

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#03 SPURLING 35C-34HZ (377' FNL & 1118' FWL, SEC.34)  
Field: WELD COUNTY (KERR MCGEE) Well: SPURLING 35C-34HZ  
Facility: SEC.34-T2N-R67W Wellbore: SPURLING 35C-34HZ PWB

Plot reference wellpath is SPURLING 35C-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#03 SPURLING 35C-34HZ (377' FNL & 1118' 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)	Latitude	Longitude	
SLOT#03 SPURLING 35C-34HZ (377' FNL & 1118' FWL, SEC.34)	0.00	-59.99	3172758.769	1280239.575	40°06'03.593"N	104°52'56.723"W	
PERMIT (17' KB) (RKB) to Mud line (At Slot: SLOT#03 SPURLING 35C-34HZ (377' FNL & 1118' FWL, SEC.34))						5030R	
Mean Sea Level to Mud line (At Slot: SLOT#03 SPURLING 35C-34HZ (377' FNL & 1118' FWL, SEC.34))						0R	
PERMIT (17' KB) (RKB) to Mean Sea Level						5030R	

## Survey Program

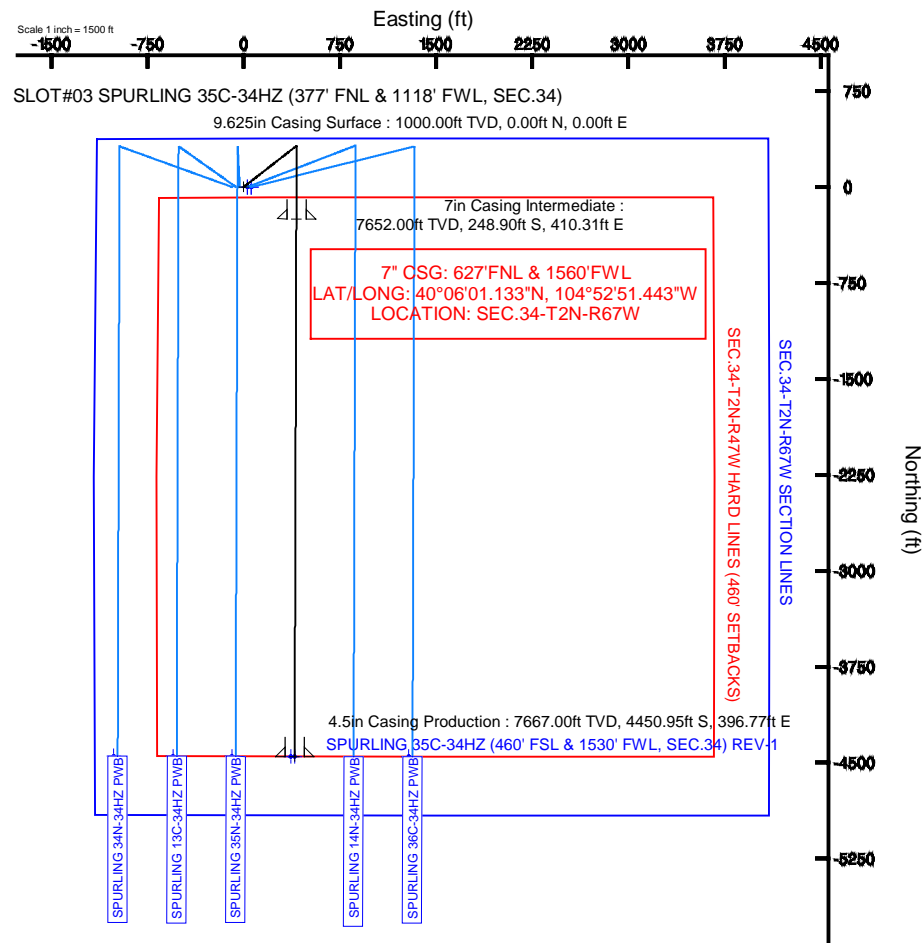
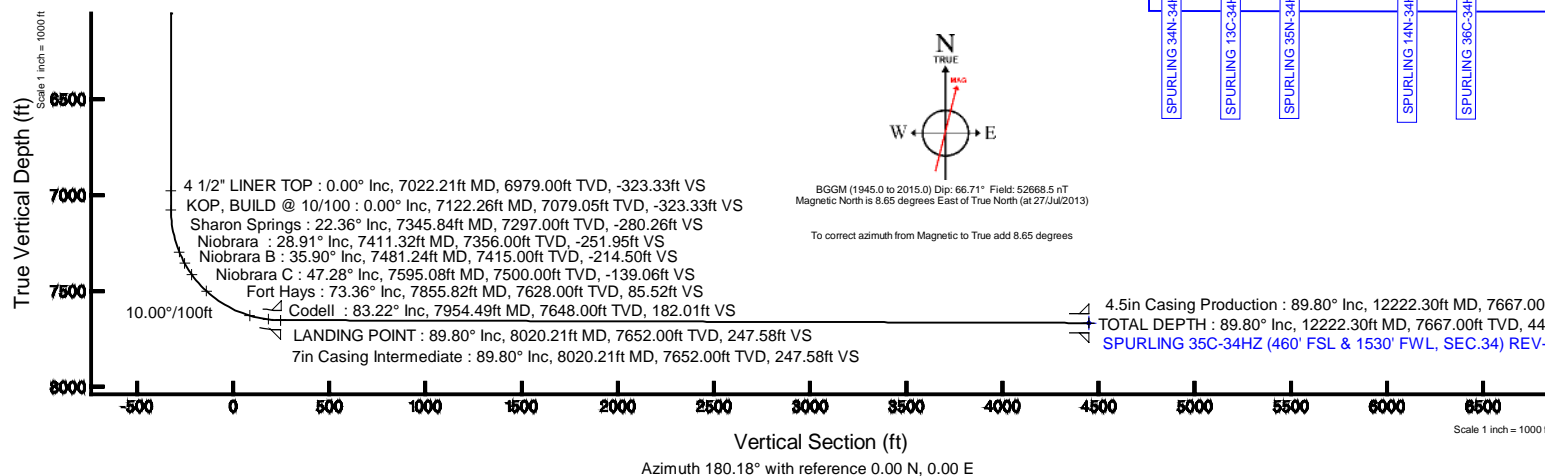
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	12222.30	NaviTrak	NaviTrak (Standard)		SPURLING 35C-34HZ PWB

## 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	59.91	3172818.66	1280239.99	40°06'03.593"N	104°52'55.952"W
SEC.34-T2N-R67W SECTION LINES		5030.00	0.00	59.91	3172818.66	1280239.99	40°06'03.593"N	104°52'55.952"W
SPURLING 35C-34HZ (460' FSL & 1530' FWL, SEC.34) REV-1	12222.30	7667.00	-4450.95	396.77	3173186.51	1275791.68	40°05'19.608"N	104°52'51.618"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	52.000	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1100.00	0.000	52.000	1100.00	0.00	0.00	0.00	0.00
END NUDGE	1600.00	10.000	52.000	1597.47	26.80	34.30	2.00	-26.91
BEGIN DROP	4110.68	10.000	52.000	4070.00	295.21	377.85	0.00	-296.43
END DROP	4610.68	0.000	180.185	4567.47	322.00	412.15	2.00	-323.33
KOP, BUILD @ 10/100	7122.26	0.000	180.185	7079.05	322.00	412.15	0.00	-323.33
LANDING POINT	8020.21	89.795	180.185	7652.00	-248.91	410.31	10.00	247.58
TOTAL DEPTH	12222.30	89.795	180.185	7667.00	-4450.95	396.77	0.00	4449.64





# Planned Wellpath Report

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

Page 1 of 6



## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 SPURLING 35C-34HZ (377' FNL & 1118' FWL, SEC.34)
Area	COLORADO	Well	SPURLING 35C-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 35C-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 09:35
Convergence at slot	n/a	Database/Source file	WA_ANADARKO/SPURLING_35C-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	-59.99	3172758.77	1280239.58	40°06'03.593"N	104°52'56.723"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#03 SPURLING 35C-34HZ (377' FNL & 1118' 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 35C-34HZ (PERMIT REV-1) PWP

Page 2 of 6



## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 SPURLING 35C-34HZ (377' FNL & 1118' FWL, SEC.34)
Area	COLORADO	Well	SPURLING 35C-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 35C-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	52.000	0.00	0.00	0.00	0.00	40°06'03.593"N	104°52'56.723"W	0.00	
17.00	0.000	52.000	17.00	0.00	0.00	0.00	40°06'03.593"N	104°52'56.723"W	0.00	TIE-ON
117.00†	0.000	52.000	117.00	0.00	0.00	0.00	40°06'03.593"N	104°52'56.723"W	0.00	
217.00†	0.000	52.000	217.00	0.00	0.00	0.00	40°06'03.593"N	104°52'56.723"W	0.00	
317.00†	0.000	52.000	317.00	0.00	0.00	0.00	40°06'03.593"N	104°52'56.723"W	0.00	
417.00†	0.000	52.000	417.00	0.00	0.00	0.00	40°06'03.593"N	104°52'56.723"W	0.00	
517.00†	0.000	52.000	517.00	0.00	0.00	0.00	40°06'03.593"N	104°52'56.723"W	0.00	
590.00†	0.000	52.000	590.00	0.00	0.00	0.00	40°06'03.593"N	104°52'56.723"W	0.00	Fox Hills Base
617.00†	0.000	52.000	617.00	0.00	0.00	0.00	40°06'03.593"N	104°52'56.723"W	0.00	
717.00†	0.000	52.000	717.00	0.00	0.00	0.00	40°06'03.593"N	104°52'56.723"W	0.00	
817.00†	0.000	52.000	817.00	0.00	0.00	0.00	40°06'03.593"N	104°52'56.723"W	0.00	
917.00†	0.000	52.000	917.00	0.00	0.00	0.00	40°06'03.593"N	104°52'56.723"W	0.00	
1017.00†	0.000	52.000	1017.00	0.00	0.00	0.00	40°06'03.593"N	104°52'56.723"W	0.00	
1100.00	0.000	52.000	1100.00	0.00	0.00	0.00	40°06'03.593"N	104°52'56.723"W	0.00	BEGIN NUDGE
1117.00†	0.340	52.000	1117.00	-0.03	0.03	0.04	40°06'03.593"N	104°52'56.722"W	2.00	
1217.00†	2.340	52.000	1216.97	-1.48	1.47	1.88	40°06'03.608"N	104°52'56.699"W	2.00	
1317.00†	4.340	52.000	1316.79	-5.08	5.06	6.47	40°06'03.643"N	104°52'56.640"W	2.00	
1417.00†	6.340	52.000	1416.35	-10.83	10.79	13.81	40°06'03.700"N	104°52'56.545"W	2.00	
1517.00†	8.340	52.000	1515.53	-18.73	18.65	23.87	40°06'03.777"N	104°52'56.416"W	2.00	
1600.00	10.000	52.000	1597.47	-26.91	26.80	34.30	40°06'03.858"N	104°52'56.282"W	2.00	END NUDGE
1617.00†	10.000	52.000	1614.21	-28.73	28.61	36.62	40°06'03.876"N	104°52'56.252"W	0.00	
1717.00†	10.000	52.000	1712.69	-39.47	39.30	50.31	40°06'03.981"N	104°52'56.076"W	0.00	
1817.00†	10.000	52.000	1811.17	-50.20	49.99	63.99	40°06'04.087"N	104°52'55.900"W	0.00	
1917.00†	10.000	52.000	1909.65	-60.94	60.69	77.67	40°06'04.193"N	104°52'55.723"W	0.00	
2017.00†	10.000	52.000	2008.13	-71.67	71.38	91.36	40°06'04.298"N	104°52'55.547"W	0.00	
2117.00†	10.000	52.000	2106.61	-82.41	82.07	105.04	40°06'04.404"N	104°52'55.371"W	0.00	
2217.00†	10.000	52.000	2205.09	-93.14	92.76	118.72	40°06'04.510"N	104°52'55.195"W	0.00	
2317.00†	10.000	52.000	2303.57	-103.88	103.45	132.41	40°06'04.615"N	104°52'55.019"W	0.00	
2417.00†	10.000	52.000	2402.05	-114.61	114.14	146.09	40°06'04.721"N	104°52'54.843"W	0.00	
2517.00†	10.000	52.000	2500.53	-125.35	124.83	159.78	40°06'04.827"N	104°52'54.667"W	0.00	
2617.00†	10.000	52.000	2599.01	-136.08	135.52	173.46	40°06'04.932"N	104°52'54.491"W	0.00	
2717.00†	10.000	52.000	2697.50	-146.82	146.21	187.14	40°06'05.038"N	104°52'54.315"W	0.00	
2817.00†	10.000	52.000	2795.98	-157.55	156.90	200.83	40°06'05.144"N	104°52'54.139"W	0.00	
2917.00†	10.000	52.000	2894.46	-168.29	167.59	214.51	40°06'05.249"N	104°52'53.963"W	0.00	
3017.00†	10.000	52.000	2992.94	-179.02	178.28	228.19	40°06'05.355"N	104°52'53.786"W	0.00	
3117.00†	10.000	52.000	3091.42	-189.76	188.98	241.88	40°06'05.460"N	104°52'53.610"W	0.00	
3217.00†	10.000	52.000	3189.90	-200.49	199.67	255.56	40°06'05.566"N	104°52'53.434"W	0.00	
3317.00†	10.000	52.000	3288.38	-211.23	210.36	269.24	40°06'05.672"N	104°52'53.258"W	0.00	
3417.00†	10.000	52.000	3386.86	-221.96	221.05	282.93	40°06'05.777"N	104°52'53.082"W	0.00	
3517.00†	10.000	52.000	3485.34	-232.70	231.74	296.61	40°06'05.883"N	104°52'52.906"W	0.00	
3617.00†	10.000	52.000	3583.82	-243.43	242.43	310.30	40°06'05.989"N	104°52'52.730"W	0.00	
3717.00†	10.000	52.000	3682.30	-254.17	253.12	323.98	40°06'06.094"N	104°52'52.554"W	0.00	
3817.00†	10.000	52.000	3780.78	-264.90	263.81	337.66	40°06'06.200"N	104°52'52.378"W	0.00	
3917.00†	10.000	52.000	3879.26	-275.64	274.50	351.35	40°06'06.306"N	104°52'52.202"W	0.00	
4017.00†	10.000	52.000	3977.75	-286.37	285.19	365.03	40°06'06.411"N	104°52'52.026"W	0.00	



# Planned Wellpath Report

## SPURLING 35C-34HZ (PERMIT REV-1) PWP

Page 3 of 6



### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 SPURLING 35C-34HZ (377' FNL & 1118' FWL, SEC.34)
Area	COLORADO	Well	SPURLING 35C-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 35C-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
4110.68	10.000	52.000	4070.00	-296.43	295.21	377.85	40°06'06.510"N	104°52'51.861"W	0.00	BEGIN DROP
4117.00†	9.874	52.000	4076.23	-297.10	295.88	378.71	40°06'06.517"N	104°52'51.849"W	2.00	
4217.00†	7.874	52.000	4175.03	-306.64	305.38	390.86	40°06'06.611"N	104°52'51.693"W	2.00	
4317.00†	5.874	52.000	4274.30	-314.03	312.74	400.29	40°06'06.684"N	104°52'51.572"W	2.00	
4417.00†	3.874	52.000	4373.94	-319.29	317.97	406.99	40°06'06.735"N	104°52'51.486"W	2.00	
4517.00†	1.874	52.000	4473.80	-322.39	321.06	410.94	40°06'06.766"N	104°52'51.435"W	2.00	
4610.68	0.000	180.185	4567.47	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	2.00	END DROP
4617.00†	0.000	180.185	4573.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
4717.00†	0.000	180.185	4673.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
4729.21†	0.000	180.185	4686.00	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	Sussex
4817.00†	0.000	180.185	4773.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
4917.00†	0.000	180.185	4873.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
5017.00†	0.000	180.185	4973.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
5117.00†	0.000	180.185	5073.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
5167.21†	0.000	180.185	5124.00	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	Shannon
5217.00†	0.000	180.185	5173.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
5317.00†	0.000	180.185	5273.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
5417.00†	0.000	180.185	5373.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
5517.00†	0.000	180.185	5473.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
5617.00†	0.000	180.185	5573.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
5717.00†	0.000	180.185	5673.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
5817.00†	0.000	180.185	5773.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
5917.00†	0.000	180.185	5873.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
6017.00†	0.000	180.185	5973.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
6117.00†	0.000	180.185	6073.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
6217.00†	0.000	180.185	6173.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
6317.00†	0.000	180.185	6273.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
6417.00†	0.000	180.185	6373.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
6517.00†	0.000	180.185	6473.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
6617.00†	0.000	180.185	6573.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
6717.00†	0.000	180.185	6673.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
6817.00†	0.000	180.185	6773.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
6917.00†	0.000	180.185	6873.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
7017.00†	0.000	180.185	6973.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
7022.21†	0.000	180.185	6979.00	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	4 1/2" LINER TOP
7117.00†	0.000	180.185	7073.79	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	
7122.26	0.000	180.185	7079.05	-323.33	322.00	412.15	40°06'06.775"N	104°52'51.419"W	0.00	KOP, BUILD @ 10/100
7217.00†	9.474	180.185	7173.36	-315.52	314.19	412.12	40°06'06.698"N	104°52'51.420"W	10.00	
7317.00†	19.474	180.185	7270.06	-290.55	289.23	412.04	40°06'06.451"N	104°52'51.421"W	10.00	
7345.84†	22.359	180.185	7297.00	-280.26	278.93	412.01	40°06'06.349"N	104°52'51.421"W	10.00	Sharon Springs
7411.32†	28.906	180.185	7356.00	-251.95	250.62	411.92	40°06'06.070"N	104°52'51.422"W	10.00	Niobrara
7417.00†	29.474	180.185	7360.96	-249.18	247.85	411.91	40°06'06.042"N	104°52'51.422"W	10.00	
7481.24†	35.899	180.185	7415.00	-214.50	213.17	411.79	40°06'05.700"N	104°52'51.424"W	10.00	Niobrara B
7517.00†	39.474	180.185	7443.29	-192.65	191.32	411.72	40°06'05.484"N	104°52'51.425"W	10.00	
7595.08†	47.282	180.185	7500.00	-139.06	137.73	411.55	40°06'04.954"N	104°52'51.427"W	10.00	Niobrara C



# Planned Wellpath Report

## SPURLING 35C-34HZ (PERMIT REV-1) PWP

Page 4 of 6



### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 SPURLING 35C-34HZ (377' FNL & 1118' FWL, SEC.34)
Area	COLORADO	Well	SPURLING 35C-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 35C-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
7617.00†	49.474	180.185	7514.56	-122.68	121.35	411.50	40°06'04.792"N	104°52'51.428"W	10.00	
7717.00†	59.474	180.185	7572.59	-41.39	40.07	411.24	40°06'03.989"N	104°52'51.431"W	10.00	
7817.00†	69.474	180.185	7615.63	48.73	-50.06	410.95	40°06'03.098"N	104°52'51.435"W	10.00	
7855.82†	73.357	180.185	7628.00	85.52	-86.85	410.83	40°06'02.735"N	104°52'51.436"W	10.00	Fort Hays
7917.00†	79.474	180.185	7642.36	144.96	-146.29	410.64	40°06'02.147"N	104°52'51.439"W	10.00	
7954.49†	83.223	180.185	7648.00	182.01	-183.34	410.52	40°06'01.781"N	104°52'51.440"W	10.00	Codell
8017.00†	89.474	180.185	7651.98	244.37	-245.69	410.32	40°06'01.165"N	104°52'51.443"W	10.00	
8020.21	89.795	180.185	7652.00	247.58	-248.91	410.31	40°06'01.133"N	104°52'51.443"W	10.00	LANDING POINT
8117.00†	89.795	180.185	7652.35	344.37	-345.69	409.99	40°06'00.177"N	104°52'51.447"W	0.00	
8217.00†	89.795	180.185	7652.70	444.37	-445.69	409.67	40°05'59.189"N	104°52'51.451"W	0.00	
8317.00†	89.795	180.185	7653.06	544.37	-545.69	409.35	40°05'58.200"N	104°52'51.455"W	0.00	
8417.00†	89.795	180.185	7653.42	644.37	-645.69	409.03	40°05'57.212"N	104°52'51.460"W	0.00	
8517.00†	89.795	180.185	7653.77	744.37	-745.69	408.71	40°05'56.224"N	104°52'51.464"W	0.00	
8617.00†	89.795	180.185	7654.13	844.36	-845.69	408.38	40°05'55.236"N	104°52'51.468"W	0.00	
8717.00†	89.795	180.185	7654.49	944.36	-945.69	408.06	40°05'54.248"N	104°52'51.472"W	0.00	
8817.00†	89.795	180.185	7654.84	1044.36	-1045.69	407.74	40°05'53.259"N	104°52'51.476"W	0.00	
8917.00†	89.795	180.185	7655.20	1144.36	-1145.68	407.42	40°05'52.271"N	104°52'51.480"W	0.00	
9017.00†	89.795	180.185	7655.56	1244.36	-1245.68	407.10	40°05'51.283"N	104°52'51.485"W	0.00	
9117.00†	89.795	180.185	7655.91	1344.36	-1345.68	406.77	40°05'50.295"N	104°52'51.489"W	0.00	
9217.00†	89.795	180.185	7656.27	1444.36	-1445.68	406.45	40°05'49.307"N	104°52'51.493"W	0.00	
9317.00†	89.795	180.185	7656.63	1544.36	-1545.68	406.13	40°05'48.318"N	104°52'51.497"W	0.00	
9417.00†	89.795	180.185	7656.99	1644.36	-1645.68	405.81	40°05'47.330"N	104°52'51.501"W	0.00	
9517.00†	89.795	180.185	7657.34	1744.36	-1745.68	405.49	40°05'46.342"N	104°52'51.505"W	0.00	
9617.00†	89.795	180.185	7657.70	1844.36	-1845.68	405.16	40°05'45.354"N	104°52'51.509"W	0.00	
9717.00†	89.795	180.185	7658.06	1944.36	-1945.67	404.84	40°05'44.366"N	104°52'51.514"W	0.00	
9817.00†	89.795	180.185	7658.41	2044.36	-2045.67	404.52	40°05'43.377"N	104°52'51.518"W	0.00	
9917.00†	89.795	180.185	7658.77	2144.36	-2145.67	404.20	40°05'42.389"N	104°52'51.522"W	0.00	
10017.00†	89.795	180.185	7659.13	2244.36	-2245.67	403.88	40°05'41.401"N	104°52'51.526"W	0.00	
10117.00†	89.795	180.185	7659.48	2344.35	-2345.67	403.55	40°05'40.413"N	104°52'51.530"W	0.00	
10217.00†	89.795	180.185	7659.84	2444.35	-2445.67	403.23	40°05'39.424"N	104°52'51.534"W	0.00	
10317.00†	89.795	180.185	7660.20	2544.35	-2545.67	402.91	40°05'38.436"N	104°52'51.539"W	0.00	
10417.00†	89.795	180.185	7660.56	2644.35	-2645.67	402.59	40°05'37.448"N	104°52'51.543"W	0.00	
10517.00†	89.795	180.185	7660.91	2744.35	-2745.67	402.27	40°05'36.460"N	104°52'51.547"W	0.00	
10617.00†	89.795	180.185	7661.27	2844.35	-2845.66	401.94	40°05'35.472"N	104°52'51.551"W	0.00	
10717.00†	89.795	180.185	7661.63	2944.35	-2945.66	401.62	40°05'34.483"N	104°52'51.555"W	0.00	
10817.00†	89.795	180.185	7661.98	3044.35	-3045.66	401.30	40°05'33.495"N	104°52'51.559"W	0.00	
10917.00†	89.795	180.185	7662.34	3144.35	-3145.66	400.98	40°05'32.507"N	104°52'51.564"W	0.00	
11017.00†	89.795	180.185	7662.70	3244.35	-3245.66	400.65	40°05'31.519"N	104°52'51.568"W	0.00	
11117.00†	89.795	180.185	7663.05	3344.35	-3345.66	400.33	40°05'30.531"N	104°52'51.572"W	0.00	
11217.00†	89.795	180.185	7663.41	3444.35	-3445.66	400.01	40°05'29.542"N	104°52'51.576"W	0.00	
11317.00†	89.795	180.185	7663.77	3544.35	-3545.66	399.69	40°05'28.554"N	104°52'51.580"W	0.00	
11417.00†	89.795	180.185	7664.13	3644.35	-3645.66	399.37	40°05'27.566"N	104°52'51.584"W	0.00	
11517.00†	89.795	180.185	7664.48	3744.35	-3745.65	399.04	40°05'26.578"N	104°52'51.589"W	0.00	
11617.00†	89.795	180.185	7664.84	3844.35	-3845.65	398.72	40°05'25.590"N	104°52'51.593"W	0.00	
11717.00†	89.795	180.185	7665.20	3944.34	-3945.65	398.40	40°05'24.601"N	104°52'51.597"W	0.00	





# Planned Wellpath Report

## SPURLING 35C-34HZ (PERMIT REV-1) PWP

Page 5 of 6



### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 SPURLING 35C-34HZ (377' FNL & 1118' FWL, SEC.34)
Area	COLORADO	Well	SPURLING 35C-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 35C-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
11817.00†	89.795	180.185	7665.55	4044.34	-4045.65	398.08	40°05'23.613"N	104°52'51.601"W	0.00	
11917.00†	89.795	180.185	7665.91	4144.34	-4145.65	397.76	40°05'22.625"N	104°52'51.605"W	0.00	
12017.00†	89.795	180.185	7666.27	4244.34	-4245.65	397.43	40°05'21.637"N	104°52'51.609"W	0.00	
12117.00†	89.795	180.185	7666.62	4344.34	-4345.65	397.11	40°05'20.649"N	104°52'51.614"W	0.00	
12217.00†	89.795	180.185	7666.98	4444.34	-4445.65	396.79	40°05'19.660"N	104°52'51.618"W	0.00	
12222.30	89.795	180.185	7667.00 <sup>1</sup>	4449.64	-4450.95	396.77	40°05'19.608"N	104°52'51.618"W	0.00	TOTAL DEPTH

### HOLE & CASING SECTIONS -

Ref Wellbore: SPURLING 35C-34HZ PWB Ref Wellpath: SPURLING 35C-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	8020.21	7020.21	1000.00	7652.00	0.00	0.00	-248.90	410.31
7in Casing Intermediate	17.00	8020.21	8003.21	17.00	7652.00	0.00	0.00	-248.90	410.31
6.125in Open Hole	8020.21	12222.30	4202.09	7652.00	7667.00	-248.90	410.31	-4450.95	396.77
4.5in Casing Production	17.00	12222.30	12205.30	17.00	7667.00	0.00	0.00	-4450.95	396.77

### 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	59.91	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	59.91	3172818.68	1280239.99	40°06'03.593"N	104°52'55.952"W	polygon
1) SPURLING 35C-34HZ (460' FSL & 1530' FWL, SEC.34) REV-1	12222.30	7667.00	-4450.95	396.77	3173186.51	1275791.68	40°05'19.608"N	104°52'51.618"W	point

### SURVEY PROGRAM - Ref Wellbore: SPURLING 35C-34HZ PWB Ref Wellpath: SPURLING 35C-34HZ (PERMIT REV-1) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	12222.30	NaviTrak (Standard)		SPURLING 35C-34HZ PWB



# Planned Wellpath Report

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

Page 6 of 6



## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 SPURLING 35C-34HZ (377' FNL & 1118' FWL, SEC.34)
Area	COLORADO	Well	SPURLING 35C-34HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SPURLING 35C-34HZ PWB
Facility	SEC.34-T2N-R67W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
590.00	0.000	52.000	590.00	Fox Hills Base
4729.21	0.000	180.185	4686.00	Sussex
5167.21	0.000	180.185	5124.00	Shannon
7022.21	0.000	180.185	6979.00	4 1/2" LINER TOP
7345.84	22.359	180.185	7297.00	Sharon Springs
7411.32	28.906	180.185	7356.00	Niobrara
7481.24	35.899	180.185	7415.00	Niobrara B
7595.08	47.282	180.185	7500.00	Niobrara C
7855.82	73.357	180.185	7628.00	Fort Hays
7954.49	83.223	180.185	7648.00	Codell