

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#04 SPURLING 35N-34HZ (377' FNL & 1088' FWL, SEC.34)
Field: WELD COUNTY (KERR MCGEE) Well: SPURLING 35N-34HZ
Facility: SEC.34-T2N-R67W Wellbore: SPURLING 35N-34HZ PWB

Plot reference wellpath is SPURLING 35N-34HZ (PERMIT REV-1) 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: 5030 feet Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#04 SPURLING 35N-34HZ (377' FNL & 1088' FWL, SEC.34)): 0 feet Depths are in feet
Coordinates are in feet referenced to Slot Created by: robale01 on 01/Aug/2013

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)
SLOT#04 SPURLING 35N-34HZ (377' FNL & 1088' FWL, SEC.34)	0.00	-89.91	3172728.854	1280239.386
PERMIT (17 KB) (RKB) to Mud line (At Slot: SLOT#04 SPURLING 35N-34HZ (377' FNL & 1088' FWL, SEC.34))				5030ft
Mean Sea Level to Mud line (At Slot: SLOT#04 SPURLING 35N-34HZ (377' FNL & 1088' FWL, SEC.34))				0ft
PERMIT (17 KB) (RKB) to Mean Sea Level				5030ft

Survey Program

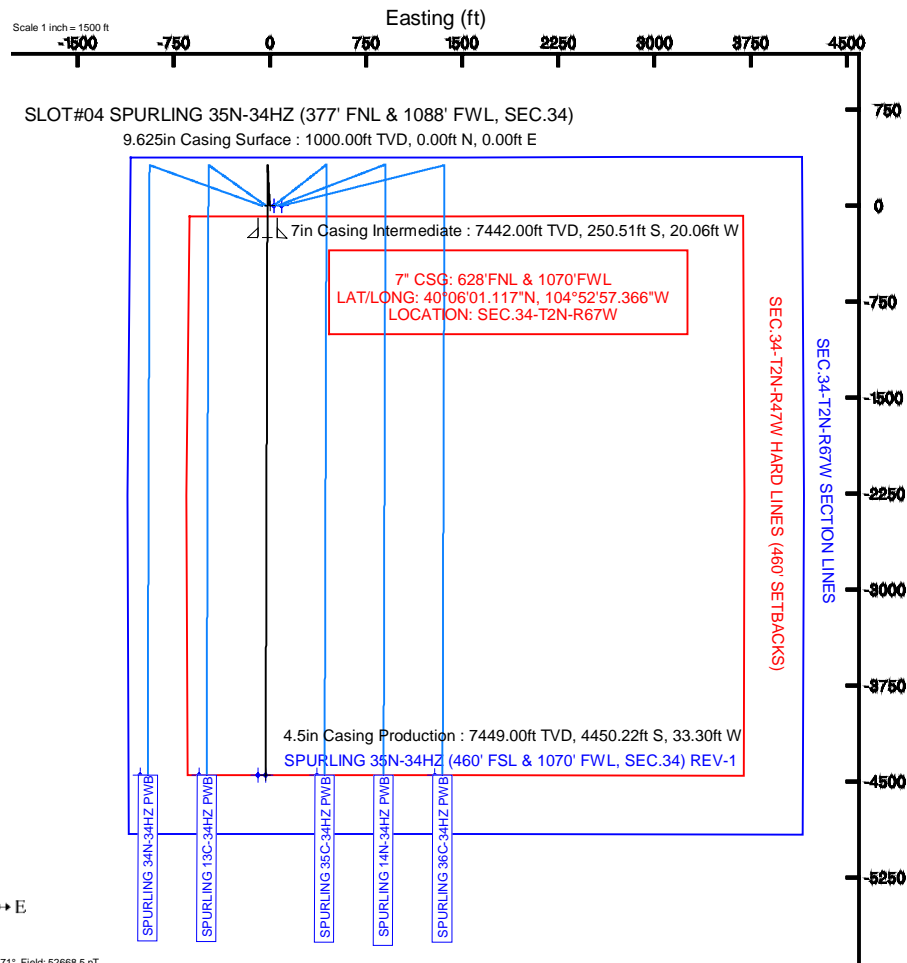
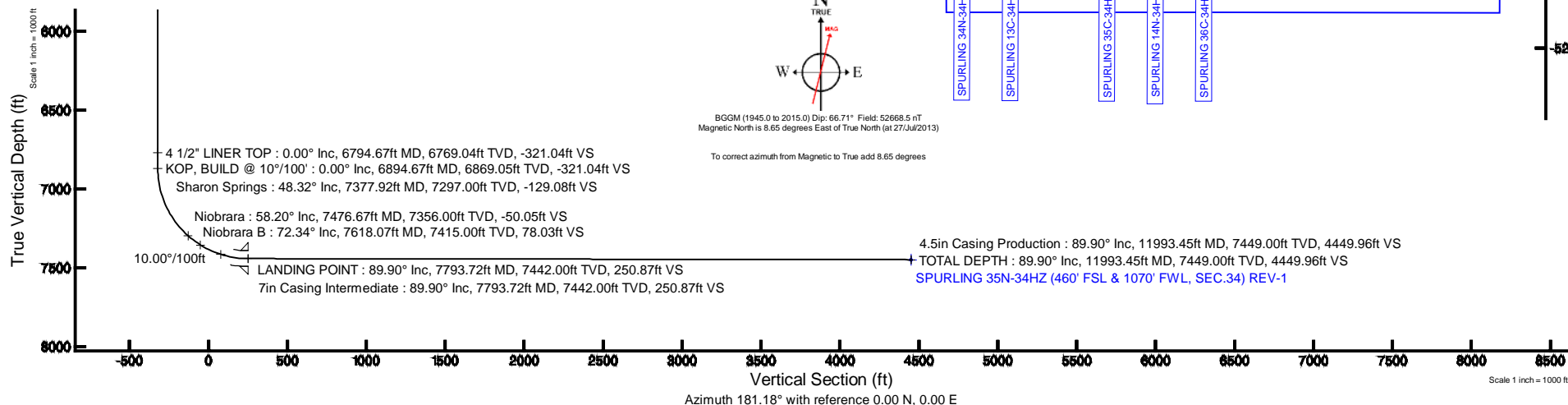
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	11993.45	NaviTrak	NaviTrak (Standard)		SPURLING 35N-34HZ PWB

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)		5030.00	0.00	89.83	3172818.66	1280239.99	40°06'03.593"N	104°52'55.952"W
SEC.34-T2N-R67W SECTION LINES		5030.00	0.00	89.83	3172818.66	1280239.99	40°06'03.593"N	104°52'55.952"W
SPURLING 35N-34HZ (460' FSL & 1070' FWL, SEC.34) REV-1	11993.45	7449.00	-4450.22	-33.30	3172726.55	1275789.21	40°05'19.615"N	104°52'57.536"W

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	356.750	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1100.00	0.000	356.750	1100.00	0.00	0.00	0.00	0.00
END NUDGE	1600.00	10.000	356.750	1597.47	43.45	-2.47	2.00	-43.39
BEGIN DROP	2953.09	10.000	356.750	2930.00	278.04	-15.79	0.00	-277.65
END DROP	3453.09	0.000	180.181	3427.47	321.49	-18.26	2.00	-321.04
KOP, BUILD @ 10°/100'	6894.67	0.000	180.181	6869.05	321.49	-18.26	0.00	-321.04
LANDING POINT	7793.72	89.905	180.181	7442.00	-250.51	-20.06	10.00	250.87
TOTAL DEPTH	11993.45	89.905	180.181	7449.00	-4450.22	-33.30	0.00	4449.96





Planned Wellpath Report

SPURLING 35N-34HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 SPURLING 35N-34HZ (377' FNL & 1088' FWL, SEC.34)
Area	COLORADO	Well	SPURLING 35N-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 35N-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	Robiale01
Scale	0.99996	Report Generated	01/Aug/2013 at 09:36
Convergence at slot	n/a	Database/Source file	WA_ANADARKO/SPURLING_35N-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	0.00	-89.91	3172728.85	1280239.37	40°06'03.593"N	104°52'57.108"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	5030.00ft
Horizontal Reference Pt	Slot	PERMIT (17' KB) (RKB) to Mean Sea Level	5030.00ft
Vertical Reference Pt	PERMIT (17' KB) (RKB)	PERMIT (17' KB) (RKB) to Mud Line at Slot (SLOT#04 SPURLING 35N-34HZ (377' FNL & 1088' FWL, SEC.34))	5030.00ft
MD Reference Pt	PERMIT (17' KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	181.18°



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SPURLING 35N-34HZ (PERMIT REV-1) PWP

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Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 35N-34HZ PWB
Facility	SEC.34-T2N-R67W		

WELLPATH DATA (135 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	356.750	0.00	0.00	0.00	0.00	40°06'03.593"N	104°52'57.108"W	0.00	
17.00	0.000	356.750	17.00	0.00	0.00	0.00	40°06'03.593"N	104°52'57.108"W	0.00	TIE-ON
117.00†	0.000	356.750	117.00	0.00	0.00	0.00	40°06'03.593"N	104°52'57.108"W	0.00	
217.00†	0.000	356.750	217.00	0.00	0.00	0.00	40°06'03.593"N	104°52'57.108"W	0.00	
317.00†	0.000	356.750	317.00	0.00	0.00	0.00	40°06'03.593"N	104°52'57.108"W	0.00	
417.00†	0.000	356.750	417.00	0.00	0.00	0.00	40°06'03.593"N	104°52'57.108"W	0.00	
517.00†	0.000	356.750	517.00	0.00	0.00	0.00	40°06'03.593"N	104°52'57.108"W	0.00	
590.00†	0.000	356.750	590.00	0.00	0.00	0.00	40°06'03.593"N	104°52'57.108"W	0.00	Fox Hills Base
617.00†	0.000	356.750	617.00	0.00	0.00	0.00	40°06'03.593"N	104°52'57.108"W	0.00	
717.00†	0.000	356.750	717.00	0.00	0.00	0.00	40°06'03.593"N	104°52'57.108"W	0.00	
817.00†	0.000	356.750	817.00	0.00	0.00	0.00	40°06'03.593"N	104°52'57.108"W	0.00	
917.00†	0.000	356.750	917.00	0.00	0.00	0.00	40°06'03.593"N	104°52'57.108"W	0.00	
1017.00†	0.000	356.750	1017.00	0.00	0.00	0.00	40°06'03.593"N	104°52'57.108"W	0.00	
1100.00	0.000	356.750	1100.00	0.00	0.00	0.00	40°06'03.593"N	104°52'57.108"W	0.00	BEGIN NUDGE
1117.00†	0.340	356.750	1117.00	-0.05	0.05	0.00	40°06'03.593"N	104°52'57.108"W	2.00	
1217.00†	2.340	356.750	1216.97	-2.38	2.39	-0.14	40°06'03.617"N	104°52'57.110"W	2.00	
1317.00†	4.340	356.750	1316.79	-8.19	8.20	-0.47	40°06'03.674"N	104°52'57.114"W	2.00	
1417.00†	6.340	356.750	1416.35	-17.47	17.49	-0.99	40°06'03.766"N	104°52'57.121"W	2.00	
1517.00†	8.340	356.750	1515.53	-30.21	30.25	-1.72	40°06'03.892"N	104°52'57.130"W	2.00	
1600.00	10.000	356.750	1597.47	-43.39	43.45	-2.47	40°06'04.022"N	104°52'57.140"W	2.00	END NUDGE
1617.00†	10.000	356.750	1614.21	-46.34	46.40	-2.63	40°06'04.052"N	104°52'57.142"W	0.00	
1717.00†	10.000	356.750	1712.69	-63.65	63.74	-3.62	40°06'04.223"N	104°52'57.155"W	0.00	
1817.00†	10.000	356.750	1811.17	-80.96	81.07	-4.60	40°06'04.394"N	104°52'57.167"W	0.00	
1917.00†	10.000	356.750	1909.65	-98.27	98.41	-5.59	40°06'04.566"N	104°52'57.180"W	0.00	
2017.00†	10.000	356.750	2008.13	-115.59	115.75	-6.57	40°06'04.737"N	104°52'57.193"W	0.00	
2117.00†	10.000	356.750	2106.61	-132.90	133.08	-7.56	40°06'04.908"N	104°52'57.205"W	0.00	
2217.00†	10.000	356.750	2205.09	-150.21	150.42	-8.54	40°06'05.079"N	104°52'57.218"W	0.00	
2317.00†	10.000	356.750	2303.57	-167.53	167.76	-9.53	40°06'05.251"N	104°52'57.231"W	0.00	
2417.00†	10.000	356.750	2402.05	-184.84	185.09	-10.51	40°06'05.422"N	104°52'57.243"W	0.00	
2517.00†	10.000	356.750	2500.53	-202.15	202.43	-11.49	40°06'05.593"N	104°52'57.256"W	0.00	
2617.00†	10.000	356.750	2599.01	-219.46	219.77	-12.48	40°06'05.765"N	104°52'57.269"W	0.00	
2717.00†	10.000	356.750	2697.50	-236.78	237.11	-13.46	40°06'05.936"N	104°52'57.281"W	0.00	
2817.00†	10.000	356.750	2795.98	-254.09	254.44	-14.45	40°06'06.107"N	104°52'57.294"W	0.00	
2917.00†	10.000	356.750	2894.46	-271.40	271.78	-15.43	40°06'06.279"N	104°52'57.307"W	0.00	
2953.09	10.000	356.750	2930.00	-277.65	278.04	-15.79	40°06'06.341"N	104°52'57.311"W	0.00	BEGIN DROP
3017.00†	8.722	356.750	2993.06	-288.02	288.41	-16.38	40°06'06.443"N	104°52'57.319"W	2.00	
3117.00†	6.722	356.750	3092.14	-301.41	301.83	-17.14	40°06'06.576"N	104°52'57.329"W	2.00	
3217.00†	4.722	356.750	3191.64	-311.35	311.78	-17.70	40°06'06.674"N	104°52'57.336"W	2.00	
3317.00†	2.722	356.750	3291.43	-317.82	318.26	-18.07	40°06'06.738"N	104°52'57.341"W	2.00	
3417.00†	0.722	356.750	3391.38	-320.82	321.26	-18.24	40°06'06.768"N	104°52'57.343"W	2.00	
3453.09	0.000	180.181	3427.47	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	2.00	END DROP
3517.00†	0.000	180.181	3491.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
3617.00†	0.000	180.181	3591.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
3717.00†	0.000	180.181	3691.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
3817.00†	0.000	180.181	3791.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	



Planned Wellpath Report

SPURLING 35N-34HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 SPURLING 35N-34HZ (377' FNL & 1088' FWL, SEC.34)
Area	COLORADO	Well	SPURLING 35N-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 35N-34HZ PWB
Facility	SEC.34-T2N-R67W		

WELLPATH DATA (135 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3917.00†	0.000	180.181	3891.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
4017.00†	0.000	180.181	3991.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
4117.00†	0.000	180.181	4091.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
4217.00†	0.000	180.181	4191.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
4317.00†	0.000	180.181	4291.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
4417.00†	0.000	180.181	4391.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
4517.00†	0.000	180.181	4491.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
4617.00†	0.000	180.181	4591.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
4711.63†	0.000	180.181	4686.00	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	Sussex
4717.00†	0.000	180.181	4691.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
4817.00†	0.000	180.181	4791.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
4917.00†	0.000	180.181	4891.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
5017.00†	0.000	180.181	4991.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
5117.00†	0.000	180.181	5091.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
5149.63†	0.000	180.181	5124.00	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	Shannon
5217.00†	0.000	180.181	5191.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
5317.00†	0.000	180.181	5291.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
5417.00†	0.000	180.181	5391.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
5517.00†	0.000	180.181	5491.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
5617.00†	0.000	180.181	5591.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
5717.00†	0.000	180.181	5691.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
5817.00†	0.000	180.181	5791.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
5917.00†	0.000	180.181	5891.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
6017.00†	0.000	180.181	5991.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
6117.00†	0.000	180.181	6091.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
6217.00†	0.000	180.181	6191.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
6317.00†	0.000	180.181	6291.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
6417.00†	0.000	180.181	6391.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
6517.00†	0.000	180.181	6491.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
6617.00†	0.000	180.181	6591.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
6717.00†	0.000	180.181	6691.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
6794.67†	0.000	180.181	6769.04	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	4 1/2" LINER TOP
6817.00†	0.000	180.181	6791.37	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	
6894.67	0.000	180.181	6869.05	-321.04	321.49	-18.26	40°06'06.770"N	104°52'57.343"W	0.00	KOP, BUILD @ 10°/100'
6917.00†	2.233	180.181	6891.37	-320.61	321.05	-18.26	40°06'06.766"N	104°52'57.343"W	10.00	
7017.00†	12.233	180.181	6990.45	-308.04	308.48	-18.30	40°06'06.641"N	104°52'57.343"W	10.00	
7117.00†	22.233	180.181	7085.84	-278.45	278.89	-18.39	40°06'06.349"N	104°52'57.345"W	10.00	
7217.00†	32.233	180.181	7174.64	-232.76	233.19	-18.53	40°06'05.897"N	104°52'57.347"W	10.00	
7317.00†	42.233	180.181	7254.16	-172.34	172.76	-18.72	40°06'05.300"N	104°52'57.349"W	10.00	
7377.92†	48.324	180.181	7297.00	-129.08	129.50	-18.86	40°06'04.873"N	104°52'57.351"W	10.00	Sharon Springs
7417.00†	52.233	180.181	7321.97	-99.03	99.44	-18.96	40°06'04.576"N	104°52'57.352"W	10.00	
7476.67†	58.200	180.181	7356.00	-50.05	50.45	-19.11	40°06'04.092"N	104°52'57.354"W	10.00	Niobrara
7517.00†	62.233	180.181	7376.03	-15.06	15.46	-19.22	40°06'03.746"N	104°52'57.355"W	10.00	
7617.00†	72.233	180.181	7414.68	77.02	-76.63	-19.51	40°06'02.836"N	104°52'57.359"W	10.00	
7618.07†	72.339	180.181	7415.00	78.03	-77.64	-19.51	40°06'02.826"N	104°52'57.359"W	10.00	Niobrara B



Planned Wellpath Report

SPURLING 35N-34HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

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Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 35N-34HZ PWB
Facility	SEC.34-T2N-R67W		

WELLPATH DATA (135 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7717.00†	82.233	180.181	7436.75	174.40	-174.03	-19.82	40°06'01.873"N	104°52'57.363"W	10.00	
7793.72	89.905	180.181	7442.00	250.87	-250.51	-20.06	40°06'01.117"N	104°52'57.366"W	10.00	LANDING POINT
7817.00†	89.905	180.181	7442.04	274.15	-273.79	-20.13	40°06'00.887"N	104°52'57.367"W	0.00	
7917.00†	89.905	180.181	7442.21	374.14	-373.79	-20.45	40°05'59.899"N	104°52'57.371"W	0.00	
8017.00†	89.905	180.181	7442.37	474.12	-473.79	-20.76	40°05'58.911"N	104°52'57.375"W	0.00	
8117.00†	89.905	180.181	7442.54	574.11	-573.79	-21.08	40°05'57.923"N	104°52'57.379"W	0.00	
8217.00†	89.905	180.181	7442.71	674.09	-673.79	-21.39	40°05'56.934"N	104°52'57.383"W	0.00	
8317.00†	89.905	180.181	7442.87	774.07	-773.79	-21.71	40°05'55.946"N	104°52'57.387"W	0.00	
8417.00†	89.905	180.181	7443.04	874.06	-873.79	-22.02	40°05'54.958"N	104°52'57.391"W	0.00	
8517.00†	89.905	180.181	7443.21	974.04	-973.79	-22.34	40°05'53.970"N	104°52'57.395"W	0.00	
8617.00†	89.905	180.181	7443.37	1074.03	-1073.79	-22.65	40°05'52.982"N	104°52'57.400"W	0.00	
8717.00†	89.905	180.181	7443.54	1174.01	-1173.79	-22.97	40°05'51.993"N	104°52'57.404"W	0.00	
8817.00†	89.905	180.181	7443.71	1274.00	-1273.79	-23.28	40°05'51.005"N	104°52'57.408"W	0.00	
8917.00†	89.905	180.181	7443.87	1373.98	-1373.79	-23.60	40°05'50.017"N	104°52'57.412"W	0.00	
9017.00†	89.905	180.181	7444.04	1473.97	-1473.79	-23.91	40°05'49.029"N	104°52'57.416"W	0.00	
9117.00†	89.905	180.181	7444.21	1573.95	-1573.79	-24.23	40°05'48.041"N	104°52'57.420"W	0.00	
9217.00†	89.905	180.181	7444.37	1673.94	-1673.79	-24.54	40°05'47.052"N	104°52'57.424"W	0.00	
9317.00†	89.905	180.181	7444.54	1773.92	-1773.79	-24.86	40°05'46.064"N	104°52'57.428"W	0.00	
9417.00†	89.905	180.181	7444.71	1873.91	-1873.78	-25.18	40°05'45.076"N	104°52'57.432"W	0.00	
9517.00†	89.905	180.181	7444.87	1973.89	-1973.78	-25.49	40°05'44.088"N	104°52'57.436"W	0.00	
9617.00†	89.905	180.181	7445.04	2073.87	-2073.78	-25.81	40°05'43.100"N	104°52'57.440"W	0.00	
9717.00†	89.905	180.181	7445.21	2173.86	-2173.78	-26.12	40°05'42.111"N	104°52'57.444"W	0.00	
9817.00†	89.905	180.181	7445.37	2273.84	-2273.78	-26.44	40°05'41.123"N	104°52'57.448"W	0.00	
9917.00†	89.905	180.181	7445.54	2373.83	-2373.78	-26.75	40°05'40.135"N	104°52'57.452"W	0.00	
10017.00†	89.905	180.181	7445.71	2473.81	-2473.78	-27.07	40°05'39.147"N	104°52'57.456"W	0.00	
10117.00†	89.905	180.181	7445.87	2573.80	-2573.78	-27.38	40°05'38.159"N	104°52'57.460"W	0.00	
10217.00†	89.905	180.181	7446.04	2673.78	-2673.78	-27.70	40°05'37.170"N	104°52'57.464"W	0.00	
10317.00†	89.905	180.181	7446.21	2773.77	-2773.78	-28.01	40°05'36.182"N	104°52'57.468"W	0.00	
10417.00†	89.905	180.181	7446.37	2873.75	-2873.78	-28.33	40°05'35.194"N	104°52'57.472"W	0.00	
10517.00†	89.905	180.181	7446.54	2973.74	-2973.78	-28.64	40°05'34.206"N	104°52'57.477"W	0.00	
10617.00†	89.905	180.181	7446.71	3073.72	-3073.78	-28.96	40°05'33.217"N	104°52'57.481"W	0.00	
10717.00†	89.905	180.181	7446.87	3173.71	-3173.78	-29.27	40°05'32.229"N	104°52'57.485"W	0.00	
10817.00†	89.905	180.181	7447.04	3273.69	-3273.78	-29.59	40°05'31.241"N	104°52'57.489"W	0.00	
10917.00†	89.905	180.181	7447.21	3373.67	-3373.77	-29.90	40°05'30.253"N	104°52'57.493"W	0.00	
11017.00†	89.905	180.181	7447.37	3473.66	-3473.77	-30.22	40°05'29.265"N	104°52'57.497"W	0.00	
11117.00†	89.905	180.181	7447.54	3573.64	-3573.77	-30.53	40°05'28.276"N	104°52'57.501"W	0.00	
11217.00†	89.905	180.181	7447.71	3673.63	-3673.77	-30.85	40°05'27.288"N	104°52'57.505"W	0.00	
11317.00†	89.905	180.181	7447.87	3773.61	-3773.77	-31.16	40°05'26.300"N	104°52'57.509"W	0.00	
11417.00†	89.905	180.181	7448.04	3873.60	-3873.77	-31.48	40°05'25.312"N	104°52'57.513"W	0.00	
11517.00†	89.905	180.181	7448.21	3973.58	-3973.77	-31.79	40°05'24.324"N	104°52'57.517"W	0.00	
11617.00†	89.905	180.181	7448.37	4073.57	-4073.77	-32.11	40°05'23.335"N	104°52'57.521"W	0.00	
11717.00†	89.905	180.181	7448.54	4173.55	-4173.77	-32.42	40°05'22.347"N	104°52'57.525"W	0.00	
11817.00†	89.905	180.181	7448.71	4273.54	-4273.77	-32.74	40°05'21.359"N	104°52'57.529"W	0.00	
11917.00†	89.905	180.181	7448.87	4373.52	-4373.77	-33.06	40°05'20.371"N	104°52'57.533"W	0.00	
11993.45	89.905	180.181	7449.00 [†]	4449.96	-4450.22	-33.30	40°05'19.615"N	104°52'57.536"W	0.00	TOTAL DEPTH



Planned Wellpath Report

SPURLING 35N-34HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 SPURLING 35N-34HZ (377' FNL & 1088' FWL, SEC.34)
Area	COLORADO	Well	SPURLING 35N-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 35N-34HZ PWB
Facility	SEC.34-T2N-R67W		

HOLE & CASING SECTIONS -									
Ref Wellbore: SPURLING 35N-34HZ PWB				Ref Wellpath: SPURLING 35N-34HZ (PERMIT REV-1) 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	1000.00	983.00	17.00	1000.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	1000.00	983.00	17.00	1000.00	0.00	0.00	0.00	0.00
8.75in Open Hole	1000.00	7793.72	6793.72	1000.00	7442.00	0.00	0.00	-250.51	-20.06
7in Casing Intermediate	17.00	7793.72	7776.72	17.00	7442.00	0.00	0.00	-250.51	-20.06
6.125in Open Hole	7793.72	11993.45	4199.73	7442.00	7449.00	-250.51	-20.06	-4450.22	-33.30
4.5in Casing Production	17.00	11993.45	11976.45	17.00	7449.00	0.00	0.00	-4450.22	-33.30

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)		5030.00	0.00	89.83	3172818.68	1280239.99	40°06'03.593"N	104°52'55.952"W	polygon
SEC.34-T2N-R67W SECTION LINES		5030.00	0.00	89.83	3172818.68	1280239.99	40°06'03.593"N	104°52'55.952"W	polygon
1) SPURLING 35N-34HZ (460' FSL & 1070' FWL, SEC.34) REV-1	11993.45	7449.00	-4450.22	-33.30	3172726.55	1275789.21	40°05'19.615"N	104°52'57.536"W	point

SURVEY PROGRAM - Ref Wellbore: SPURLING 35N-34HZ PWB					Ref Wellpath: SPURLING 35N-34HZ (PERMIT REV-1) PWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model		Log Name/Comment		Wellbore
17.00	11993.45	NaviTrak (Standard)				SPURLING 35N-34HZ PWB



Planned Wellpath Report

SPURLING 35N-34HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 SPURLING 35N-34HZ (377' FNL & 1088' FWL, SEC.34)
Area	COLORADO	Well	SPURLING 35N-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 35N-34HZ PWB
Facility	SEC.34-T2N-R67W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
590.00	0.000	356.750	590.00	Fox Hills Base
4711.63	0.000	180.181	4686.00	Sussex
5149.63	0.000	180.181	5124.00	Shannon
6794.67	0.000	180.181	6769.04	4 1/2" LINER TOP
7377.92	48.324	180.181	7297.00	Sharon Springs
7476.67	58.200	180.181	7356.00	Niobrara
7618.07	72.339	180.181	7415.00	Niobrara B