

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#01 SPURLING 36C-34HZ (377' FNL & 1178' FWL, SEC. 34)  
Field: WELD COUNTY (KERR MCGEE) Well: SPURLING 36C-34HZ  
Facility: SEC.34-T2N-R67W Wellbore: SPURLING 36C-34HZ PWB

Plot reference wellpath is SPURLING 36C-34HZ (PERMIT REV-1) PWB

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#01 SPURLING 36C-34HZ (377' FNL & 1178' FWL, SEC. 34)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wlsjef02 on 7/31/2013

## Location Information

Facility Name			Grid East (US R)	Grid North (US R)	Latitude	Longitude
SEC.34-T2N-R67W			3172818.756	1280239.992	40°06'03.593"N	104°52'55.951"W
Slot	Local N (R)	Local E (R)	Grid East (US R)	Grid North (US R)	Latitude	Longitude
SLOT#01 SPURLING 36C-34HZ (377 FNL & 1178 FWL, SEC. 34)	-0.00	-0.08	3172818.679	1280239.992	40°06'03.593"N	104°52'55.952"W
PERMIT (17 KB) (RKB) to Mud line (At Slot: SLOT#01 SPURLING 36C-34HZ (377 FNL & 1178 FWL, SEC. 34))					5030R	
Mean Sea Level to Mud line (At Slot: SLOT#01 SPURLING 36C-34HZ (377 FNL & 1178 FWL, SEC. 34))					0R	
PERMIT (17 KB) (RKB) to Mean Sea Level					5030R	

## Survey Program

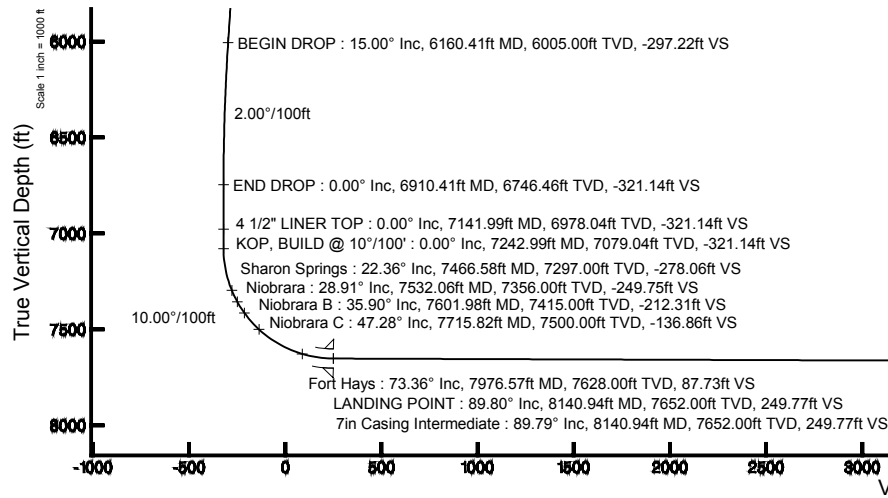
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	12339.22	NaviTrak	NaviTrak (Standard)		SPURLING 36C-34HZ PWB

## Well Profile Data

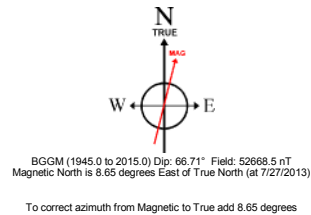
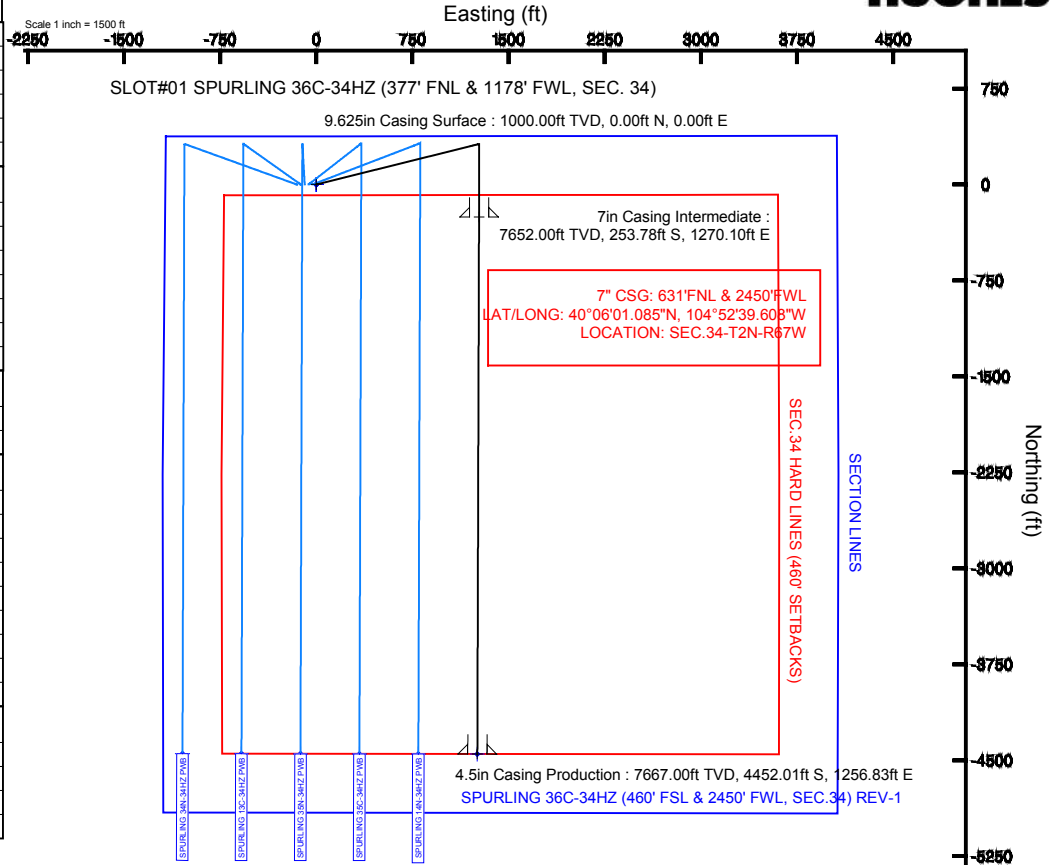
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE-ON	17.00	0.000	76.000	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1100.00	0.000	76.000	1100.00	0.00	0.00	0.00	0.00
END NUDGE	1850.00	15.000	76.000	1841.46	23.62	94.72	2.00	-23.91
BEGIN DROP	6160.41	15.000	76.000	6005.00	293.51	1177.19	0.00	-297.22
END DROP	6910.41	0.000	180.181	6746.46	317.12	1271.91	2.00	-321.14
KOP, BUILD @ 10°/100'	7242.99	0.000	180.181	7079.04	317.12	1271.91	0.00	-321.14
LANDING POINT	8140.94	89.795	180.181	7652.00	-253.78	1270.10	10.00	249.77
TOTAL DEPTH	12339.22	89.795	180.181	7667.00	-4452.01	1256.83	0.00	4448.02

## Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US R)	Grid North (US R)	Latitude	Longitude
SEC.34-T2N-R47W HARD LINES (460' SETBACKS)		5030.00	0.00	0.00	3172818.68	1280239.99	40°06'03.593"N	104°52'55.952"W
SEC.34-T2N-R67W SECTION LINES		5030.00	0.00	0.00	3172818.68	1280239.99	40°06'03.593"N	104°52'55.952"W
SPURLING 36C-34HZ (460' FSL & 2450' FWL, SEC.34) REV-1	12339.22	7667.00	-4452.01	1256.83	3174106.44	1275797.03	40°05'19.597"N	104°52'39.781"W



Azimuth 180.18° with reference 0.00 N, 0.00 E



4.5in Casing Production : 89.80° Inc, 12339.22ft MD, 7667.00ft TVD, 4448.02ft VS  
TOTAL DEPTH : 89.80° Inc, 12339.22ft MD, 7667.00ft TVD, 4448.02ft VS  
SPURLING 36C-34HZ (460' FSL & 2450' FWL, SEC.34) REV-1

Scale 1 inch = 1000 ft



# Planned Wellpath Report

SPURLING 36C-34HZ (PERMIT REV-1) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 SPURLING 36C-34HZ (377' FNL & 1178' FWL, SEC. 34)
Area	COLORADO	Well	SPURLING 36C-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 36C-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	Wilsjef02
Scale	0.99996	Report Generated	7/31/2013 at 10:41:37
Convergence at slot	n/a	Database/Source file	WellArchitectDB/SPURLING_36C-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	-0.08	3172818.68	1280239.99	40°06'03.593"N	104°52'55.952"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#01 SPURLING 36C-34HZ (377' FNL & 1178' 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	180.18°



# Planned Wellpath Report

SPURLING 36C-34HZ (PERMIT REV-1) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 SPURLING 36C-34HZ (377' FNL & 1178' FWL, SEC. 34)
Area	COLORADO	Well	SPURLING 36C-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 36C-34HZ PWB
Facility	SEC.34-T2N-R67W		

## WELLPATH DATA (141 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	76.000	0.00	0.00	0.00	0.00	40°06'03.593"N	104°52'55.952"W	0.00	
17.00	0.000	76.000	17.00	0.00	0.00	0.00	40°06'03.593"N	104°52'55.952"W	0.00	TIE-ON
117.00†	0.000	76.000	117.00	0.00	0.00	0.00	40°06'03.593"N	104°52'55.952"W	0.00	
217.00†	0.000	76.000	217.00	0.00	0.00	0.00	40°06'03.593"N	104°52'55.952"W	0.00	
317.00†	0.000	76.000	317.00	0.00	0.00	0.00	40°06'03.593"N	104°52'55.952"W	0.00	
417.00†	0.000	76.000	417.00	0.00	0.00	0.00	40°06'03.593"N	104°52'55.952"W	0.00	
517.00†	0.000	76.000	517.00	0.00	0.00	0.00	40°06'03.593"N	104°52'55.952"W	0.00	
590.00†	0.000	76.000	590.00	0.00	0.00	0.00	40°06'03.593"N	104°52'55.952"W	0.00	Fox Hills Base
617.00†	0.000	76.000	617.00	0.00	0.00	0.00	40°06'03.593"N	104°52'55.952"W	0.00	
717.00†	0.000	76.000	717.00	0.00	0.00	0.00	40°06'03.593"N	104°52'55.952"W	0.00	
817.00†	0.000	76.000	817.00	0.00	0.00	0.00	40°06'03.593"N	104°52'55.952"W	0.00	
917.00†	0.000	76.000	917.00	0.00	0.00	0.00	40°06'03.593"N	104°52'55.952"W	0.00	
1017.00†	0.000	76.000	1017.00	0.00	0.00	0.00	40°06'03.593"N	104°52'55.952"W	0.00	
1100.00	0.000	76.000	1100.00	0.00	0.00	0.00	40°06'03.593"N	104°52'55.952"W	0.00	BEGIN NUDGE
1117.00†	0.340	76.000	1117.00	-0.01	0.01	0.05	40°06'03.593"N	104°52'55.951"W	2.00	
1217.00†	2.340	76.000	1216.97	-0.59	0.58	2.32	40°06'03.599"N	104°52'55.922"W	2.00	
1317.00†	4.340	76.000	1316.79	-2.01	1.99	7.97	40°06'03.613"N	104°52'55.849"W	2.00	
1417.00†	6.340	76.000	1416.35	-4.29	4.24	17.00	40°06'03.635"N	104°52'55.733"W	2.00	
1517.00†	8.340	76.000	1515.53	-7.42	7.33	29.40	40°06'03.665"N	104°52'55.574"W	2.00	
1617.00†	10.340	76.000	1614.20	-11.40	11.26	45.14	40°06'03.704"N	104°52'55.371"W	2.00	
1717.00†	12.340	76.000	1712.24	-16.21	16.01	64.22	40°06'03.751"N	104°52'55.126"W	2.00	
1817.00†	14.340	76.000	1809.54	-21.87	21.59	86.61	40°06'03.806"N	104°52'54.837"W	2.00	
1850.00	15.000	76.000	1841.46	-23.91	23.62	94.72	40°06'03.826"N	104°52'54.733"W	2.00	END NUDGE
1917.00†	15.000	76.000	1906.18	-28.16	27.81	111.54	40°06'03.868"N	104°52'54.517"W	0.00	
2017.00†	15.000	76.000	2002.77	-34.50	34.07	136.65	40°06'03.930"N	104°52'54.193"W	0.00	
2117.00†	15.000	76.000	2099.36	-40.84	40.33	161.77	40°06'03.992"N	104°52'53.870"W	0.00	
2217.00†	15.000	76.000	2195.96	-47.18	46.59	186.88	40°06'04.053"N	104°52'53.547"W	0.00	
2317.00†	15.000	76.000	2292.55	-53.53	52.86	211.99	40°06'04.115"N	104°52'53.224"W	0.00	
2417.00†	15.000	76.000	2389.14	-59.87	59.12	237.11	40°06'04.177"N	104°52'52.901"W	0.00	
2517.00†	15.000	76.000	2485.73	-66.21	65.38	262.22	40°06'04.239"N	104°52'52.578"W	0.00	
2617.00†	15.000	76.000	2582.33	-72.55	71.64	287.33	40°06'04.301"N	104°52'52.254"W	0.00	
2717.00†	15.000	76.000	2678.92	-78.89	77.90	312.45	40°06'04.363"N	104°52'51.931"W	0.00	
2817.00†	15.000	76.000	2775.51	-85.23	84.16	337.56	40°06'04.425"N	104°52'51.608"W	0.00	
2917.00†	15.000	76.000	2872.10	-91.57	90.42	362.67	40°06'04.487"N	104°52'51.285"W	0.00	
3017.00†	15.000	76.000	2968.70	-97.91	96.69	387.79	40°06'04.548"N	104°52'50.962"W	0.00	
3117.00†	15.000	76.000	3065.29	-104.25	102.95	412.90	40°06'04.610"N	104°52'50.639"W	0.00	
3217.00†	15.000	76.000	3161.88	-110.59	109.21	438.01	40°06'04.672"N	104°52'50.315"W	0.00	
3317.00†	15.000	76.000	3258.48	-116.93	115.47	463.12	40°06'04.734"N	104°52'49.992"W	0.00	
3417.00†	15.000	76.000	3355.07	-123.27	121.73	488.24	40°06'04.796"N	104°52'49.669"W	0.00	
3517.00†	15.000	76.000	3451.66	-129.61	127.99	513.35	40°06'04.858"N	104°52'49.346"W	0.00	
3617.00†	15.000	76.000	3548.25	-135.95	134.25	538.46	40°06'04.920"N	104°52'49.023"W	0.00	
3717.00†	15.000	76.000	3644.85	-142.30	140.52	563.58	40°06'04.982"N	104°52'48.699"W	0.00	
3817.00†	15.000	76.000	3741.44	-148.64	146.78	588.69	40°06'05.043"N	104°52'48.376"W	0.00	
3917.00†	15.000	76.000	3838.03	-154.98	153.04	613.80	40°06'05.105"N	104°52'48.053"W	0.00	
4017.00†	15.000	76.000	3934.62	-161.32	159.30	638.92	40°06'05.167"N	104°52'47.730"W	0.00	



# Planned Wellpath Report

## SPURLING 36C-34HZ (PERMIT REV-1) PWP

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### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 SPURLING 36C-34HZ (377' FNL & 1178' FWL, SEC. 34)
Area	COLORADO	Well	SPURLING 36C-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 36C-34HZ PWB
Facility	SEC.34-T2N-R67W		

### WELLPATH DATA (141 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4117.00†	15.000	76.000	4031.22	-167.66	165.56	664.03	40°06'05.229"N	104°52'47.407"W	0.00	
4217.00†	15.000	76.000	4127.81	-174.00	171.82	689.14	40°06'05.291"N	104°52'47.084"W	0.00	
4317.00†	15.000	76.000	4224.40	-180.34	178.08	714.26	40°06'05.353"N	104°52'46.760"W	0.00	
4417.00†	15.000	76.000	4320.99	-186.68	184.35	739.37	40°06'05.415"N	104°52'46.437"W	0.00	
4517.00†	15.000	76.000	4417.59	-193.02	190.61	764.48	40°06'05.476"N	104°52'46.114"W	0.00	
4617.00†	15.000	76.000	4514.18	-199.36	196.87	789.60	40°06'05.538"N	104°52'45.791"W	0.00	
4717.00†	15.000	76.000	4610.77	-205.70	203.13	814.71	40°06'05.600"N	104°52'45.468"W	0.00	
4794.88†	15.000	76.000	4686.00	-210.64	208.01	834.27	40°06'05.648"N	104°52'45.216"W	0.00	Sussex
4817.00†	15.000	76.000	4707.36	-212.04	209.39	839.82	40°06'05.662"N	104°52'45.145"W	0.00	
4917.00†	15.000	76.000	4803.96	-218.38	215.65	864.93	40°06'05.724"N	104°52'44.821"W	0.00	
5017.00†	15.000	76.000	4900.55	-224.72	221.91	890.05	40°06'05.786"N	104°52'44.498"W	0.00	
5117.00†	15.000	76.000	4997.14	-231.07	228.18	915.16	40°06'05.848"N	104°52'44.175"W	0.00	
5217.00†	15.000	76.000	5093.73	-237.41	234.44	940.27	40°06'05.910"N	104°52'43.852"W	0.00	
5248.33†	15.000	76.000	5124.00	-239.39	236.40	948.14	40°06'05.929"N	104°52'43.751"W	0.00	Shannon
5317.00†	15.000	76.000	5190.33	-243.75	240.70	965.39	40°06'05.971"N	104°52'43.529"W	0.00	
5417.00†	15.000	76.000	5286.92	-250.09	246.96	990.50	40°06'06.033"N	104°52'43.206"W	0.00	
5517.00†	15.000	76.000	5383.51	-256.43	253.22	1015.61	40°06'06.095"N	104°52'42.882"W	0.00	
5617.00†	15.000	76.000	5480.10	-262.77	259.48	1040.73	40°06'06.157"N	104°52'42.559"W	0.00	
5717.00†	15.000	76.000	5576.70	-269.11	265.74	1065.84	40°06'06.219"N	104°52'42.236"W	0.00	
5817.00†	15.000	76.000	5673.29	-275.45	272.00	1090.95	40°06'06.281"N	104°52'41.913"W	0.00	
5917.00†	15.000	76.000	5769.88	-281.79	278.27	1116.07	40°06'06.343"N	104°52'41.590"W	0.00	
6017.00†	15.000	76.000	5866.47	-288.13	284.53	1141.18	40°06'06.404"N	104°52'41.266"W	0.00	
6117.00†	15.000	76.000	5963.07	-294.47	290.79	1166.29	40°06'06.466"N	104°52'40.943"W	0.00	
6160.41	15.000	76.000	6005.00	-297.22	293.51	1177.19	40°06'06.493"N	104°52'40.803"W	0.00	BEGIN DROP
6217.00†	13.868	76.000	6059.80	-300.68	296.92	1190.88	40°06'06.527"N	104°52'40.627"W	2.00	
6317.00†	11.868	76.000	6157.28	-306.14	302.31	1212.49	40°06'06.580"N	104°52'40.349"W	2.00	
6417.00†	9.868	76.000	6255.49	-310.76	306.87	1230.78	40°06'06.625"N	104°52'40.113"W	2.00	
6517.00†	7.868	76.000	6354.29	-314.53	310.60	1245.74	40°06'06.662"N	104°52'39.921"W	2.00	
6617.00†	5.868	76.000	6453.56	-317.46	313.49	1257.34	40°06'06.691"N	104°52'39.772"W	2.00	
6717.00†	3.868	76.000	6553.20	-319.54	315.54	1265.58	40°06'06.711"N	104°52'39.666"W	2.00	
6817.00†	1.868	76.000	6653.07	-320.77	316.75	1270.43	40°06'06.723"N	104°52'39.603"W	2.00	
6910.41	0.000	180.181	6746.46	-321.14	317.12	1271.91	40°06'06.727"N	104°52'39.584"W	2.00	END DROP
6917.00†	0.000	180.181	6753.05	-321.14	317.12	1271.91	40°06'06.727"N	104°52'39.584"W	0.00	
7017.00†	0.000	180.181	6853.05	-321.14	317.12	1271.91	40°06'06.727"N	104°52'39.584"W	0.00	
7117.00†	0.000	180.181	6953.05	-321.14	317.12	1271.91	40°06'06.727"N	104°52'39.584"W	0.00	
7141.99†	0.000	180.181	6978.04	-321.14	317.12	1271.91	40°06'06.727"N	104°52'39.584"W	0.00	4 1/2" LINER TOP
7217.00†	0.000	180.181	7053.05	-321.14	317.12	1271.91	40°06'06.727"N	104°52'39.584"W	0.00	
7242.99	0.000	180.181	7079.04	-321.14	317.12	1271.91	40°06'06.727"N	104°52'39.584"W	0.00	KOP, BUILD @ 10°/100'
7317.00†	7.401	180.181	7152.84	-316.37	312.35	1271.89	40°06'06.679"N	104°52'39.584"W	10.00	
7417.00†	17.401	180.181	7250.39	-294.92	290.90	1271.83	40°06'06.467"N	104°52'39.585"W	10.00	
7466.58†	22.359	180.181	7297.00	-278.06	274.05	1271.77	40°06'06.301"N	104°52'39.586"W	10.00	Sharon Springs
7517.00†	27.401	180.181	7342.72	-256.86	252.84	1271.71	40°06'06.091"N	104°52'39.587"W	10.00	
7532.06†	28.907	180.181	7356.00	-249.75	245.74	1271.68	40°06'06.021"N	104°52'39.587"W	10.00	Niobrara
7601.98†	35.899	180.181	7415.00	-212.31	208.29	1271.57	40°06'05.651"N	104°52'39.589"W	10.00	Niobrara B
7617.00†	37.401	180.181	7427.05	-203.34	199.33	1271.54	40°06'05.562"N	104°52'39.589"W	10.00	



# Planned Wellpath Report

SPURLING 36C-34HZ (PERMIT REV-1) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 SPURLING 36C-34HZ (377' FNL & 1178' FWL, SEC. 34)
Area	COLORADO	Well	SPURLING 36C-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 36C-34HZ PWB
Facility	SEC.34-T2N-R67W		

## WELLPATH DATA (141 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7715.82†	47.283	180.181	7500.00	-136.86	132.85	1271.33	40°06'04.906"N	104°52'39.592"W	10.00	Niobrara C
7717.00†	47.401	180.181	7500.80	-136.00	131.98	1271.32	40°06'04.897"N	104°52'39.592"W	10.00	
7817.00†	57.401	180.181	7561.74	-56.87	52.85	1271.07	40°06'04.115"N	104°52'39.595"W	10.00	
7917.00†	67.401	180.181	7608.01	31.64	-35.66	1270.79	40°06'03.240"N	104°52'39.599"W	10.00	
7976.57†	73.358	180.181	7628.00	87.73	-91.74	1270.62	40°06'02.686"N	104°52'39.601"W	10.00	Fort Hays
8017.00†	77.401	180.181	7638.20	126.84	-130.85	1270.49	40°06'02.300"N	104°52'39.603"W	10.00	
8117.00†	87.401	180.181	7651.41	225.84	-229.85	1270.18	40°06'01.321"N	104°52'39.607"W	10.00	
8140.94	89.795	180.181	7652.00	249.77	-253.78	1270.10	40°06'01.085"N	104°52'39.608"W	10.00	LANDING POINT
8217.00†	89.795	180.181	7652.27	325.83	-329.84	1269.86	40°06'00.333"N	104°52'39.611"W	0.00	
8317.00†	89.795	180.181	7652.63	425.83	-429.84	1269.55	40°05'59.345"N	104°52'39.615"W	0.00	
8417.00†	89.795	180.181	7652.98	525.83	-529.84	1269.23	40°05'58.357"N	104°52'39.619"W	0.00	
8517.00†	89.795	180.181	7653.34	625.82	-629.84	1268.92	40°05'57.369"N	104°52'39.623"W	0.00	
8617.00†	89.795	180.181	7653.70	725.82	-729.84	1268.60	40°05'56.380"N	104°52'39.627"W	0.00	
8717.00†	89.795	180.181	7654.05	825.82	-829.83	1268.28	40°05'55.392"N	104°52'39.631"W	0.00	
8817.00†	89.795	180.181	7654.41	925.82	-929.83	1267.97	40°05'54.404"N	104°52'39.636"W	0.00	
8917.00†	89.795	180.181	7654.77	1025.82	-1029.83	1267.65	40°05'53.416"N	104°52'39.640"W	0.00	
9017.00†	89.795	180.181	7655.13	1125.82	-1129.83	1267.34	40°05'52.428"N	104°52'39.644"W	0.00	
9117.00†	89.795	180.181	7655.48	1225.82	-1229.83	1267.02	40°05'51.439"N	104°52'39.648"W	0.00	
9217.00†	89.795	180.181	7655.84	1325.82	-1329.83	1266.70	40°05'50.451"N	104°52'39.652"W	0.00	
9317.00†	89.795	180.181	7656.20	1425.82	-1429.83	1266.39	40°05'49.463"N	104°52'39.656"W	0.00	
9417.00†	89.795	180.181	7656.56	1525.82	-1529.83	1266.07	40°05'48.475"N	104°52'39.660"W	0.00	
9517.00†	89.795	180.181	7656.91	1625.82	-1629.82	1265.75	40°05'47.487"N	104°52'39.665"W	0.00	
9617.00†	89.795	180.181	7657.27	1725.82	-1729.82	1265.44	40°05'46.498"N	104°52'39.669"W	0.00	
9717.00†	89.795	180.181	7657.63	1825.82	-1829.82	1265.12	40°05'45.510"N	104°52'39.673"W	0.00	
9817.00†	89.795	180.181	7657.99	1925.82	-1929.82	1264.81	40°05'44.522"N	104°52'39.677"W	0.00	
9917.00†	89.795	180.181	7658.34	2025.82	-2029.82	1264.49	40°05'43.534"N	104°52'39.681"W	0.00	
10017.00†	89.795	180.181	7658.70	2125.81	-2129.82	1264.17	40°05'42.545"N	104°52'39.685"W	0.00	
10117.00†	89.795	180.181	7659.06	2225.81	-2229.82	1263.86	40°05'41.557"N	104°52'39.689"W	0.00	
10217.00†	89.795	180.181	7659.42	2325.81	-2329.82	1263.54	40°05'40.569"N	104°52'39.693"W	0.00	
10317.00†	89.795	180.181	7659.77	2425.81	-2429.82	1263.23	40°05'39.581"N	104°52'39.698"W	0.00	
10417.00†	89.795	180.181	7660.13	2525.81	-2529.81	1262.91	40°05'38.593"N	104°52'39.702"W	0.00	
10517.00†	89.795	180.181	7660.49	2625.81	-2629.81	1262.59	40°05'37.604"N	104°52'39.706"W	0.00	
10617.00†	89.795	180.181	7660.85	2725.81	-2729.81	1262.28	40°05'36.616"N	104°52'39.710"W	0.00	
10717.00†	89.795	180.181	7661.20	2825.81	-2829.81	1261.96	40°05'35.628"N	104°52'39.714"W	0.00	
10817.00†	89.795	180.181	7661.56	2925.81	-2929.81	1261.65	40°05'34.640"N	104°52'39.718"W	0.00	
10917.00†	89.795	180.181	7661.92	3025.81	-3029.81	1261.33	40°05'33.652"N	104°52'39.722"W	0.00	
11017.00†	89.795	180.181	7662.27	3125.81	-3129.81	1261.01	40°05'32.663"N	104°52'39.727"W	0.00	
11117.00†	89.795	180.181	7662.63	3225.81	-3229.81	1260.70	40°05'31.675"N	104°52'39.731"W	0.00	
11217.00†	89.795	180.181	7662.99	3325.81	-3329.81	1260.38	40°05'30.687"N	104°52'39.735"W	0.00	
11317.00†	89.795	180.181	7663.35	3425.81	-3429.80	1260.06	40°05'29.699"N	104°52'39.739"W	0.00	
11417.00†	89.795	180.181	7663.70	3525.81	-3529.80	1259.75	40°05'28.711"N	104°52'39.743"W	0.00	
11517.00†	89.795	180.181	7664.06	3625.81	-3629.80	1259.43	40°05'27.722"N	104°52'39.747"W	0.00	
11617.00†	89.795	180.181	7664.42	3725.80	-3729.80	1259.12	40°05'26.734"N	104°52'39.751"W	0.00	
11717.00†	89.795	180.181	7664.78	3825.80	-3829.80	1258.80	40°05'25.746"N	104°52'39.755"W	0.00	
11817.00†	89.795	180.181	7665.13	3925.80	-3929.80	1258.48	40°05'24.758"N	104°52'39.760"W	0.00	





# Planned Wellpath Report

## SPURLING 36C-34HZ (PERMIT REV-1) PWP

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### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 SPURLING 36C-34HZ (377' FNL & 1178' FWL, SEC. 34)
Area	COLORADO	Well	SPURLING 36C-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 36C-34HZ PWB
Facility	SEC.34-T2N-R67W		

### WELLPATH DATA (141 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11917.00†	89.795	180.181	7665.49	4025.80	-4029.80	1258.17	40°05'23.770"N	104°52'39.764"W	0.00	
12017.00†	89.795	180.181	7665.85	4125.80	-4129.80	1257.85	40°05'22.781"N	104°52'39.768"W	0.00	
12117.00†	89.795	180.181	7666.21	4225.80	-4229.80	1257.54	40°05'21.793"N	104°52'39.772"W	0.00	
12217.00†	89.795	180.181	7666.56	4325.80	-4329.79	1257.22	40°05'20.805"N	104°52'39.776"W	0.00	
12317.00†	89.795	180.181	7666.92	4425.80	-4429.79	1256.90	40°05'19.817"N	104°52'39.780"W	0.00	
12339.22	89.795	180.181	7667.00 <sup>1</sup>	4448.02	-4452.01	1256.83	40°05'19.597"N	104°52'39.781"W	0.00	TOTAL DEPTH

### HOLE & CASING SECTIONS -

Ref Wellbore: SPURLING 36C-34HZ PWB

Ref Wellpath: SPURLING 36C-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	8140.94	7140.94	1000.00	7652.00	0.00	0.00	-253.78	1270.10
7in Casing Intermediate	17.00	8140.94	8123.94	17.00	7652.00	0.00	0.00	-253.78	1270.10
6.125in Open Hole	8140.94	12339.22	4198.28	7652.00	7667.00	-253.78	1270.10	-4452.01	1256.83
4.5in Casing Production	17.00	12339.22	12322.22	17.00	7667.00	0.00	0.00	-4452.01	1256.83

### 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	0.00	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	0.00	3172818.68	1280239.99	40°06'03.593"N	104°52'55.952"W	polygon
1) SPURLING 36C-34HZ (460' FSL & 2450' FWL, SEC.34) REV-1	12339.22	7667.00	-4452.01	1256.83	3174106.44	1275797.03	40°05'19.597"N	104°52'39.781"W	point

### SURVEY PROGRAM - Ref Wellbore: SPURLING 36C-34HZ PWB

Ref Wellpath: SPURLING 36C-34HZ (PERMIT REV-1) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	12339.22	NaviTrak (Standard)		SPURLING 36C-34HZ PWB



# Planned Wellpath Report

SPURLING 36C-34HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 SPURLING 36C-34HZ (377' FNL & 1178' FWL, SEC. 34)
Area	COLORADO	Well	SPURLING 36C-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 36C-34HZ PWB
Facility	SEC.34-T2N-R67W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
590.00	0.000	76.000	590.00	Fox Hills Base
4794.88	15.000	76.000	4686.00	Sussex
5248.33	15.000	76.000	5124.00	Shannon
7141.99	0.000	180.181	6978.04	4 1/2" LINER TOP
7466.58	22.359	180.181	7297.00	Sharon Springs
7532.06	28.907	180.181	7356.00	Niobrara
7601.98	35.899	180.181	7415.00	Niobrara B
7715.82	47.283	180.181	7500.00	Niobrara C
7976.57	73.358	180.181	7628.00	Fort Hays