

KERR-MCGEE OIL & GAS ONSHORE LP



Location: COLORADO Slot: SLOT#07 SICKLER 28N-34HZ (327°FSL & 1545°FEL, SEC.34)
 Field: WELD COUNTY (KERR MCGEE) Well: SICKLER 28N-34HZ
 Facility: SEC.34-T2N-R67W Wellbore: SICKLER 28N-34HZ PWB

Plot reference wellpath is SICKLER 28N-34HZ (PERMIT REV-3) PWP

True vertical depths are referenced to PERMIT (17 KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to PERMIT (17 KB) (RKB)	North Reference: True north
PERMIT (17 KB) (RKB) to Mean Sea Level: 4966 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#07 SICKLER 28N-34HZ (327°FSL & 1545°FEL, SEC.34): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: precain on 19/Mar/2014

Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude		
SEC.34-T2N-R67W	3172818.756	1280239.992	40°06'03.593"N	104°52'55.951"W		
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#07 SICKLER 28N-34HZ (327°FSL & 1545°FEL, SEC.34)	-4586.72	2522.34	3175372.882	1275671.143	40°06'18.265"N	104°52'23.498"W
PERMIT (17 KB) (RKB) to Mud line (At Slot: SLOT#07 SICKLER 28N-34HZ (327°FSL & 1545°FEL, SEC.34)					4966ft	
Mean Sea Level to Mud line (At Slot: SLOT#07 SICKLER 28N-34HZ (327°FSL & 1545°FEL, SEC.34)					0ft	
PERMIT (17 KB) (RKB) to Mean Sea Level					4966ft	

Survey Program

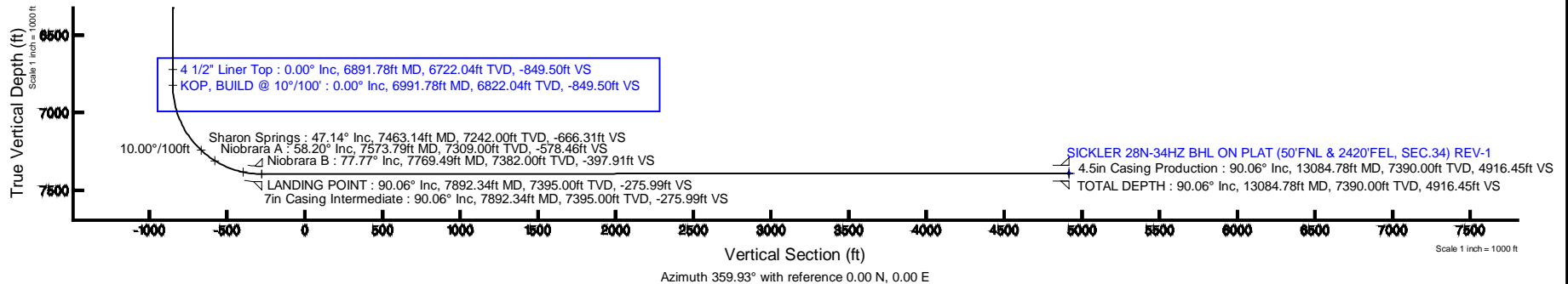
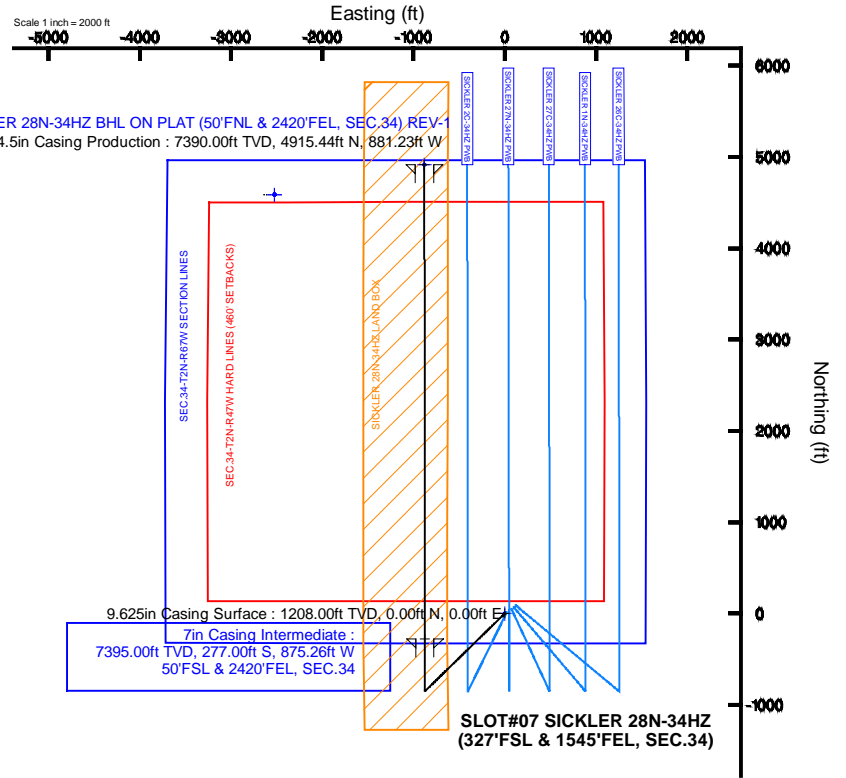
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	13084.78	NaviTrak	NaviTrak (MAGCORR,IFR)		SICKLER 28N-34HZ PWB

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	225.800	17.00	0.00	0.00	0.00	0.00
BEGIN NUUDGE	1320.00	0.000	225.800	1320.00	0.00	0.00	0.00	0.00
END NUUDGE	2170.00	17.000	225.800	2157.58	-87.27	-89.74	2.00	-87.17
BEGIN DROP	5486.32	17.000	225.800	5329.00	-763.24	-784.86	0.00	-762.34
END DROP	6336.32	0.000	359.934	6166.58	-850.51	-874.60	2.00	-849.50
KOP, BUILD @ 10°/100'	6991.78	0.000	359.934	6822.04	-850.51	-874.60	0.00	-849.50
LANDING POINT	7892.34	90.055	359.934	7395.00	-277.00	-875.26	10.00	-275.99
TOTAL DEPTH	13084.78	90.055	359.934	7390.00	4915.44	-881.23	0.00	4916.45

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.34-T2N-R47W HARD LINES (460' SETBACKS)		4966.00	4586.98	-2521.95	3172818.68	1280239.99	40°06'03.593"N	104°52'55.952"W
SEC.34-T2N-R67W SECTION LINES		4966.00	4586.98	-2521.95	3172818.68	1280239.99	40°06'03.593"N	104°52'55.952"W
SICKLER 28N-34HZ BHL ON PLAT (50°FNL & 2420°FEL, SEC.34) REV-1	13084.78	7390.00	4915.44	-881.23	3174556.96	1280580.03	40°06'06.840"N	104°52'34.838"W
SICKLER 28N-34HZ LAND BOX		7390.00	0.00	0.00	3175372.88	1275671.14	40°06'18.265"N	104°52'23.498"W



Azimuth 359.93° with reference 0.00 N, 0.00 E

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 SICKLER 28N-34HZ (327'FSL & 1545'FEL, SEC.34)
Area	COLORADO	Well	SICKLER 28N-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SICKLER 28N-34HZ PWB
Facility	SEC.34-T2N-R67W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Precain
Scale	0.999961	Report Generated	19/Mar/2014 at 08:34
Convergence at slot	n/a	Database/Source file	WellArchitectDB/SICKLER_28N-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	-4586.72	2522.34	3175372.88	1275671.14	40°05'18.265"N	104°52'23.498"W
Facility Reference Pt			3172818.76	1280239.99	40°06'03.593"N	104°52'55.951"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	PERMIT (17' KB) (RKB) to Facility Vertical Datum	4966.00ft
Horizontal Reference Pt	Slot	PERMIT (17' KB) (RKB) to Mean Sea Level	4966.00ft
Vertical Reference Pt	PERMIT (17' KB) (RKB)	PERMIT (17' KB) (RKB) to Mud Line at Slot (SLOT#07 SICKLER 28N-34HZ (327'FSL & 1545'FEL, SEC.34))	4966.00ft
MD Reference Pt	PERMIT (17' KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.93°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 SICKLER 28N-34HZ (327'FSL & 1545'FEL, SEC.34)
Area	COLORADO	Well	SICKLER 28N-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SICKLER 28N-34HZ PWB
Facility	SEC.34-T2N-R67W		

WELLPATH DATA (146 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	225.800	0.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	
17.00	0.000	225.800	17.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	TIE-ON
117.00†	0.000	225.800	117.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	
217.00†	0.000	225.800	217.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	
317.00†	0.000	225.800	317.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	
417.00†	0.000	225.800	417.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	
517.00†	0.000	225.800	517.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	
617.00†	0.000	225.800	617.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	
717.00†	0.000	225.800	717.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	
817.00†	0.000	225.800	817.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	
917.00†	0.000	225.800	917.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	
1017.00†	0.000	225.800	1017.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	
1117.00†	0.000	225.800	1117.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	
1158.00†	0.000	225.800	1158.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	Fox Hills Marker
1217.00†	0.000	225.800	1217.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	
1317.00†	0.000	225.800	1317.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	
1320.00	0.000	225.800	1320.00	0.00	0.00	0.00	40°05'18.265"N	104°52'23.498"W	0.00	BEGIN NUDGE
1417.00†	1.940	225.800	1416.98	-1.14	-1.14	-1.18	40°05'18.254"N	104°52'23.513"W	2.00	
1517.00†	3.940	225.800	1516.84	-4.71	-4.72	-4.85	40°05'18.218"N	104°52'23.560"W	2.00	
1617.00†	5.940	225.800	1616.47	-10.71	-10.72	-11.03	40°05'18.159"N	104°52'23.640"W	2.00	
1717.00†	7.940	225.800	1715.73	-19.12	-19.15	-19.69	40°05'18.076"N	104°52'23.751"W	2.00	
1817.00†	9.940	225.800	1814.51	-29.94	-29.98	-30.83	40°05'17.969"N	104°52'23.895"W	2.00	
1917.00†	11.940	225.800	1912.69	-43.16	-43.21	-44.43	40°05'17.838"N	104°52'24.070"W	2.00	
2017.00†	13.940	225.800	2010.14	-58.75	-58.82	-60.49	40°05'17.684"N	104°52'24.276"W	2.00	
2117.00†	15.940	225.800	2106.76	-76.70	-76.79	-78.97	40°05'17.506"N	104°52'24.514"W	2.00	
2170.00	17.000	225.800	2157.58	-87.17	-87.27	-89.74	40°05'17.403"N	104°52'24.653"W	2.00	END NUDGE
2217.00†	17.000	225.800	2202.53	-96.73	-96.85	-99.59	40°05'17.308"N	104°52'24.779"W	0.00	
2317.00†	17.000	225.800	2298.16	-117.09	-117.23	-120.55	40°05'17.106"N	104°52'25.049"W	0.00	
2417.00†	17.000	225.800	2393.79	-137.45	-137.62	-141.51	40°05'16.905"N	104°52'25.319"W	0.00	
2517.00†	17.000	225.800	2489.42	-157.81	-158.00	-162.47	40°05'16.704"N	104°52'25.588"W	0.00	
2617.00†	17.000	225.800	2585.05	-178.17	-178.38	-183.43	40°05'16.502"N	104°52'25.858"W	0.00	
2717.00†	17.000	225.800	2680.68	-198.53	-198.77	-204.39	40°05'16.301"N	104°52'26.128"W	0.00	
2817.00†	17.000	225.800	2776.31	-218.89	-219.15	-225.36	40°05'16.099"N	104°52'26.397"W	0.00	
2917.00†	17.000	225.800	2871.94	-239.25	-239.53	-246.32	40°05'15.898"N	104°52'26.667"W	0.00	
3017.00†	17.000	225.800	2967.57	-259.61	-259.91	-267.28	40°05'15.696"N	104°52'26.937"W	0.00	
3117.00†	17.000	225.800	3063.20	-279.97	-280.30	-288.24	40°05'15.495"N	104°52'27.206"W	0.00	
3217.00†	17.000	225.800	3158.83	-300.32	-300.68	-309.20	40°05'15.294"N	104°52'27.476"W	0.00	
3317.00†	17.000	225.800	3254.46	-320.68	-321.06	-330.16	40°05'15.092"N	104°52'27.746"W	0.00	
3417.00†	17.000	225.800	3350.10	-341.04	-341.45	-351.12	40°05'14.891"N	104°52'28.016"W	0.00	
3517.00†	17.000	225.800	3445.73	-361.40	-361.83	-372.08	40°05'14.689"N	104°52'28.285"W	0.00	
3617.00†	17.000	225.800	3541.36	-381.76	-382.21	-393.04	40°05'14.488"N	104°52'28.555"W	0.00	
3717.00†	17.000	225.800	3636.99	-402.12	-402.60	-414.00	40°05'14.286"N	104°52'28.825"W	0.00	
3817.00†	17.000	225.800	3732.62	-422.48	-422.98	-434.96	40°05'14.085"N	104°52'29.094"W	0.00	
3917.00†	17.000	225.800	3828.25	-442.84	-443.36	-455.92	40°05'13.884"N	104°52'29.364"W	0.00	
4007.72†	17.000	225.800	3915.00	-461.31	-461.85	-474.93	40°05'13.701"N	104°52'29.609"W	0.00	Parkman

REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP		Slot	SLOT#07 SICKLER 28N-34HZ (327'FSL & 1545'FEL, SEC.34)
Area	COLORADO		Well	SICKLER 28N-34HZ
Field	WELD COUNTY (KERR MCGEE)		Wellbore	SICKLER 28N-34HZ PWB
Facility	SEC.34-T2N-R67W			

WELLPATH DATA (146 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4017.00†	17.000	225.800	3923.88	-463.20	-463.75	-476.88	40°05'13.682"N	104°52'29.634"W	0.00	
4117.00†	17.000	225.800	4019.51	-483.56	-484.13	-497.84	40°05'13.481"N	104°52'29.903"W	0.00	
4217.00†	17.000	225.800	4115.14	-503.91	-504.51	-518.80	40°05'13.279"N	104°52'30.173"W	0.00	
4317.00†	17.000	225.800	4210.77	-524.27	-524.90	-539.76	40°05'13.078"N	104°52'30.443"W	0.00	
4417.00†	17.000	225.800	4306.40	-544.63	-545.28	-560.72	40°05'12.876"N	104°52'30.712"W	0.00	
4517.00†	17.000	225.800	4402.03	-564.99	-565.66	-581.68	40°05'12.675"N	104°52'30.982"W	0.00	
4592.26†	17.000	225.800	4474.00	-580.31	-581.00	-597.46	40°05'12.523"N	104°52'31.185"W	0.00	Sussex
4617.00†	17.000	225.800	4497.66	-585.35	-586.04	-602.64	40°05'12.474"N	104°52'31.252"W	0.00	
4717.00†	17.000	225.800	4593.29	-605.71	-606.43	-623.60	40°05'12.272"N	104°52'31.521"W	0.00	
4817.00†	17.000	225.800	4688.92	-626.07	-626.81	-644.56	40°05'12.071"N	104°52'31.791"W	0.00	
4917.00†	17.000	225.800	4784.55	-646.43	-647.19	-665.52	40°05'11.869"N	104°52'32.061"W	0.00	
5017.00†	17.000	225.800	4880.18	-666.79	-667.58	-686.48	40°05'11.668"N	104°52'32.330"W	0.00	
5117.00†	17.000	225.800	4975.81	-687.15	-687.96	-707.45	40°05'11.466"N	104°52'32.600"W	0.00	
5217.00†	17.000	225.800	5071.44	-707.50	-708.34	-728.41	40°05'11.265"N	104°52'32.870"W	0.00	
5317.00†	17.000	225.800	5167.07	-727.86	-728.73	-749.37	40°05'11.063"N	104°52'33.139"W	0.00	
5417.00†	17.000	225.800	5262.70	-748.22	-749.11	-770.33	40°05'10.862"N	104°52'33.409"W	0.00	
5486.32	17.000	225.800	5329.00	-762.34	-763.24	-784.86	40°05'10.722"N	104°52'33.596"W	0.00	BEGIN DROP
5517.00†	16.386	225.800	5358.38	-768.47	-769.38	-791.17	40°05'10.662"N	104°52'33.677"W	2.00	
5617.00†	14.386	225.800	5454.79	-786.95	-787.88	-810.20	40°05'10.479"N	104°52'33.922"W	2.00	
5717.00†	12.386	225.800	5552.07	-803.07	-804.02	-826.79	40°05'10.319"N	104°52'34.135"W	2.00	
5817.00†	10.386	225.800	5650.10	-816.81	-817.78	-840.94	40°05'10.183"N	104°52'34.317"W	2.00	
5917.00†	8.386	225.800	5748.75	-828.17	-829.15	-852.64	40°05'10.071"N	104°52'34.468"W	2.00	
6017.00†	6.386	225.800	5847.92	-837.12	-838.12	-861.85	40°05'09.982"N	104°52'34.586"W	2.00	
6117.00†	4.386	225.800	5947.47	-843.66	-844.66	-868.58	40°05'09.918"N	104°52'34.673"W	2.00	
6217.00†	2.386	225.800	6047.29	-847.77	-848.78	-872.82	40°05'09.877"N	104°52'34.727"W	2.00	
6317.00†	0.386	225.800	6147.26	-849.46	-850.46	-874.55	40°05'09.860"N	104°52'34.750"W	2.00	
6336.32	0.000	359.934	6166.58	-849.50	-850.51	-874.60	40°05'09.860"N	104°52'34.750"W	2.00	END DROP
6417.00†	0.000	359.934	6247.26	-849.50	-850.51	-874.60	40°05'09.860"N	104°52'34.750"W	0.00	
6517.00†	0.000	359.934	6347.26	-849.50	-850.51	-874.60	40°05'09.860"N	104°52'34.750"W	0.00	
6617.00†	0.000	359.934	6447.26	-849.50	-850.51	-874.60	40°05'09.860"N	104°52'34.750"W	0.00	
6717.00†	0.000	359.934	6547.26	-849.50	-850.51	-874.60	40°05'09.860"N	104°52'34.750"W	0.00	
6817.00†	0.000	359.934	6647.26	-849.50	-850.51	-874.60	40°05'09.860"N	104°52'34.750"W	0.00	
6891.78†	0.000	359.934	6722.04	-849.50	-850.51	-874.60	40°05'09.860"N	104°52'34.750"W	0.00	4 1/2" Liner Top
6917.00†	0.000	359.934	6747.26	-849.50	-850.51	-874.60	40°05'09.860"N	104°52'34.750"W	0.00	
6991.78	0.000	359.934	6822.04	-849.50	-850.51	-874.60	40°05'09.860"N	104°52'34.750"W	0.00	KOP, BUILD @ 10°/100'
7017.00†	2.522	359.934	6847.25	-848.95	-849.96	-874.60	40°05'09.865"N	104°52'34.750"W	10.00	
7117.00†	12.522	359.934	6946.26	-835.87	-836.88	-874.61	40°05'09.995"N	104°52'34.751"W	10.00	
7217.00†	22.522	359.934	7041.50	-805.81	-806.81	-874.65	40°05'10.292"N	104°52'34.751"W	10.00	
7317.00†	32.522	359.934	7130.08	-759.66	-760.66	-874.70	40°05'10.748"N	104°52'34.752"W	10.00	
7417.00†	42.522	359.934	7209.29	-698.83	-699.84	-874.77	40°05'11.349"N	104°52'34.753"W	10.00	
7463.14†	47.135	359.934	7242.00	-666.31	-667.32	-874.81	40°05'11.670"N	104°52'34.753"W	10.00	Sharon Springs
7517.00†	52.522	359.934	7276.73	-625.17	-626.18	-874.86	40°05'12.077"N	104°52'34.754"W	10.00	
7573.79†	58.201	359.934	7309.00	-578.46	-579.47	-874.91	40°05'12.538"N	104°52'34.755"W	10.00	Niobrara A
7617.00†	62.522	359.934	7330.36	-540.92	-541.92	-874.95	40°05'12.909"N	104°52'34.755"W	10.00	
7717.00†	72.522	359.934	7368.55	-448.63	-449.64	-875.06	40°05'13.821"N	104°52'34.757"W	10.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 SICKLER 28N-34HZ (327'FSL & 1545'FEL, SEC.34)
Area	COLORADO	Well	SICKLER 28N-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SICKLER 28N-34HZ PWB
Facility	SEC.34-T2N-R67W		

WELLPATH DATA (146 stations) † = interpolated/extrapolated station											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments	
7769.49†	77.771	359.934	7382.00	-397.91	-398.92	-875.12	40°05'14.323"N	104°52'34.757"W	10.00	Niobrara B	
7817.00†	82.522	359.934	7390.13	-351.12	-352.12	-875.17	40°05'14.785"N	104°52'34.758"W	10.00		
7892.34	90.055	359.934	7395.00	-275.99	-277.00	-875.26	40°05'15.527"N	104°52'34.759"W	10.00	LANDING POINT	
7917.00†	90.055	359.934	7394.98	-251.33	-252.34	-875.29	40°05'15.771"N	104°52'34.760"W	0.00		
8017.00†	90.055	359.934	7394.88	-151.33	-152.34	-875.40	40°05'16.759"N	104°52'34.761"W	0.00		
8117.00†	90.055	359.934	7394.78	-51.33	-52.34	-875.52	40°05'17.748"N	104°52'34.763"W	0.00		
8217.00†	90.055	359.934	7394.69	48.67	47.66	-875.63	40°05'18.736"N	104°52'34.764"W	0.00		
8317.00†	90.055	359.934	7394.59	148.67	147.66	-875.75	40°05'19.724"N	104°52'34.766"W	0.00		
8417.00†	90.055	359.934	7394.50	248.67	247.66	-875.86	40°05'20.712"N	104°52'34.767"W	0.00		
8517.00†	90.055	359.934	7394.40	348.67	347.66	-875.98	40°05'21.701"N	104°52'34.769"W	0.00		
8617.00†	90.055	359.934	7394.30	448.67	447.66	-876.09	40°05'22.689"N	104°52'34.770"W	0.00		
8717.00†	90.055	359.934	7394.21	548.67	547.66	-876.21	40°05'23.677"N	104°52'34.772"W	0.00		
8817.00†	90.055	359.934	7394.11	648.67	647.66	-876.32	40°05'24.665"N	104°52'34.773"W	0.00		
8917.00†	90.055	359.934	7394.01	748.67	747.66	-876.44	40°05'25.653"N	104°52'34.775"W	0.00		
9017.00†	90.055	359.934	7393.92	848.67	847.66	-876.55	40°05'26.642"N	104°52'34.776"W	0.00		
9117.00†	90.055	359.934	7393.82	948.67	947.66	-876.67	40°05'27.630"N	104°52'34.778"W	0.00		
9217.00†	90.055	359.934	7393.73	1048.67	1047.66	-876.78	40°05'28.618"N	104°52'34.779"W	0.00		
9317.00†	90.055	359.934	7393.63	1148.67	1147.66	-876.90	40°05'29.606"N	104°52'34.781"W	0.00		
9417.00†	90.055	359.934	7393.53	1248.67	1247.66	-877.01	40°05'30.594"N	104°52'34.782"W	0.00		
9517.00†	90.055	359.934	7393.44	1348.67	1347.66	-877.13	40°05'31.583"N	104°52'34.784"W	0.00		
9617.00†	90.055	359.934	7393.34	1448.67	1447.66	-877.24	40°05'32.571"N	104°52'34.785"W	0.00		
9717.00†	90.055	359.934	7393.24	1548.67	1547.66	-877.36	40°05'33.559"N	104°52'34.787"W	0.00		
9817.00†	90.055	359.934	7393.15	1648.67	1647.66	-877.47	40°05'34.547"N	104°52'34.789"W	0.00		
9917.00†	90.055	359.934	7393.05	1748.67	1747.66	-877.59	40°05'35.536"N	104°52'34.790"W	0.00		
10017.00†	90.055	359.934	7392.95	1848.67	1847.66	-877.70	40°05'36.524"N	104°52'34.792"W	0.00		
10117.00†	90.055	359.934	7392.86	1948.67	1947.66	-877.82	40°05'37.512"N	104°52'34.793"W	0.00		
10217.00†	90.055	359.934	7392.76	2048.67	2047.66	-877.93	40°05'38.500"N	104°52'34.795"W	0.00		
10317.00†	90.055	359.934	7392.67	2148.67	2147.66	-878.05	40°05'39.488"N	104°52'34.796"W	0.00		
10417.00†	90.055	359.934	7392.57	2248.67	2247.66	-878.16	40°05'40.477"N	104°52'34.798"W	0.00		
10517.00†	90.055	359.934	7392.47	2348.67	2347.66	-878.28	40°05'41.465"N	104°52'34.799"W	0.00		
10617.00†	90.055	359.934	7392.38	2448.67	2447.66	-878.39	40°05'42.453"N	104°52'34.801"W	0.00		
10717.00†	90.055	359.934	7392.28	2548.67	2547.66	-878.51	40°05'43.441"N	104°52'34.802"W	0.00		
10817.00†	90.055	359.934	7392.18	2648.67	2647.66	-878.62	40°05'44.429"N	104°52'34.804"W	0.00		
10917.00†	90.055	359.934	7392.09	2748.67	2747.66	-878.74	40°05'45.418"N	104°52'34.805"W	0.00		
11017.00†	90.055	359.934	7391.99	2848.67	2847.66	-878.85	40°05'46.406"N	104°52'34.807"W	0.00		
11117.00†	90.055	359.934	7391.90	2948.67	2947.66	-878.97	40°05'47.394"N	104°52'34.808"W	0.00		
11217.00†	90.055	359.934	7391.80	3048.67	3047.66	-879.08	40°05'48.382"N	104°52'34.810"W	0.00		
11317.00†	90.055	359.934	7391.70	3148.67	3147.66	-879.20	40°05'49.371"N	104°52'34.811"W	0.00		
11417.00†	90.055	359.934	7391.61	3248.67	3247.66	-879.31	40°05'50.359"N	104°52'34.813"W	0.00		
11517.00†	90.055	359.934	7391.51	3348.67	3347.66	-879.43	40°05'51.347"N	104°52'34.814"W	0.00		
11617.00†	90.055	359.934	7391.41	3448.67	3447.66	-879.54	40°05'52.335"N	104°52'34.816"W	0.00		
11717.00†	90.055	359.934	7391.32	3548.67	3547.66	-879.66	40°05'53.323"N	104°52'34.818"W	0.00		
11817.00†	90.055	359.934	7391.22	3648.67	3647.66	-879.77	40°05'54.312"N	104°52'34.819"W	0.00		
11917.00†	90.055	359.934	7391.12	3748.67	3747.66	-879.89	40°05'55.300"N	104°52'34.821"W	0.00		
12017.00†	90.055	359.934	7391.03	3848.67	3847.66	-880.00	40°05'56.288"N	104°52'34.822"W	0.00		

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 SICKLER 28N-34HZ (327'FSL & 1545'FEL, SEC.34)
Area	COLORADO	Well	SICKLER 28N-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SICKLER 28N-34HZ PWB
Facility	SEC.34-T2N-R67W		

WELLPATH DATA (146 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12117.00†	90.055	359.934	7390.93	3948.67	3947.66	-880.12	40°05'57.276"N	104°52'34.824"W	0.00	
12217.00†	90.055	359.934	7390.84	4048.67	4047.66	-880.23	40°05'58.264"N	104°52'34.825"W	0.00	
12317.00†	90.055	359.934	7390.74	4148.67	4147.66	-880.35	40°05'59.253"N	104°52'34.827"W	0.00	
12417.00†	90.055	359.934	7390.64	4248.67	4247.66	-880.46	40°06'00.241"N	104°52'34.828"W	0.00	
12517.00†	90.055	359.934	7390.55	4348.67	4347.66	-880.58	40°06'01.229"N	104°52'34.830"W	0.00	
12617.00†	90.055	359.934	7390.45	4448.67	4447.66	-880.69	40°06'02.217"N	104°52'34.831"W	0.00	
12717.00†	90.055	359.934	7390.35	4548.67	4547.66	-880.81	40°06'03.206"N	104°52'34.833"W	0.00	
12817.00†	90.055	359.934	7390.26	4648.67	4647.66	-880.92	40°06'04.194"N	104°52'34.834"W	0.00	
12917.00†	90.055	359.934	7390.16	4748.67	4747.66	-881.04	40°06'05.182"N	104°52'34.836"W	0.00	
13017.00†	90.055	359.934	7390.07	4848.67	4847.66	-881.15	40°06'06.170"N	104°52'34.837"W	0.00	
13084.78	90.055	359.934	7390.00 ¹	4916.45	4915.44	-881.23	40°06'06.840"N	104°52'34.838"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: SICKLER 28N-34HZ PWB Ref Wellpath: SICKLER 28N-34HZ (PERMIT REV-3) 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	1208.00	1191.00	17.00	1208.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	1208.00	1191.00	17.00	1208.00	0.00	0.00	0.00	0.00
8.75in Open Hole	1208.00	7892.34	6684.34	1208.00	7395.00	0.00	0.00	-277.00	-875.26
7in Casing Intermediate	17.00	7892.34	7875.34	17.00	7395.00	0.00	0.00	-277.00	-875.26
6.125in Open Hole	7892.34	13084.78	5192.44	7395.00	7390.00	-277.00	-875.26	4915.44	-881.23
4.5in Casing Production	17.00	13084.78	13067.78	17.00	7390.00	0.00	0.00	4915.44	-881.23

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 SICKLER 28N-34HZ (327'FSL & 1545'FEL, SEC.34)
Area	COLORADO	Well	SICKLER 28N-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SICKLER 28N-34HZ PWB
Facility	SEC.34-T2N-R67W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.34-T2N-R47W HARD LINES (460' SETBACKS)		4966.00	4586.98	-2521.95	3172818.68	1280239.99	40°06'03.593"N	104°52'55.952"W	polygon
SEC.34-T2N-R67W SECTION LINES		4966.00	4586.98	-2521.95	3172818.68	1280239.99	40°06'03.593"N	104°52'55.952"W	polygon
1) SICKLER 28N-34HZ BHL ON PLAT (50'FNL & 2420'FEL, SEC.34) REV-1	13084.78	7390.00	4915.44	-881.23	3174456.96	1280580.03	40°06'06.840"N	104°52'34.838"W	point
SICKLER 28N-34HZ LAND BOX		7390.00	0.00	0.00	3175372.88	1275671.14	40°05'18.265"N	104°52'23.498"W	polygon

SURVEY PROGRAM - Ref Wellbore: SICKLER 28N-34HZ PWB Ref Wellpath: SICKLER 28N-34HZ (PERMIT REV-3) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	13084.78	NaviTrak (MAGCORR,IFR)		SICKLER 28N-34HZ PWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 SICKLER 28N-34HZ (327'FSL & 1545'FEL, SEC.34)
Area	COLORADO	Well	SICKLER 28N-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SICKLER 28N-34HZ PWB
Facility	SEC.34-T2N-R67W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1158.00	0.000	225.800	1158.00	Fox Hills Marker
4007.72	17.000	225.800	3915.00	Parkman
4592.26	17.000	225.800	4474.00	Sussex
6891.78	0.000	359.934	6722.04	4 1/2" Liner Top
7463.14	47.135	359.934	7242.00	Sharon Springs
7573.79	58.201	359.934	7309.00	Niobrara A
7769.49	77.771	359.934	7382.00	Niobrara B

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	225.800	17.00	TIE-ON
1320.00	0.000	225.800	1320.00	BEGIN NUDGE
2170.00	17.000	225.800	2157.58	END NUDGE
5486.32	17.000	225.800	5329.00	BEGIN DROP
6336.32	0.000	359.934	6166.58	END DROP
6991.78	0.000	359.934	6822.04	KOP, BUILD @ 10°/100'
7892.34	90.055	359.934	7395.00	LANDING POINT
13084.78	90.055	359.934	7390.00	TOTAL DEPTH