.830	7284.00	5251.71	5247.29	-223.05	40°06'09.652"N	104°40'29.252"W	0.00	
12517.00†	90.000	359.830	7284.00	5351.67	5347.29	-223.35	40°06'10.640"N	104°40'29.256"W	0.00	
12617.00†	90.000	359.830	7284.00	5451.62	5447.28	-223.65	40°06'11.628"N	104°40'29.260"W	0.00	
12717.00†	90.000	359.830	7284.00	5551.58	5547.28	-223.94	40°06'12.616"N	104°40'29.264"W	0.00	
12817.00†	90.000	359.830	7284.00	5651.54	5647.28	-224.24	40°06'13.604"N	104°40'29.268"W	0.00	
12917.00†	90.000	359.830	7284.00	5751.50	5747.28	-224.53	40°06'14.593"N	104°40'29.272"W	0.00	
13017.00†	90.000	359.830	7284.00	5851.46	5847.28	-224.83	40°06'15.581"N	104°40'29.275"W	0.00	
13117.00†	90.000	359.830	7284.00	5951.42	5947.28	-225.13	40°06'16.569"N	104°40'29.279"W	0.00	
13217.00†	90.000	359.830	7284.00	6051.38	6047.28	-225.42	40°06'17.557"N	104°40'29.283"W	0.00	
13317.00†	90.000	359.830	7284.00	6151.34	6147.28	-225.72	40°06'18.545"N	104°40'29.287"W	0.00	
13417.00†	90.000	359.830	7284.00	6251.30	6247.28	-226.02	40°06'19.534"N	104°40'29.291"W	0.00	
13517.00†	90.000	359.830	7284.00	6351.26	6347.28	-226.31	40°06'20.522"N	104°40'29.295"W	0.00	
13617.00†	90.000	359.830	7284.00	6451.22	6447.28	-226.61	40°06'21.510"N	104°40'29.298"W	0.00	
13717.00†	90.000	359.830	7284.00	6551.18	6547.28	-226.90	40°06'22.498"N	104°40'29.302"W	0.00	
13817.00†	90.000	359.830	7284.00	6651.14	6647.28	-227.20	40°06'23.486"N	104°40'29.306"W	0.00	
13917.00†	90.000	359.830	7284.00	6751.10	6747.28	-227.50	40°06'24.475"N	104°40'29.310"W	0.00	
14017.00†	90.000	359.830	7284.00	6851.06	6847.28	-227.79	40°06'25.463"N	104°40'29.314"W	0.00	
14117.00†	90.000	359.830	7284.00	6951.02	6947.28	-228.09	40°06'26.451"N	104°40'29.317"W	0.00	
14217.00†	90.000	359.830	7284.00	7050.97	7047.28	-228.38	40°06'27.439"N	104°40'29.321"W	0.00	
14317.00†	90.000	359.831	7284.00	7150.93	7147.28	-228.68	40°06'28.428"N	104°40'29.325"W	0.00	
14417.00†	90.000	359.831	7284.00	7250.89	7247.28	-228.98	40°06'29.416"N	104°40'29.329"W	0.00	
14445.36	90.000	359.831	7284.00 <sup>1</sup>	7279.24	7275.64	-229.06	40°06'29.696"N	104°40'29.330"W	0.00	End of 3D Arc

HOLE & CASING SECTIONS - Ref Wellbore: GITTLEIN 4C-28HZ PWB Ref Wellpath: GITTLEIN 4C-28HZ (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	17.00	7616.41	7599.41	17.00	7284.00	0.00	0.00	446.72	-208.77
7in Casing Intermediate	17.00	7616.41	7599.41	17.00	7284.00	0.00	0.00	446.72	-208.77
6.125in Open Hole	7616.41	14445.36	6828.95	7284.00	7284.00	446.72	-208.77	7275.64	-229.06
4.5in Casing Production	17.00	14445.36	14428.36	17.00	7284.00	0.00	0.00	7275.64	-229.06



## Planned Wellpath Report

GITTLEIN 4C-28HZ (PERMIT) PWP

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### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33)
Area	COLORADO	Well	GITTLEIN 4C-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	GITTLEIN 4C-28HZ PWB
Facility	SEC.33-T2N-R65W		

### TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
GITTLEIN 4 PAD SECTION 28 LINES		0.00	-0.71	-60.16	3231045.24	1276079.08	40°05'17.790"N	104°40'27.156"W	polygon
GITTLEIN 4 PAD SECTION 33 LINES		0.00	-0.71	-60.16	3231045.24	1276079.08	40°05'17.790"N	104°40'27.156"W	polygon
1) GITTLEIN 4C-28HZ BHL ON PLAT (2185'FSL & 990'FWL, SEC.28) REV-1	14445.36	7284.00	7275.64	-229.06	3230808.57	1283353.23	40°06'29.696"N	104°40'29.330"W	point
GITTLEIN 4 PAD SEC. 28 HARDLINES (460'SETBACKS)		7300.00	-0.71	-60.16	3231045.24	1276079.08	40°05'17.790"N	104°40'27.156"W	polygon
GITTLEIN 4 PAD SEC. 33 HARDLINES (460'SETBACKS)		7300.00	-0.71	-60.16	3231045.24	1276079.08	40°05'17.790"N	104°40'27.156"W	polygon

### SURVEY PROGRAM - Ref Wellbore: GITTLEIN 4C-28HZ PWB Ref Wellpath: GITTLEIN 4C-28HZ (PERMIT) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	7616.41	NaviTrak (Standard)		GITTLEIN 4C-28HZ PWB
7616.41	14445.36	OnTrak (Standard)		GITTLEIN 4C-28HZ PWB



**Planned Wellpath Report**  
 GITTLEIN 4C-28HZ (PERMIT) PWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 GITTLEIN 4C-28HZ (175'FSL & 1198'FWL, SEC.33)
Area	COLORADO	Well	GITTLEIN 4C-28HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	GITTLEIN 4C-28HZ PWB
Facility	SEC.33-T2N-R65W		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
756.00	0.000	235.800	756.00	FOX HILLS	
4952.24	2.550	235.800	4949.00	SUSSEX	
6938.66	22.320	354.671	6928.00	SHARON SPRINGS	
6970.38	25.480	355.387	6957.00	NIOBRARA A	
7053.27	33.745	356.662	7029.00	NIOBRARA B	
7160.36	44.435	357.672	7112.00	NIOBRARA C	
7433.29	71.701	359.130	7255.00	FORT HAYS	
7548.68	83.232	359.578	7280.00	CODELL	