

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOTH02 BARCLAY 15C-26HZ (577FSL & 2193FEL, SEC.14)
Field: WELD COUNTY (KERR MCGEE) Well: BARCLAY 15C-26HZ
Facility: SEC.14-T2N-R67W Wellbore: BARCLAY 15C-26HZ PWB

Plot reference wellpath is BARCLAY 15C-26HZ (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: 4949 feet	Scale: True distance
Mean Sea Level to Mud line (A Slot: SLOTH02 BARCLAY 15C-26HZ (577FSL & 2193FEL, SEC.14): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by rebaine01 on 21/Aug/2013

Location Information

Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.14-T2N-R67W				3179914.426	1291732.032	40°07'56.662"N	104°51'23.565"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SLOTH02 BARCLAY 15C-26HZ (577FSL & 2193FEL, SEC.14)	-0.20	29.98	3179944.407	1291732.047	40°07'56.660"N	104°51'23.179"W	
PERMIT (17 KB) (RKB) to Mud line (A Slot: SLOTH02 BARCLAY 15C-26HZ (577FSL & 2193FEL, SEC.14):						4949ft	
Mean Sea Level to Mud line (A Slot: SLOTH02 BARCLAY 15C-26HZ (577FSL & 2193FEL, SEC.14):						0ft	
PERMIT (17 KB) (RKB) to Mean Sea Level						4949ft	

Survey Program

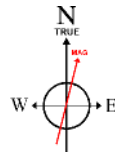
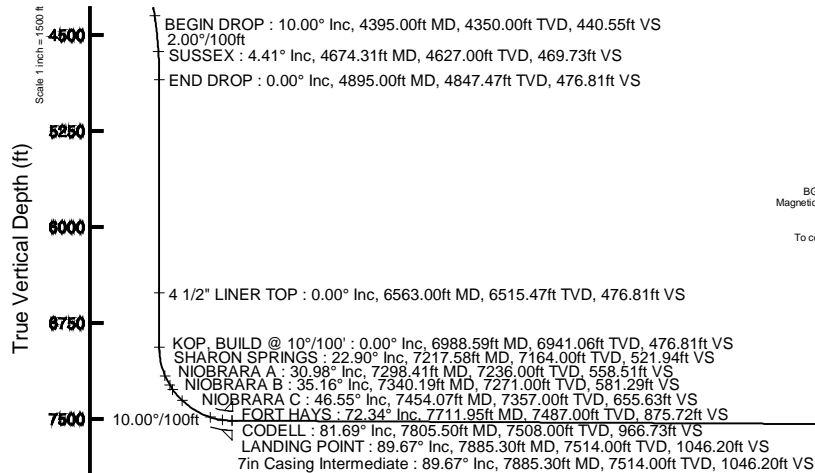
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	7885.30	NaviTrak	NaviTrak (Standard)		BARCLAY 15C-26HZ PWB
7885.30	17464.33	OnTrak	OnTrak (Standard)		BARCLAY 15C-26HZ PWB

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.14-T2N-R67W SECTION LINES		0.00	0.00	-29.98	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"W
SEC.23-T2N-R67W SECTION LINES		0.00	0.20	-29.98	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"W
SEC.26-T2N-R67W SECTION LINES		0.00	0.20	-29.98	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"W
SEC.14-T2N-R67W HARDLINES (460 SETBACK)	7353.00	0.20	-29.98	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"W	
SEC.23-T2N-R67W HARDLINES (460 SETBACK)	7353.00	0.20	-29.98	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"W	
SEC.26-T2N-R67W HARDLINES (460 SETBACK)	7353.00	0.20	-29.98	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"W	
BARCLAY 15C-26HZ LANDBOX	7569.00	0.00	0.00	3179944.41	1291732.05	40°07'56.660"N	104°51'23.179"W	
BARCLAY 15C-26HZ BHL ON PLAT (460FSL & 1865FEL, SEC.26)	17464.33	7569.00	-10617.20	261.17	3180262.61	1281117.48	40°06'11.740"N	104°51'19.818"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	145.000	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1100.00	0.000	145.000	1100.00	0.00	0.00	0.00	0.00
END NUDGE	1600.00	10.000	145.000	1597.47	-35.65	24.96	2.00	36.25
BEGIN DROP	4395.00	10.000	145.000	4350.00	-433.22	303.35	0.00	440.55
END DROP	4895.00	0.000	180.379	4847.47	-468.88	328.31	2.00	476.81
KOP, BUILD @ 10°/100'	6988.59	0.000	180.379	6941.06	-468.88	328.31	0.00	476.81
LANDING POINT	7885.30	89.671	180.379	7514.00	-1038.53	324.54	10.00	1046.20
TOTAL DEPTH	17464.33	89.671	180.379	7569.00	-10617.20	261.17	0.00	10620.41

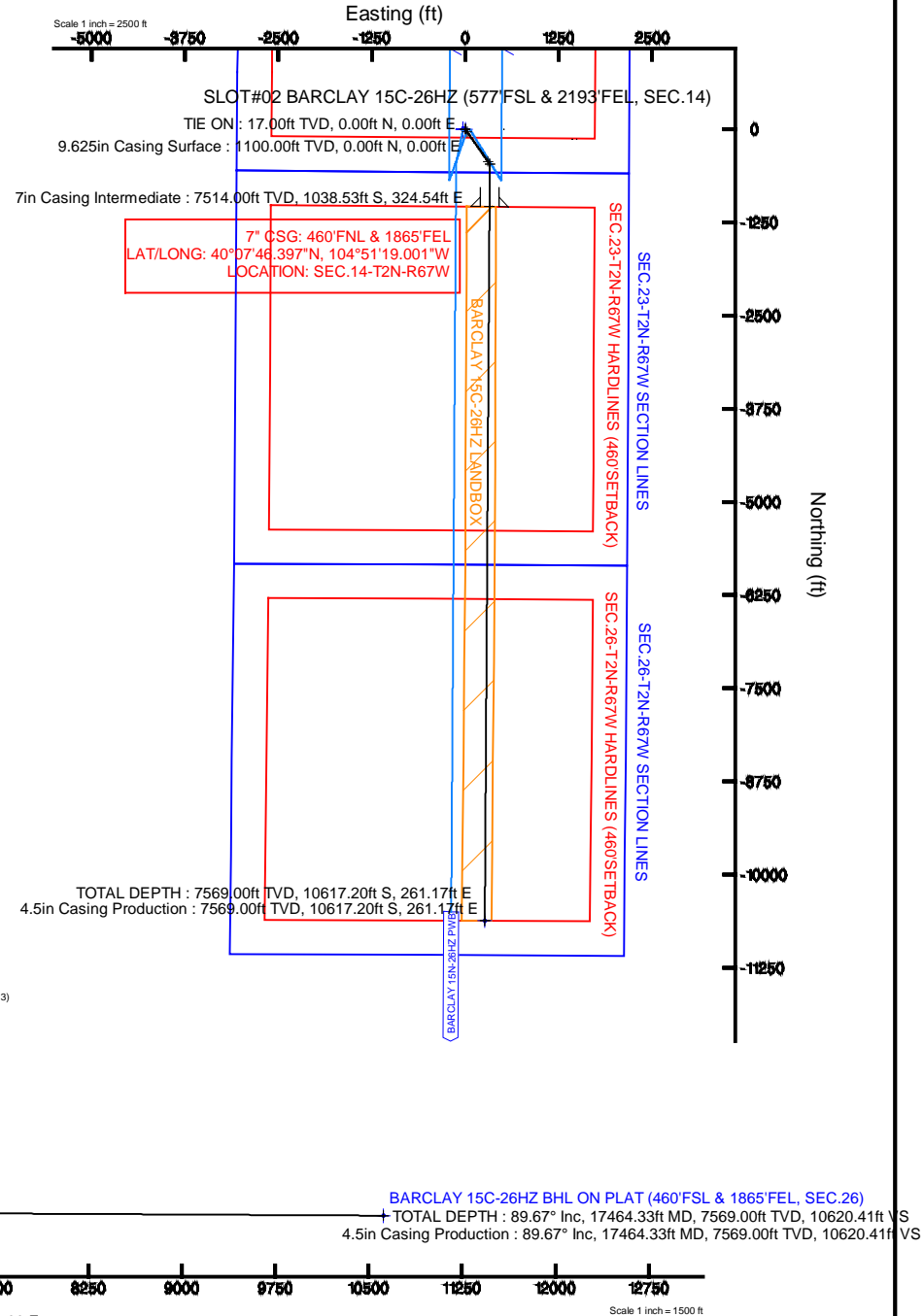


BGGM (1945.0 to 2014.0) Dip: 66.71° Field: 52644 nT
Magnetic North is 8.65 degrees East of True North (at 16/Aug/2013)

To correct azimuth from Magnetic to True add 8.65 degrees

Vertical Section (ft)

Azimuth 178.59° with reference 0.00 N, 0.00 E





Planned Wellpath Report

BARCLAY 15C-26HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 BARCLAY 15C-26HZ (577'FSL & 2193'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 15C-26HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 15C-26HZ PWB
Facility	SEC.14-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	0.999959	Report Generated	20/Aug/2013 at 15:47
Convergence at slot	n/a	Database/Source file	WA_ANADARKO/BARCLAY_15C-26HZ_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-0.20	29.98	3179944.41	1291732.05	40°07'56.660"N	104°51'23.179"W
Facility Reference Pt			3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"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	4949.00ft
Horizontal Reference Pt	Slot	PERMIT (17' KB) (RKB) to Mean Sea Level	4949.00ft
Vertical Reference Pt	PERMIT (17' KB) (RKB)	PERMIT (17' KB) (RKB) to Mud Line at Slot (SLOT#02 BARCLAY 15C-26HZ (577'FSL & 2193'FEL, SEC.14))	4949.00ft
MD Reference Pt	PERMIT (17' KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	178.59°



Planned Wellpath Report

BARCLAY 15C-26HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 BARCLAY 15C-26HZ (577'FSL & 2193'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 15C-26HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 15C-26HZ PWB
Facility	SEC.14-T2N-R67W		

WELLPATH DATA (192 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	145.000	0.00	0.00	0.00	0.00	40°07'56.660"N	104°51'23.179"W	0.00	
17.00	0.000	145.000	17.00	0.00	0.00	0.00	40°07'56.660"N	104°51'23.179"W	0.00	TIE ON
117.00†	0.000	145.000	117.00	0.00	0.00	0.00	40°07'56.660"N	104°51'23.179"W	0.00	
217.00†	0.000	145.000	217.00	0.00	0.00	0.00	40°07'56.660"N	104°51'23.179"W	0.00	
317.00†	0.000	145.000	317.00	0.00	0.00	0.00	40°07'56.660"N	104°51'23.179"W	0.00	
401.00†	0.000	145.000	401.00	0.00	0.00	0.00	40°07'56.660"N	104°51'23.179"W	0.00	FOX HILLS BASE
417.00†	0.000	145.000	417.00	0.00	0.00	0.00	40°07'56.660"N	104°51'23.179"W	0.00	
517.00†	0.000	145.000	517.00	0.00	0.00	0.00	40°07'56.660"N	104°51'23.179"W	0.00	
617.00†	0.000	145.000	617.00	0.00	0.00	0.00	40°07'56.660"N	104°51'23.179"W	0.00	
717.00†	0.000	145.000	717.00	0.00	0.00	0.00	40°07'56.660"N	104°51'23.179"W	0.00	
817.00†	0.000	145.000	817.00	0.00	0.00	0.00	40°07'56.660"N	104°51'23.179"W	0.00	
917.00†	0.000	145.000	917.00	0.00	0.00	0.00	40°07'56.660"N	104°51'23.179"W	0.00	
1017.00†	0.000	145.000	1017.00	0.00	0.00	0.00	40°07'56.660"N	104°51'23.179"W	0.00	
1100.00	0.000	145.000	1100.00	0.00	0.00	0.00	40°07'56.660"N	104°51'23.179"W	0.00	BEGIN NUDGE
1117.00†	0.340	145.000	1117.00	0.04	-0.04	0.03	40°07'56.660"N	104°51'23.179"W	2.00	
1217.00†	2.340	145.000	1216.97	1.99	-1.96	1.37	40°07'56.641"N	104°51'23.161"W	2.00	
1317.00†	4.340	145.000	1316.79	6.84	-6.73	4.71	40°07'56.594"N	104°51'23.118"W	2.00	
1417.00†	6.340	145.000	1416.35	14.59	-14.35	10.05	40°07'56.518"N	104°51'23.050"W	2.00	
1517.00†	8.340	145.000	1515.53	25.24	-24.82	17.38	40°07'56.415"N	104°51'22.955"W	2.00	
1600.00	10.000	145.000	1597.47	36.25	-35.65	24.96	40°07'56.308"N	104°51'22.858"W	2.00	END NUDGE
1617.00†	10.000	145.000	1614.21	38.71	-38.07	26.66	40°07'56.284"N	104°51'22.836"W	0.00	
1717.00†	10.000	145.000	1712.69	53.18	-52.29	36.62	40°07'56.143"N	104°51'22.708"W	0.00	
1817.00†	10.000	145.000	1811.17	67.64	-66.52	46.58	40°07'56.003"N	104°51'22.579"W	0.00	
1917.00†	10.000	145.000	1909.65	82.11	-80.74	56.54	40°07'55.862"N	104°51'22.451"W	0.00	
2017.00†	10.000	145.000	2008.13	96.57	-94.97	66.50	40°07'55.722"N	104°51'22.323"W	0.00	
2117.00†	10.000	145.000	2106.61	111.04	-109.19	76.46	40°07'55.581"N	104°51'22.195"W	0.00	
2217.00†	10.000	145.000	2205.09	125.50	-123.42	86.42	40°07'55.440"N	104°51'22.066"W	0.00	
2317.00†	10.000	145.000	2303.57	139.97	-137.64	96.38	40°07'55.300"N	104°51'21.938"W	0.00	
2417.00†	10.000	145.000	2402.05	154.43	-151.87	106.34	40°07'55.159"N	104°51'21.810"W	0.00	
2517.00†	10.000	145.000	2500.53	168.90	-166.09	116.30	40°07'55.019"N	104°51'21.682"W	0.00	
2617.00†	10.000	145.000	2599.01	183.36	-180.31	126.26	40°07'54.878"N	104°51'21.554"W	0.00	
2717.00†	10.000	145.000	2697.50	197.83	-194.54	136.22	40°07'54.738"N	104°51'21.425"W	0.00	
2817.00†	10.000	145.000	2795.98	212.29	-208.76	146.18	40°07'54.597"N	104°51'21.297"W	0.00	
2917.00†	10.000	145.000	2894.46	226.76	-222.99	156.14	40°07'54.456"N	104°51'21.169"W	0.00	
3017.00†	10.000	145.000	2992.94	241.22	-237.21	166.10	40°07'54.316"N	104°51'21.041"W	0.00	
3117.00†	10.000	145.000	3091.42	255.69	-251.44	176.06	40°07'54.175"N	104°51'20.912"W	0.00	
3217.00†	10.000	145.000	3189.90	270.15	-265.66	186.02	40°07'54.035"N	104°51'20.784"W	0.00	
3317.00†	10.000	145.000	3288.38	284.62	-279.89	195.98	40°07'53.894"N	104°51'20.656"W	0.00	
3417.00†	10.000	145.000	3386.86	299.08	-294.11	205.94	40°07'53.754"N	104°51'20.528"W	0.00	
3517.00†	10.000	145.000	3485.34	313.55	-308.33	215.90	40°07'53.613"N	104°51'20.399"W	0.00	
3617.00†	10.000	145.000	3583.82	328.01	-322.56	225.86	40°07'53.472"N	104°51'20.271"W	0.00	
3717.00†	10.000	145.000	3682.30	342.48	-336.78	235.82	40°07'53.332"N	104°51'20.143"W	0.00	
3817.00†	10.000	145.000	3780.78	356.94	-351.01	245.78	40°07'53.191"N	104°51'20.015"W	0.00	
3917.00†	10.000	145.000	3879.26	371.41	-365.23	255.74	40°07'53.051"N	104°51'19.887"W	0.00	
4017.00†	10.000	145.000	3977.75	385.88	-379.46	265.70	40°07'52.910"N	104°51'19.758"W	0.00	



Planned Wellpath Report

BARCLAY 15C-26HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP		Slot	SLOT#02 BARCLAY 15C-26HZ (577'FSL & 2193'FEL, SEC.14)
Area	COLORADO		Well	BARCLAY 15C-26HZ
Field	WELD COUNTY (KERR MCGEE)		Wellbore	BARCLAY 15C-26HZ PWB
Facility	SEC.14-T2N-R67W			

WELLPATH DATA (192 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4117.00†	10.000	145.000	4076.23	400.34	-393.68	275.66	40°07'52.770"N	104°51'19.630"W	0.00	
4217.00†	10.000	145.000	4174.71	414.81	-407.90	285.62	40°07'52.629"N	104°51'19.502"W	0.00	
4317.00†	10.000	145.000	4273.19	429.27	-422.13	295.58	40°07'52.488"N	104°51'19.374"W	0.00	
4395.00	10.000	145.000	4350.00	440.55	-433.22	303.35	40°07'52.379"N	104°51'19.274"W	0.00	BEGIN DROP
4417.00†	9.560	145.000	4371.68	443.67	-436.29	305.49	40°07'52.349"N	104°51'19.246"W	2.00	
4517.00†	7.560	145.000	4470.56	456.06	-448.48	314.03	40°07'52.228"N	104°51'19.136"W	2.00	
4617.00†	5.560	145.000	4569.90	465.58	-457.84	320.58	40°07'52.136"N	104°51'19.052"W	2.00	
4674.31†	4.414	145.000	4627.00	469.73	-461.92	323.44	40°07'52.095"N	104°51'19.015"W	2.00	SUSSEX
4717.00†	3.560	145.000	4669.58	472.20	-464.35	325.14	40°07'52.071"N	104°51'18.993"W	2.00	
4817.00†	1.560	145.000	4769.48	475.92	-468.01	327.70	40°07'52.035"N	104°51'18.960"W	2.00	
4895.00	0.000	180.379	4847.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	2.00	END DROP
4917.00†	0.000	180.379	4869.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
5017.00†	0.000	180.379	4969.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
5117.00†	0.000	180.379	5069.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
5217.00†	0.000	180.379	5169.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
5317.00†	0.000	180.379	5269.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
5417.00†	0.000	180.379	5369.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
5517.00†	0.000	180.379	5469.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
5617.00†	0.000	180.379	5569.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
5717.00†	0.000	180.379	5669.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
5817.00†	0.000	180.379	5769.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
5917.00†	0.000	180.379	5869.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
6017.00†	0.000	180.379	5969.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
6117.00†	0.000	180.379	6069.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
6217.00†	0.000	180.379	6169.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
6317.00†	0.000	180.379	6269.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
6417.00†	0.000	180.379	6369.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
6517.00†	0.000	180.379	6469.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
6563.00†	0.000	180.379	6515.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	4 1/2" LINER TOP
6617.00†	0.000	180.379	6569.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
6717.00†	0.000	180.379	6669.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
6817.00†	0.000	180.379	6769.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
6917.00†	0.000	180.379	6869.47	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	
6988.59	0.000	180.379	6941.06	476.81	-468.88	328.31	40°07'52.027"N	104°51'18.952"W	0.00	KOP, BUILD @ 10°/100'
7017.00†	2.841	180.379	6969.46	477.51	-469.58	328.31	40°07'52.020"N	104°51'18.952"W	10.00	
7117.00†	12.841	180.379	7068.40	491.13	-483.21	328.22	40°07'51.885"N	104°51'18.953"W	10.00	
7217.00†	22.841	180.379	7163.47	521.71	-513.80	328.01	40°07'51.583"N	104°51'18.956"W	10.00	
7217.58†	22.899	180.379	7164.00	521.94	-514.03	328.01	40°07'51.580"N	104°51'18.956"W	10.00	SHARON SPRINGS
7298.41†	30.982	180.379	7236.00	558.51	-550.62	327.77	40°07'51.219"N	104°51'18.959"W	10.00	NIOBRARA A
7317.00†	32.841	180.379	7251.78	568.34	-560.45	327.70	40°07'51.122"N	104°51'18.960"W	10.00	
7340.19†	35.160	180.379	7271.00	581.29	-573.41	327.62	40°07'50.993"N	104°51'18.961"W	10.00	NIOBRARA B
7417.00†	42.841	180.379	7330.65	629.58	-621.71	327.30	40°07'50.516"N	104°51'18.965"W	10.00	
7454.07†	46.549	180.379	7357.00	655.63	-647.79	327.13	40°07'50.259"N	104°51'18.968"W	10.00	NIOBRARA C
7517.00†	52.841	180.379	7397.68	703.57	-695.75	326.81	40°07'49.785"N	104°51'18.972"W	10.00	
7617.00†	62.841	180.379	7450.84	788.08	-780.30	326.25	40°07'48.949"N	104°51'18.979"W	10.00	



Planned Wellpath Report

BARCLAY 15C-26HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 BARCLAY 15C-26HZ (577'FSL & 2193'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 15C-26HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 15C-26HZ PWB
Facility	SEC.14-T2N-R67W		

WELLPATH DATA (192 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7711.95†	72.336	180.379	7487.00	875.72	-867.97	325.67	40°07'48.083"N	104°51'18.986"W	10.00	FORT HAYS
7717.00†	72.841	180.379	7488.51	880.53	-872.79	325.64	40°07'48.035"N	104°51'18.987"W	10.00	
7805.50†	81.692	180.379	7508.00	966.73	-959.03	325.07	40°07'47.183"N	104°51'18.994"W	10.00	CODELL
7817.00†	82.841	180.379	7509.55	978.12	-970.42	324.99	40°07'47.070"N	104°51'18.995"W	10.00	
7885.30	89.671	180.379	7514.00	1046.20	-1038.53	324.54	40°07'46.397"N	104°51'19.001"W	10.00	LANDING POINT
7917.00†	89.671	180.379	7514.19	1077.88	-1070.23	324.33	40°07'46.084"N	104°51'19.004"W	0.00	
8017.00†	89.671	180.379	7514.76	1177.83	-1170.23	323.67	40°07'45.096"N	104°51'19.012"W	0.00	
8117.00†	89.671	180.379	7515.33	1277.78	-1270.23	323.01	40°07'44.107"N	104°51'19.021"W	0.00	
8217.00†	89.671	180.379	7515.91	1377.73	-1370.22	322.35	40°07'43.119"N	104°51'19.029"W	0.00	
8317.00†	89.671	180.379	7516.48	1477.68	-1470.22	321.69	40°07'42.131"N	104°51'19.038"W	0.00	
8417.00†	89.671	180.379	7517.06	1577.63	-1570.21	321.02	40°07'41.143"N	104°51'19.046"W	0.00	
8517.00†	89.671	180.379	7517.63	1677.58	-1670.21	320.36	40°07'40.155"N	104°51'19.055"W	0.00	
8617.00†	89.671	180.379	7518.20	1777.53	-1770.21	319.70	40°07'39.167"N	104°51'19.063"W	0.00	
8717.00†	89.671	180.379	7518.78	1877.48	-1870.20	319.04	40°07'38.178"N	104°51'19.072"W	0.00	
8817.00†	89.671	180.379	7519.35	1977.43	-1970.20	318.38	40°07'37.190"N	104°51'19.080"W	0.00	
8917.00†	89.671	180.379	7519.93	2077.38	-2070.19	317.72	40°07'36.202"N	104°51'19.089"W	0.00	
9017.00†	89.671	180.379	7520.50	2177.33	-2170.19	317.05	40°07'35.214"N	104°51'19.097"W	0.00	
9117.00†	89.671	180.379	7521.08	2277.28	-2270.19	316.39	40°07'34.226"N	104°51'19.106"W	0.00	
9217.00†	89.671	180.379	7521.65	2377.23	-2370.18	315.73	40°07'33.238"N	104°51'19.114"W	0.00	
9317.00†	89.671	180.379	7522.22	2477.18	-2470.18	315.07	40°07'32.249"N	104°51'19.123"W	0.00	
9417.00†	89.671	180.379	7522.80	2577.13	-2570.18	314.41	40°07'31.261"N	104°51'19.132"W	0.00	
9517.00†	89.671	180.379	7523.37	2677.08	-2670.17	313.75	40°07'30.273"N	104°51'19.140"W	0.00	
9617.00†	89.671	180.379	7523.95	2777.03	-2770.17	313.09	40°07'29.285"N	104°51'19.149"W	0.00	
9717.00†	89.671	180.379	7524.52	2876.98	-2870.16	312.42	40°07'28.297"N	104°51'19.157"W	0.00	
9817.00†	89.671	180.379	7525.09	2976.93	-2970.16	311.76	40°07'27.309"N	104°51'19.166"W	0.00	
9917.00†	89.671	180.379	7525.67	3076.88	-3070.16	311.10	40°07'26.320"N	104°51'19.174"W	0.00	
10017.00†	89.671	180.379	7526.24	3176.83	-3170.15	310.44	40°07'25.332"N	104°51'19.183"W	0.00	
10117.00†	89.671	180.379	7526.82	3276.78	-3270.15	309.78	40°07'24.344"N	104°51'19.191"W	0.00	
10217.00†	89.671	180.379	7527.39	3376.73	-3370.14	309.12	40°07'23.356"N	104°51'19.200"W	0.00	
10317.00†	89.671	180.379	7527.96	3476.68	-3470.14	308.45	40°07'22.368"N	104°51'19.208"W	0.00	
10417.00†	89.671	180.379	7528.54	3576.63	-3570.14	307.79	40°07'21.380"N	104°51'19.217"W	0.00	
10517.00†	89.671	180.379	7529.11	3676.58	-3670.13	307.13	40°07'20.391"N	104°51'19.225"W	0.00	
10617.00†	89.671	180.379	7529.69	3776.53	-3770.13	306.47	40°07'19.403"N	104°51'19.234"W	0.00	
10717.00†	89.671	180.379	7530.26	3876.48	-3870.13	305.81	40°07'18.415"N	104°51'19.242"W	0.00	
10817.00†	89.671	180.379	7530.84	3976.42	-3970.12	305.15	40°07'17.427"N	104°51'19.251"W	0.00	
10917.00†	89.671	180.379	7531.41	4076.37	-4070.12	304.48	40°07'16.439"N	104°51'19.260"W	0.00	
11017.00†	89.671	180.379	7531.98	4176.32	-4170.11	303.82	40°07'15.450"N	104°51'19.268"W	0.00	
11117.00†	89.671	180.379	7532.56	4276.27	-4270.11	303.16	40°07'14.462"N	104°51'19.277"W	0.00	
11217.00†	89.671	180.379	7533.13	4376.22	-4370.11	302.50	40°07'13.474"N	104°51'19.285"W	0.00	
11317.00†	89.671	180.379	7533.71	4476.17	-4470.10	301.84	40°07'12.486"N	104°51'19.294"W	0.00	
11417.00†	89.671	180.379	7534.28	4576.12	-4570.10	301.18	40°07'11.498"N	104°51'19.302"W	0.00	
11517.00†	89.671	180.379	7534.85	4676.07	-4670.09	300.52	40°07'10.510"N	104°51'19.311"W	0.00	
11617.00†	89.671	180.379	7535.43	4776.02	-4770.09	299.85	40°07'09.521"N	104°51'19.319"W	0.00	
11717.00†	89.671	180.379	7536.00	4875.97	-4870.09	299.19	40°07'08.533"N	104°51'19.328"W	0.00	
11817.00†	89.671	180.379	7536.58	4975.92	-4970.08	298.53	40°07'07.545"N	104°51'19.336"W	0.00	



Planned Wellpath Report

BARCLAY 15C-26HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 BARCLAY 15C-26HZ (577'FSL & 2193'FEL, SEC.14)	
Area	COLORADO	Well	BARCLAY 15C-26HZ	
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 15C-26HZ PWB	
Facility	SEC.14-T2N-R67W			

WELLPATH DATA (192 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11917.00†	89.671	180.379	7537.15	5075.87	-5070.08	297.87	40°07'06.557"N	104°51'19.345"W	0.00	
12017.00†	89.671	180.379	7537.73	5175.82	-5170.08	297.21	40°07'05.569"N	104°51'19.353"W	0.00	
12117.00†	89.671	180.379	7538.30	5275.77	-5270.07	296.55	40°07'04.581"N	104°51'19.362"W	0.00	
12217.00†	89.671	180.379	7538.87	5375.72	-5370.07	295.88	40°07'03.592"N	104°51'19.370"W	0.00	
12317.00†	89.671	180.379	7539.45	5475.67	-5470.06	295.22	40°07'02.604"N	104°51'19.379"W	0.00	
12417.00†	89.671	180.379	7540.02	5575.62	-5570.06	294.56	40°07'01.616"N	104°51'19.388"W	0.00	
12517.00†	89.671	180.379	7540.60	5675.57	-5670.06	293.90	40°07'00.628"N	104°51'19.396"W	0.00	
12617.00†	89.671	180.379	7541.17	5775.52	-5770.05	293.24	40°06'59.640"N	104°51'19.405"W	0.00	
12717.00†	89.671	180.379	7541.74	5875.47	-5870.05	292.58	40°06'58.652"N	104°51'19.413"W	0.00	
12817.00†	89.671	180.379	7542.32	5975.42	-5970.04	291.91	40°06'57.663"N	104°51'19.422"W	0.00	
12917.00†	89.671	180.379	7542.89	6075.37	-6070.04	291.25	40°06'56.675"N	104°51'19.430"W	0.00	
13017.00†	89.671	180.379	7543.47	6175.32	-6170.04	290.59	40°06'55.687"N	104°51'19.439"W	0.00	
13117.00†	89.671	180.379	7544.04	6275.27	-6270.03	289.93	40°06'54.699"N	104°51'19.447"W	0.00	
13217.00†	89.671	180.379	7544.61	6375.22	-6370.03	289.27	40°06'53.711"N	104°51'19.456"W	0.00	
13317.00†	89.671	180.379	7545.19	6475.17	-6470.03	288.61	40°06'52.722"N	104°51'19.464"W	0.00	
13417.00†	89.671	180.379	7545.76	6575.12	-6570.02	287.95	40°06'51.734"N	104°51'19.473"W	0.00	
13517.00†	89.671	180.379	7546.34	6675.07	-6670.02	287.28	40°06'50.746"N	104°51'19.481"W	0.00	
13617.00†	89.671	180.379	7546.91	6775.02	-6770.01	286.62	40°06'49.758"N	104°51'19.490"W	0.00	
13717.00†	89.671	180.379	7547.49	6874.96	-6870.01	285.96	40°06'48.770"N	104°51'19.498"W	0.00	
13817.00†	89.671	180.379	7548.06	6974.91	-6970.01	285.30	40°06'47.782"N	104°51'19.507"W	0.00	
13917.00†	89.671	180.379	7548.63	7074.86	-7070.00	284.64	40°06'46.793"N	104°51'19.515"W	0.00	
14017.00†	89.671	180.379	7549.21	7174.81	-7170.00	283.98	40°06'45.805"N	104°51'19.524"W	0.00	
14117.00†	89.671	180.379	7549.78	7274.76	-7269.99	283.31	40°06'44.817"N	104°51'19.533"W	0.00	
14217.00†	89.671	180.379	7550.36	7374.71	-7369.99	282.65	40°06'43.829"N	104°51'19.541"W	0.00	
14317.00†	89.671	180.379	7550.93	7474.66	-7469.99	281.99	40°06'42.841"N	104°51'19.550"W	0.00	
14417.00†	89.671	180.379	7551.50	7574.61	-7569.98	281.33	40°06'41.853"N	104°51'19.558"W	0.00	
14517.00†	89.671	180.379	7552.08	7674.56	-7669.98	280.67	40°06'40.864"N	104°51'19.567"W	0.00	
14617.00†	89.671	180.379	7552.65	7774.51	-7769.98	280.01	40°06'39.876"N	104°51'19.575"W	0.00	
14717.00†	89.671	180.379	7553.23	7874.46	-7869.97	279.35	40°06'38.888"N	104°51'19.584"W	0.00	
14817.00†	89.671	180.379	7553.80	7974.41	-7969.97	278.68	40°06'37.900"N	104°51'19.592"W	0.00	
14917.00†	89.671	180.379	7554.37	8074.36	-8069.96	278.02	40°06'36.912"N	104°51'19.601"W	0.00	
15017.00†	89.671	180.379	7554.95	8174.31	-8169.96	277.36	40°06'35.924"N	104°51'19.609"W	0.00	
15117.00†	89.671	180.379	7555.52	8274.26	-8269.96	276.70	40°06'34.935"N	104°51'19.618"W	0.00	
15217.00†	89.671	180.379	7556.10	8374.21	-8369.95	276.04	40°06'33.947"N	104°51'19.626"W	0.00	
15317.00†	89.671	180.379	7556.67	8474.16	-8469.95	275.38	40°06'32.959"N	104°51'19.635"W	0.00	
15417.00†	89.671	180.379	7557.25	8574.11	-8569.94	274.71	40°06'31.971"N	104°51'19.643"W	0.00	
15517.00†	89.671	180.379	7557.82	8674.06	-8669.94	274.05	40°06'30.983"N	104°51'19.652"W	0.00	
15617.00†	89.671	180.379	7558.39	8774.01	-8769.94	273.39	40°06'29.994"N	104°51'19.660"W	0.00	
15717.00†	89.671	180.379	7558.97	8873.96	-8869.93	272.73	40°06'29.006"N	104°51'19.669"W	0.00	
15817.00†	89.671	180.379	7559.54	8973.91	-8969.93	272.07	40°06'28.018"N	104°51'19.678"W	0.00	
15917.00†	89.671	180.379	7560.12	9073.86	-9069.93	271.41	40°06'27.030"N	104°51'19.686"W	0.00	
16017.00†	89.671	180.379	7560.69	9173.81	-9169.92	270.74	40°06'26.042"N	104°51'19.695"W	0.00	
16117.00†	89.671	180.379	7561.26	9273.76	-9269.92	270.08	40°06'25.054"N	104°51'19.703"W	0.00	
16217.00†	89.671	180.379	7561.84	9373.71	-9369.91	269.42	40°06'24.065"N	104°51'19.712"W	0.00	
16317.00†	89.671	180.379	7562.41	9473.66	-9469.91	268.76	40°06'23.077"N	104°51'19.720"W	0.00	



Planned Wellpath Report

BARCLAY 15C-26HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 BARCLAY 15C-26HZ (577'FSL & 2193'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 15C-26HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 15C-26HZ PWB
Facility	SEC.14-T2N-R67W		

WELLPATH DATA (192 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16417.00†	89.671	180.379	7562.99	9573.61	-9569.91	268.10	40°06'22.089"N	104°51'19.729"W	0.00	
16517.00†	89.671	180.379	7563.56	9673.56	-9669.90	267.44	40°06'21.101"N	104°51'19.737"W	0.00	
16617.00†	89.671	180.379	7564.14	9773.50	-9769.90	266.78	40°06'20.113"N	104°51'19.746"W	0.00	
16717.00†	89.671	180.379	7564.71	9873.45	-9869.90	266.11	40°06'19.125"N	104°51'19.754"W	0.00	
16817.00†	89.671	180.379	7565.28	9973.40	-9969.89	265.45	40°06'18.136"N	104°51'19.763"W	0.00	
16917.00†	89.671	180.379	7565.86	10073.35	-10069.89	264.79	40°06'17.148"N	104°51'19.771"W	0.00	
17017.00†	89.671	180.379	7566.43	10173.30	-10169.88	264.13	40°06'16.160"N	104°51'19.780"W	0.00	
17117.00†	89.671	180.379	7567.01	10273.25	-10269.88	263.47	40°06'15.172"N	104°51'19.788"W	0.00	
17217.00†	89.671	180.379	7567.58	10373.20	-10369.88	262.81	40°06'14.184"N	104°51'19.797"W	0.00	
17317.00†	89.671	180.379	7568.15	10473.15	-10469.87	262.14	40°06'13.196"N	104°51'19.805"W	0.00	
17417.00†	89.671	180.379	7568.73	10573.10	-10569.87	261.48	40°06'12.207"N	104°51'19.814"W	0.00	
17464.33	89.671	180.379	7569.00 ¹	10620.41	-10617.20	261.17	40°06'11.740"N	104°51'19.818"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS -									
Ref Wellbore: BARCLAY 15C-26HZ PWB					Ref Wellpath: BARCLAY 15C-26HZ (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	1100.00	1083.00	17.00	1100.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	1100.00	1083.00	17.00	1100.00	0.00	0.00	0.00	0.00
8.75in Open Hole	1100.00	7885.30	6785.30	1100.00	7514.00	0.00	0.00	-1038.53	324.54
7in Casing Intermediate	17.00	7885.30	7868.30	17.00	7514.00	0.00	0.00	-1038.53	324.54
6.125in Open Hole	7885.30	17464.33	9579.03	7514.00	7569.00	-1038.53	324.54	-10617.20	261.17
4.5in Casing Production	17.00	17464.33	17447.33	17.00	7569.00	0.00	0.00	-10617.20	261.17



Planned Wellpath Report

BARCLAY 15C-26HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 BARCLAY 15C-26HZ (577'FSL & 2193'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 15C-26HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 15C-26HZ PWB
Facility	SEC.14-T2N-R67W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.14-T2N-R67W SECTION LINES		0.00	-3.33	484.06	3180428.45	1291732.23	40°07'56.627"N	104°51'16.947"W	polygon
SEC.23-T2N-R67W SECTION LINES		0.00	-3.33	484.06	3180428.45	1291732.23	40°07'56.627"N	104°51'16.947"W	polygon
SEC.26-T2N-R67W SECTION LINES		0.00	-3.33	484.06	3180428.45	1291732.23	40°07'56.627"N	104°51'16.947"W	polygon
SEC.14-T2N-R67W HARDLINES (460' SETBACK)		7353.00	-3.33	484.06	3180428.45	1291732.23	40°07'56.627"N	104°51'16.947"W	polygon
SEC.23-T2N-R67W HARDLINES (460' SETBACK)		7353.00	-3.33	484.06	3180428.45	1291732.23	40°07'56.627"N	104°51'16.947"W	polygon
SEC.26-T2N-R67W HARDLINES (460' SETBACK)		7353.00	-3.33	484.06	3180428.45	1291732.23	40°07'56.627"N	104°51'16.947"W	polygon
BARCLAY 15C-26HZ LANDBOX		7569.00	0.00	0.00	3179944.41	1291732.05	40°07'56.660"N	104°51'23.179"W	polygon
1) BARCLAY 15C-26HZ BHL ON PLAT (460'FSL & 1865'FEL, SEC.26)	17464.33	7569.00	-10617.20	261.17	3180282.61	1281117.48	40°06'11.740"N	104°51'19.818"W	point

SURVEY PROGRAM - Ref Wellbore: BARCLAY 15C-26HZ PWB				Ref Wellpath: BARCLAY 15C-26HZ (PERMIT REV-1) PWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	
17.00	7885.30	NaviTrak (Standard)		BARCLAY 15C-26HZ PWB	
7885.30	17464.33	OnTrak (Standard)		BARCLAY 15C-26HZ PWB	



Planned Wellpath Report

BARCLAY 15C-26HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 BARCLAY 15C-26HZ (577'FSL & 2193'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 15C-26HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 15C-26HZ PWB
Facility	SEC.14-T2N-R67W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
401.00	0.000	145.000	401.00	FOX HILLS BASE
4674.31	4.414	145.000	4627.00	SUSSEX
6563.00	0.000	180.379	6515.47	4 1/2" LINER TOP
7217.58	22.899	180.379	7164.00	SHARON SPRINGS
7298.41	30.982	180.379	7236.00	NIOBRARA A
7340.19	35.160	180.379	7271.00	NIOBRARA B
7454.07	46.549	180.379	7357.00	NIOBRARA C
7711.95	72.336	180.379	7487.00	FORT HAYS
7805.50	81.692	180.379	7508.00	CODELL

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	145.000	17.00	TIE ON
1100.00	0.000	145.000	1100.00	BEGIN NUDGE
1600.00	10.000	145.000	1597.47	END NUDGE
4395.00	10.000	145.000	4350.00	BEGIN DROP
4895.00	0.000	180.379	4847.47	END DROP
6988.59	0.000	180.379	6941.06	KOP, BUILD @ 10°/100'
7885.30	89.671	180.379	7514.00	LANDING POINT
17464.33	89.671	180.379	7569.00	TOTAL DEPTH