

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#19 USA FED 28N-36HZ (664'FSL & 1931'FWL, SEC.36)  
Field: WELD COUNTY (KERR MCGEE) Well: USA FED 28N-36HZ  
Facility: SEC.36-T3N-R66V Wellbore: USA FED 28N-36HZ PWB

Plot reference wellpath is USA FED 28N-36HZ (PERMIT) PWP

True vertical depths are referenced to XTREME 6 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 6 (RKB)	North Reference: True north
XTREME 6 (RKB) to Mean Sea Level: 5022 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#19 USA FED 28N-36HZ (664'FSL & 1931'FWL, SEC.36)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wjlgf02 on 3/29/2012

## Location Information

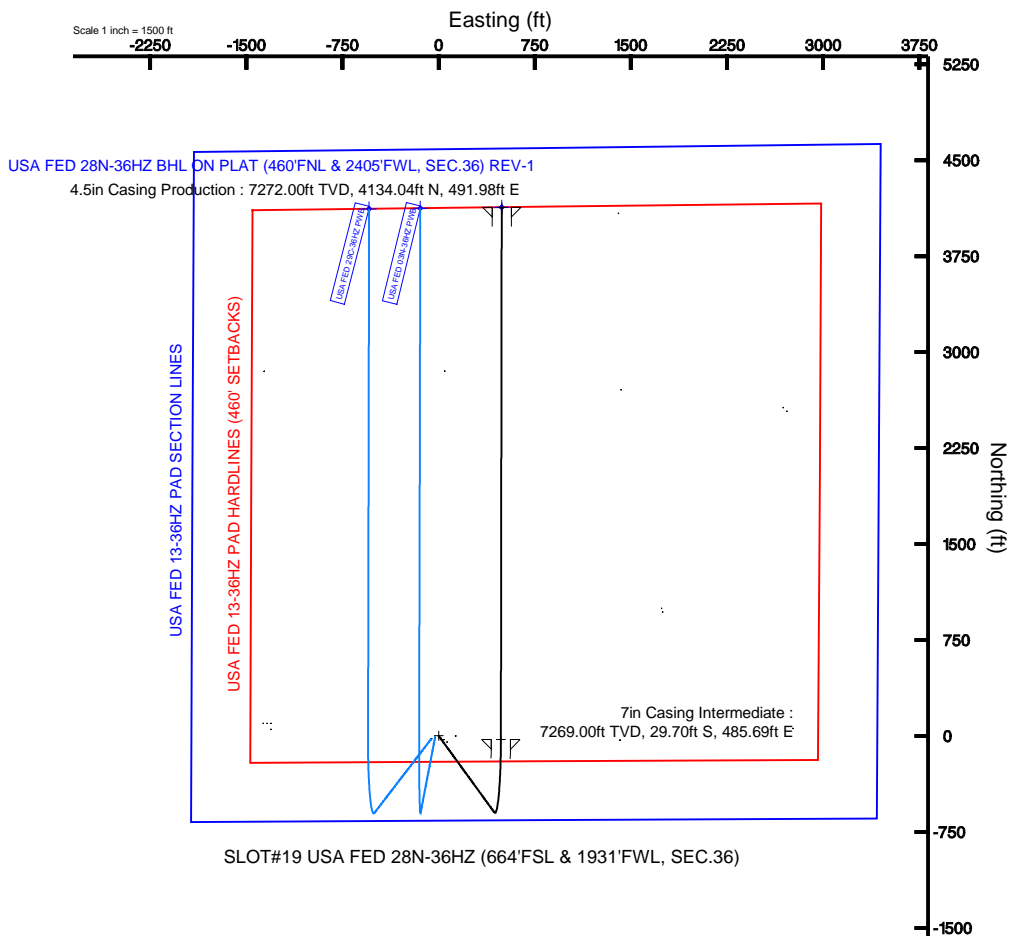
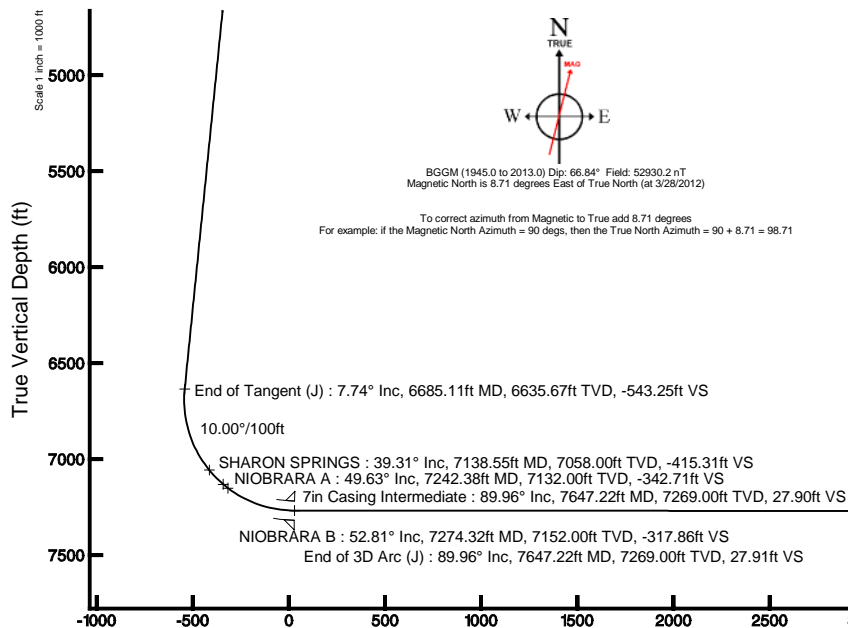
Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.36-T3N-R66W				3214305.575	1310913.744	40°11'03.516"N	104°43'58.656"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SLOT#19 USA FED 28N-36HZ (664'FSL & 1931'FWL, SEC.36)	-2851.30	1362.59	3215692.711	1308074.459	40°10'35.339"N	104°43'41.102"W	
XTREME 6 (RKB) to Mud line (At Slot: SLOT#19 USA FED 28N-36HZ (664'FSL & 1931'FWL, SEC.36))						5022ft	
Mean Sea Level to Mud line (At Slot: SLOT#19 USA FED 28N-36HZ (664'FSL & 1931'FWL, SEC.36))						0ft	
XTREME 6 (RKB) to Mean Sea Level						5022ft	

## 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	144.050	17.00	0.00	0.00	0.00	0.00
End of Tangent	1000.00	0.000	144.050	1000.00	0.00	0.00	0.00	0.00
End of Build (J)	1387.00	7.740	144.050	1385.82	-21.13	15.32	2.00	-19.17
End of Tangent (J)	6685.11	7.740	144.050	6635.67	-598.76	434.23	0.00	-543.25
End of 3D Arc (J)	7647.22	89.959	0.087	7269.00	-29.70	485.69	10.00	27.91
End of Tangent (J)	11810.97	89.959	0.087	7272.00	4134.04	491.98	0.00	4163.21

## Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
USA FED 13-36HZ PAD SECTION LINES		-19.00	96.58	-1369.57	3214322.42	1308155.11	40°10'36.293"N	104°43'58.746"W
USA FED 28N-36HZ BHL ON PLAT (460'FNL & 2405'FWL, SEC.36) REV-1	11810.97	7272.00	4134.04	491.98	3216148.67	1312212.44	40°11'16.192"N	104°43'34.763"W
USA FED 13-36HZ PAD HARDLINES (460' SETBACKS)		7421.00	96.58	-1369.57	3214322.42	1308155.11	40°10'36.293"N	104°43'58.746"W



SLOT#19 USA FED 28N-36HZ (664'FSL & 1931'FWL, SEC.36)

4.5in Casing Production : 89.96° Inc, 11810.97ft MD, 7272.00ft TVD, 4163.21ft VS  
End of Tangent (J) : 89.96° Inc, 11810.97ft MD, 7272.00ft TVD, 4163.21ft VS  
USA FED 28N-36HZ BHL ON PLAT (460'FNL & 2405'FWL, SEC.36) REV-1

Vertical Section (ft)  
Azimuth 6.79° with reference 0.00 N, 0.00 E



# Planned Wellpath Report

USA FED 28N-36HZ (PERMIT) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	<b>KERR-MCGEE OIL &amp; GAS ONSHORE LP</b>	Slot	<b>SLOT#19 USA FED 28N-36HZ (664'FSL &amp; 1931'FWL, SEC.36)</b>
Area	<b>COLORADO</b>	Well	<b>USA FED 28N-36HZ</b>
Field	<b>WELD COUNTY (KERR MCGEE)</b>	Wellbore	<b>USA FED 28N-36HZ PWB</b>
Facility	<b>SEC.36-T3N-R66W</b>		

## REPORT SETUP INFORMATION

Projection System	<b>NAD83 / Lambert Colorado SP, Northern Zone (501), US feet</b>	Software System	<b>WellArchitect® 3.0.2</b>
North Reference	<b>True</b>	User	<b>Wilsjef02</b>
Scale	<b>0.999958</b>	Report Generated	<b>3/29/2012 at 12:57:00</b>
Convergence at slot	<b>0.50° East</b>	Database/Source file	<b>WellArchitectDB/USA_FED_28N-36HZ_PWB.xml</b>

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-2851.30	1362.59	3215692.71	1308074.46	<b>40°10'35.339"N</b>	<b>104°43'41.102"W</b>
Facility Reference Pt			3214305.58	1310913.74	<b>40°11'03.516"N</b>	<b>104°43'58.656"W</b>
Field Reference Pt			<b>3197771.84</b>	<b>1268891.29</b>	40°04'09.600"N	104°47'36.000"W

## WELLPATH DATUM

Calculation method	<b>Minimum curvature</b>	XTREME 6 (RKB) to Facility Vertical Datum	<b>5022.00ft</b>
Horizontal Reference Pt	<b>Slot</b>	XTREME 6 (RKB) to Mean Sea Level	<b>5022.00ft</b>
Vertical Reference Pt	<b>XTREME 6 (RKB)</b>	XTREME 6 (RKB) to Mud Line at Slot (SLOT#19 USA FED 28N-36HZ (664'FSL & 1931'FWL, SEC.36))	<b>5022.00ft</b>
MD Reference Pt	<b>XTREME 6 (RKB)</b>	Section Origin	<b>N 0.00, E 0.00 ft</b>
Field Vertical Reference	<b>Mean Sea Level</b>	Section Azimuth	<b>6.79°</b>



# Planned Wellpath Report

USA FED 28N-36HZ (PERMIT) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#19 USA FED 28N-36HZ (664'FSL & 1931'FWL, SEC.36)
Area	COLORADO	Well	USA FED 28N-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	USA FED 28N-36HZ PWB
Facility	SEC.36-T3N-R66W		

## WELLPATH DATA (129 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	144.050	0.00	0.00	0.00	0.00	40°10'35.339"N	104°43'41.102"W	0.00	
17.00	0.000	144.050	17.00	0.00	0.00	0.00	40°10'35.339"N	104°43'41.102"W	0.00	Tie On
117.00†	0.000	144.050	117.00	0.00	0.00	0.00	40°10'35.339"N	104°43'41.102"W	0.00	
217.00†	0.000	144.050	217.00	0.00	0.00	0.00	40°10'35.339"N	104°43'41.102"W	0.00	
317.00†	0.000	144.050	317.00	0.00	0.00	0.00	40°10'35.339"N	104°43'41.102"W	0.00	
417.00†	0.000	144.050	417.00	0.00	0.00	0.00	40°10'35.339"N	104°43'41.102"W	0.00	
517.00†	0.000	144.050	517.00	0.00	0.00	0.00	40°10'35.339"N	104°43'41.102"W	0.00	
617.00†	0.000	144.050	617.00	0.00	0.00	0.00	40°10'35.339"N	104°43'41.102"W	0.00	
717.00†	0.000	144.050	717.00	0.00	0.00	0.00	40°10'35.339"N	104°43'41.102"W	0.00	
817.00†	0.000	144.050	817.00	0.00	0.00	0.00	40°10'35.339"N	104°43'41.102"W	0.00	
917.00†	0.000	144.050	917.00	0.00	0.00	0.00	40°10'35.339"N	104°43'41.102"W	0.00	
1000.00	0.000	144.050	1000.00	0.00	0.00	0.00	40°10'35.339"N	104°43'41.102"W	0.00	End of Tangent
1017.00†	0.340	144.050	1017.00	-0.04	-0.04	0.03	40°10'35.339"N	104°43'41.102"W	2.00	
1117.00†	2.340	144.050	1116.97	-1.75	-1.93	1.40	40°10'35.320"N	104°43'41.084"W	2.00	
1217.00†	4.340	144.050	1216.79	-6.03	-6.65	4.82	40°10'35.273"N	104°43'41.040"W	2.00	
1317.00†	6.340	144.050	1316.35	-12.87	-14.18	10.29	40°10'35.199"N	104°43'40.969"W	2.00	
1387.00	7.740	144.050	1385.82	-19.17	-21.13	15.32	40°10'35.130"N	104°43'40.905"W	2.00	End of Build (J)
1417.00†	7.740	144.050	1415.55	-22.14	-24.40	17.69	40°10'35.098"N	104°43'40.874"W	0.00	
1517.00†	7.740	144.050	1514.64	-32.03	-35.30	25.60	40°10'34.990"N	104°43'40.772"W	0.00	
1617.00†	7.740	144.050	1613.73	-41.92	-46.20	33.51	40°10'34.882"N	104°43'40.670"W	0.00	
1717.00†	7.740	144.050	1712.82	-51.81	-57.11	41.41	40°10'34.775"N	104°43'40.568"W	0.00	
1817.00†	7.740	144.050	1811.91	-61.70	-68.01	49.32	40°10'34.667"N	104°43'40.467"W	0.00	
1917.00†	7.740	144.050	1911.00	-71.60	-78.91	57.23	40°10'34.559"N	104°43'40.365"W	0.00	
2017.00†	7.740	144.050	2010.08	-81.49	-89.81	65.13	40°10'34.451"N	104°43'40.263"W	0.00	
2117.00†	7.740	144.050	2109.17	-91.38	-100.72	73.04	40°10'34.344"N	104°43'40.161"W	0.00	
2217.00†	7.740	144.050	2208.26	-101.27	-111.62	80.95	40°10'34.236"N	104°43'40.059"W	0.00	
2317.00†	7.740	144.050	2307.35	-111.16	-122.52	88.85	40°10'34.128"N	104°43'39.957"W	0.00	
2417.00†	7.740	144.050	2406.44	-121.06	-133.43	96.76	40°10'34.020"N	104°43'39.855"W	0.00	
2517.00†	7.740	144.050	2505.53	-130.95	-144.33	104.67	40°10'33.913"N	104°43'39.754"W	0.00	
2617.00†	7.740	144.050	2604.62	-140.84	-155.23	112.57	40°10'33.805"N	104°43'39.652"W	0.00	
2717.00†	7.740	144.050	2703.71	-150.73	-166.13	120.48	40°10'33.697"N	104°43'39.550"W	0.00	
2817.00†	7.740	144.050	2802.80	-160.62	-177.04	128.39	40°10'33.590"N	104°43'39.448"W	0.00	
2917.00†	7.740	144.050	2901.88	-170.51	-187.94	136.29	40°10'33.482"N	104°43'39.346"W	0.00	
3017.00†	7.740	144.050	3000.97	-180.41	-198.84	144.20	40°10'33.374"N	104°43'39.244"W	0.00	
3117.00†	7.740	144.050	3100.06	-190.30	-209.74	152.11	40°10'33.266"N	104°43'39.142"W	0.00	
3217.00†	7.740	144.050	3199.15	-200.19	-220.65	160.01	40°10'33.159"N	104°43'39.041"W	0.00	
3317.00†	7.740	144.050	3298.24	-210.08	-231.55	167.92	40°10'33.051"N	104°43'38.939"W	0.00	
3417.00†	7.740	144.050	3397.33	-219.97	-242.45	175.83	40°10'32.943"N	104°43'38.837"W	0.00	
3517.00†	7.740	144.050	3496.42	-229.87	-253.35	183.73	40°10'32.835"N	104°43'38.735"W	0.00	
3617.00†	7.740	144.050	3595.51	-239.76	-264.26	191.64	40°10'32.728"N	104°43'38.633"W	0.00	
3717.00†	7.740	144.050	3694.60	-249.65	-275.16	199.55	40°10'32.620"N	104°43'38.531"W	0.00	
3817.00†	7.740	144.050	3793.69	-259.54	-286.06	207.45	40°10'32.512"N	104°43'38.429"W	0.00	
3917.00†	7.740	144.050	3892.77	-269.43	-296.96	215.36	40°10'32.404"N	104°43'38.328"W	0.00	
4017.00†	7.740	144.050	3991.86	-279.32	-307.87	223.27	40°10'32.297"N	104°43'38.226"W	0.00	
4108.97†	7.740	144.050	4083.00	-288.42	-317.89	230.54	40°10'32.198"N	104°43'38.132"W	0.00	PARKMAN
4117.00†	7.740	144.050	4090.95	-289.22	-318.77	231.17	40°10'32.189"N	104°43'38.124"W	0.00	
4217.00†	7.740	144.050	4190.04	-299.11	-329.67	239.08	40°10'32.081"N	104°43'38.022"W	0.00	
4317.00†	7.740	144.050	4289.13	-309.00	-340.57	246.99	40°10'31.973"N	104°43'37.920"W	0.00	
4417.00†	7.740	144.050	4388.22	-318.89	-351.48	254.89	40°10'31.866"N	104°43'37.818"W	0.00	
4517.00†	7.740	144.050	4487.31	-328.78	-362.38	262.80	40°10'31.758"N	104°43'37.716"W	0.00	
4593.39†	7.740	144.050	4563.00	-336.34	-370.71	268.84	40°10'31.676"N	104°43'37.639"W	0.00	SUSSEX
4617.00†	7.740	144.050	4586.40	-338.68	-373.28	270.71	40°10'31.650"N	104°43'37.615"W	0.00	
4717.00†	7.740	144.050	4685.49	-348.57	-384.18	278.61	40°10'31.542"N	104°43'37.513"W	0.00	
4817.00†	7.740	144.050	4784.57	-358.46	-395.09	286.52	40°10'31.435"N	104°43'37.411"W	0.00	
4917.00†	7.740	144.050	4883.66	-368.35	-405.99	294.43	40°10'31.327"N	104°43'37.309"W	0.00	
5017.00†	7.740	144.050	4982.75	-378.24	-416.89	302.33	40°10'31.219"N	104°43'37.207"W	0.00	
5117.00†	7.740	144.050	5081.84	-388.14	-427.79	310.24	40°10'31.112"N	104°43'37.105"W	0.00	
5217.00†	7.740	144.050	5180.93	-398.03	-438.70	318.15	40°10'31.004"N	104°43'37.003"W	0.00	
5317.00†	7.740	144.050	5280.02	-407.92	-449.60	326.05	40°10'30.896"N	104°43'36.902"W	0.00	
5417.00†	7.740	144.050	5379.11	-417.81	-460.50	333.96	40°10'30.788"N	104°43'36.800"W	0.00	



# Planned Wellpath Report

USA FED 28N-36HZ (PERMIT) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#19 USA FED 28N-36HZ (664'FSL & 1931'FWL, SEC.36)
Area	COLORADO	Well	USA FED 28N-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	USA FED 28N-36HZ PWB
Facility	SEC.36-T3N-R66W		

## WELLPATH DATA (129 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5517.00†	7.740	144.050	5478.20	-427.70	-471.41	341.87	40°10'30.681"N	104°43'36.698"W	0.00	
5617.00†	7.740	144.050	5577.29	-437.59	-482.31	349.77	40°10'30.573"N	104°43'36.596"W	0.00	
5717.00†	7.740	144.050	5676.38	-447.49	-493.21	357.68	40°10'30.465"N	104°43'36.494"W	0.00	
5817.00†	7.740	144.050	5775.46	-457.38	-504.11	365.59	40°10'30.357"N	104°43'36.392"W	0.00	
5917.00†	7.740	144.050	5874.55	-467.27	-515.02	373.49	40°10'30.250"N	104°43'36.290"W	0.00	
6017.00†	7.740	144.050	5973.64	-477.16	-525.92	381.40	40°10'30.142"N	104°43'36.189"W	0.00	
6117.00†	7.740	144.050	6072.73	-487.05	-536.82	389.31	40°10'30.034"N	104°43'36.087"W	0.00	
6217.00†	7.740	144.050	6171.82	-496.95	-547.72	397.21	40°10'29.926"N	104°43'35.985"W	0.00	
6317.00†	7.740	144.050	6270.91	-506.84	-558.63	405.12	40°10'29.819"N	104°43'35.883"W	0.00	
6417.00†	7.740	144.050	6370.00	-516.73	-569.53	413.03	40°10'29.711"N	104°43'35.781"W	0.00	
6517.00†	7.740	144.050	6469.09	-526.62	-580.43	420.93	40°10'29.603"N	104°43'35.679"W	0.00	
6617.00†	7.740	144.050	6568.18	-536.51	-591.33	428.84	40°10'29.495"N	104°43'35.577"W	0.00	
6685.11	7.740	144.050	6635.67	-543.25	-598.76	434.23	40°10'29.422"N	104°43'35.508"W	0.00	End of Tangent (J)
6717.00†	5.501	123.966	6667.34	-545.53	-601.35	436.76	40°10'29.396"N	104°43'35.475"W	10.00	
6817.00†	8.301	33.312	6766.84	-541.25	-597.99	444.72	40°10'29.430"N	104°43'35.373"W	10.00	
6917.00†	17.525	14.750	6864.25	-519.82	-577.34	452.53	40°10'29.634"N	104°43'35.272"W	10.00	
7017.00†	27.293	8.997	6956.59	-481.90	-540.04	459.97	40°10'30.002"N	104°43'35.176"W	10.00	
7117.00†	37.178	6.135	7041.08	-428.65	-487.22	466.80	40°10'30.524"N	104°43'35.088"W	10.00	
7138.55†	39.315	5.686	7058.00	-415.31	-473.96	468.17	40°10'30.655"N	104°43'35.071"W	10.00	SHARON SPRINGS
7217.00†	47.107	4.343	7115.14	-361.67	-420.49	472.82	40°10'31.184"N	104°43'35.011"W	10.00	
7242.38†	49.631	3.981	7132.00	-342.71	-401.56	474.20	40°10'31.371"N	104°43'34.993"W	10.00	NIOBRARA A
7274.32†	52.807	3.562	7152.00	-317.86	-376.73	475.83	40°10'31.616"N	104°43'34.972"W	10.00	NIOBRARA B
7317.00†	57.055	3.053	7176.52	-283.00	-341.86	477.84	40°10'31.961"N	104°43'34.946"W	10.00	
7417.00†	67.014	2.027	7223.35	-195.03	-253.74	481.72	40°10'32.832"N	104°43'34.896"W	10.00	
7517.00†	76.979	1.143	7254.22	-100.44	-158.79	484.32	40°10'33.770"N	104°43'34.863"W	10.00	
7617.00†	86.946	0.328	7268.19	-2.10	-59.90	485.58	40°10'34.747"N	104°43'34.846"W	10.00	
7647.22	89.959	0.087	7269.00	27.91	-29.70	485.69	40°10'35.045"N	104°43'34.845"W	10.00	End of 3D Arc (J)
7717.00†	89.959	0.087	7269.05	97.21	40.08	485.80	40°10'35.735"N	104°43'34.844"W	0.00	
7817.00†	89.959	0.087	7269.13	196.53	140.08	485.95	40°10'36.723"N	104°43'34.842"W	0.00	
7917.00†	89.959	0.087	7269.20	295.84	240.08	486.10	40°10'37.711"N	104°43'34.840"W	0.00	
8017.00†	89.959	0.087	7269.27	395.16	340.08	486.25	40°10'38.700"N	104°43'34.838"W	0.00	
8117.00†	89.959	0.087	7269.34	494.48	440.08	486.40	40°10'39.688"N	104°43'34.836"W	0.00	
8217.00†	89.959	0.087	7269.41	593.79	540.08	486.55	40°10'40.676"N	104°43'34.834"W	0.00	
8317.00†	89.959	0.087	7269.49	693.11	640.08	486.70	40°10'41.664"N	104°43'34.832"W	0.00	
8417.00†	89.959	0.087	7269.56	792.43	740.08	486.85	40°10'42.652"N	104°43'34.830"W	0.00	
8517.00†	89.959	0.087	7269.63	891.74	840.08	487.01	40°10'43.641"N	104°43'34.828"W	0.00	
8617.00†	89.959	0.087	7269.70	991.06	940.08	487.16	40°10'44.629"N	104°43'34.826"W	0.00	
8717.00†	89.959	0.087	7269.77	1090.38	1040.08	487.31	40°10'45.617"N	104°43'34.824"W	0.00	
8817.00†	89.959	0.087	7269.84	1189.70	1140.08	487.46	40°10'46.605"N	104°43'34.822"W	0.00	
8917.00†	89.959	0.087	7269.92	1289.01	1240.08	487.61	40°10'47.593"N	104°43'34.820"W	0.00	
9017.00†	89.959	0.087	7269.99	1388.33	1340.08	487.76	40°10'48.582"N	104°43'34.818"W	0.00	
9117.00†	89.959	0.087	7270.06	1487.65	1440.08	487.91	40°10'49.570"N	104°43'34.816"W	0.00	
9217.00†	89.959	0.087	7270.13	1586.96	1540.08	488.06	40°10'50.558"N	104°43'34.814"W	0.00	
9317.00†	89.959	0.087	7270.20	1686.28	1640.08	488.21	40°10'51.546"N	104°43'34.812"W	0.00	
9417.00†	89.959	0.087	7270.28	1785.60	1740.08	488.37	40°10'52.534"N	104°43'34.810"W	0.00	
9517.00†	89.959	0.087	7270.35	1884.91	1840.08	488.52	40°10'53.523"N	104°43'34.808"W	0.00	
9617.00†	89.959	0.087	7270.42	1984.23	1940.08	488.67	40°10'54.511"N	104°43'34.806"W	0.00	
9717.00†	89.959	0.087	7270.49	2083.55	2040.08	488.82	40°10'55.499"N	104°43'34.804"W	0.00	
9817.00†	89.959	0.087	7270.56	2182.87	2140.08	488.97	40°10'56.487"N	104°43'34.802"W	0.00	
9917.00†	89.959	0.087	7270.64	2282.18	2240.08	489.12	40°10'57.475"N	104°43'34.800"W	0.00	
10017.00†	89.959	0.087	7270.71	2381.50	2340.08	489.27	40°10'58.464"N	104°43'34.798"W	0.00	
10117.00†	89.959	0.087	7270.78	2480.82	2440.08	489.42	40°10'59.452"N	104°43'34.796"W	0.00	
10217.00†	89.959	0.087	7270.85	2580.13	2540.08	489.57	40°11'00.440"N	104°43'34.794"W	0.00	
10317.00†	89.959	0.087	7270.92	2679.45	2640.08	489.73	40°11'01.428"N	104°43'34.792"W	0.00	
10417.00†	89.959	0.087	7271.00	2778.77	2740.08	489.88	40°11'02.416"N	104°43'34.790"W	0.00	
10517.00†	89.959	0.087	7271.07	2878.08	2840.08	490.03	40°11'03.405"N	104°43'34.788"W	0.00	
10617.00†	89.959	0.087	7271.14	2977.40	2940.08	490.18	40°11'04.393"N	104°43'34.786"W	0.00	
10717.00†	89.959	0.087	7271.21	3076.72	3040.08	490.33	40°11'05.381"N	104°43'34.784"W	0.00	
10817.00†	89.959	0.087	7271.28	3176.04	3140.08	490.48	40°11'06.369"N	104°43'34.782"W	0.00	
10917.00†	89.959	0.087	7271.36	3275.35	3240.08	490.63	40°11'07.357"N	104°43'34.780"W	0.00	



# Planned Wellpath Report

USA FED 28N-36HZ (PERMIT) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#19 USA FED 28N-36HZ (664'FSL & 1931'FWL, SEC.36)
Area	COLORADO	Well	USA FED 28N-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	USA FED 28N-36HZ PWB
Facility	SEC.36-T3N-R66W		

## WELLPATH DATA (129 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11017.00†	89.959	0.087	7271.43	3374.67	3340.08	490.78	40°11'08.346"N	104°43'34.778"W	0.00	
11117.00†	89.959	0.087	7271.50	3473.99	3440.08	490.93	40°11'09.334"N	104°43'34.776"W	0.00	
11217.00†	89.959	0.087	7271.57	3573.30	3540.08	491.08	40°11'10.322"N	104°43'34.775"W	0.00	
11317.00†	89.959	0.087	7271.64	3672.62	3640.08	491.24	40°11'11.310"N	104°43'34.773"W	0.00	
11417.00†	89.959	0.087	7271.72	3771.94	3740.08	491.39	40°11'12.298"N	104°43'34.771"W	0.00	
11517.00†	89.959	0.087	7271.79	3871.25	3840.08	491.54	40°11'13.287"N	104°43'34.769"W	0.00	
11617.00†	89.959	0.087	7271.86	3970.57	3940.08	491.69	40°11'14.275"N	104°43'34.767"W	0.00	
11717.00†	89.959	0.087	7271.93	4069.89	4040.07	491.84	40°11'15.263"N	104°43'34.765"W	0.00	
11810.97	89.959	0.087	7272.00 <sup>1</sup>	4163.21	4134.04	491.98	40°11'16.192"N	104°43'34.763"W	0.00	End of Tangent (J)

## HOLE & CASING SECTIONS - Ref Wellbore: USA FED 28N-36HZ PWB Ref Wellpath: USA FED 28N-36HZ (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]
13.5in Open Hole	17.00	800.00	783.00	17.00	800.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	800.00	783.00	17.00	800.00	0.00	0.00	0.00	0.00
8.75in Open Hole	800.00	7647.22	6847.22	800.00	7269.00	0.00	0.00	-29.70	485.69
7in Casing Intermediate	17.00	7647.22	7630.22	17.00	7269.00	0.00	0.00	-29.70	485.69
6.125in Open Hole	7647.22	11810.97	4163.75	7269.00	7272.00	-29.70	485.69	4134.04	491.98
4.5in Casing Production	17.00	11810.97	11793.97	17.00	7272.00	0.00	0.00	4134.04	491.98

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
USA FED 13-36HZ PAD SECTION LINES		-19.00	96.58	-1369.57	3214322.42	1308159.11	40°10'36.293"N	104°43'58.746"W	polygon
1) USA FED 28N-36HZ BHL ON PLAT (460'FNL & 2405'FWL, SEC.36) REV-1	11810.97	7272.00	4134.04	491.98	3216148.67	1312212.44	40°11'16.192"N	104°43'34.763"W	point
USA FED 13-36HZ PAD HARDLINES (460' SETBACKS)		7421.00	96.58	-1369.57	3214322.42	1308159.11	40°10'36.293"N	104°43'58.746"W	polygon

## SURVEY PROGRAM - Ref Wellbore: USA FED 28N-36HZ PWB Ref Wellpath: USA FED 28N-36HZ (PERMIT) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	11810.97	NaviTrak (Standard)		USA FED 28N-36HZ PWB



# Planned Wellpath Report

USA FED 28N-36HZ (PERMIT) PWP

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**REFERENCE WELLPATH IDENTIFICATION**

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#19 USA FED 28N-36HZ (664'FSL & 1931'FWL, SEC.36)
Area	COLORADO	Well	USA FED 28N-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	USA FED 28N-36HZ PWB
Facility	SEC.36-T3N-R66W		

**WELLPATH COMMENTS**

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
4108.97	7.740	144.050	4083.00	PARKMAN
4593.39	7.740	144.050	4563.00	SUSSEX
7138.55	39.315	5.686	7058.00	SHARON SPRINGS
7242.38	49.631	3.981	7132.00	NIOBRARA A
7274.32	52.807	3.562	7152.00	NIOBRARA B