

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#01 BARCLAY 15N-26HZ (577FSL & 2223FEL, SEC.14)  
Field: WELD COUNTY (KERR MCGEE) Well: BARCLAY 15N-26HZ  
Facility: SEC.14-T2N-R67W Wellbore: BARCLAY 15N-26HZ PWB

Plot reference wellpath is BARCLAY 15N-26HZ (PERMIT REV-1) PWP

True vertical depths are referenced to PERMT (17 KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501) US feet
Measured depths are referenced to PERMT (17 KB) (RKB)	North Reference: True north
PERMT (17 KB) (RKB) to Mean Sea Level: 4949 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#01 BARCLAY 15N-26HZ (577FSL & 2223FEL, SEC.14)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robale01 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
SLOT#01 BARCLAY 15N-26HZ (577FSL & 2223FEL SEC.14)	0.00	0.00	3179914.426	1291732.032	40°07'56.662"N	104°51'23.565"W
PERMIT (17 KB) (RKB) to Mud line (At Slot: SLOT#01 BARCLAY 15N-26HZ (577FSL & 2223FEL SEC.14))						4949R
Mean Sea Level to Mud line (At Slot: SLOT#01 BARCLAY 15N-26HZ (577FSL & 2223FEL SEC.14))						0ft
PERMIT (17 KB) (RKB) to Mean Sea Level						4949R

## Survey Program

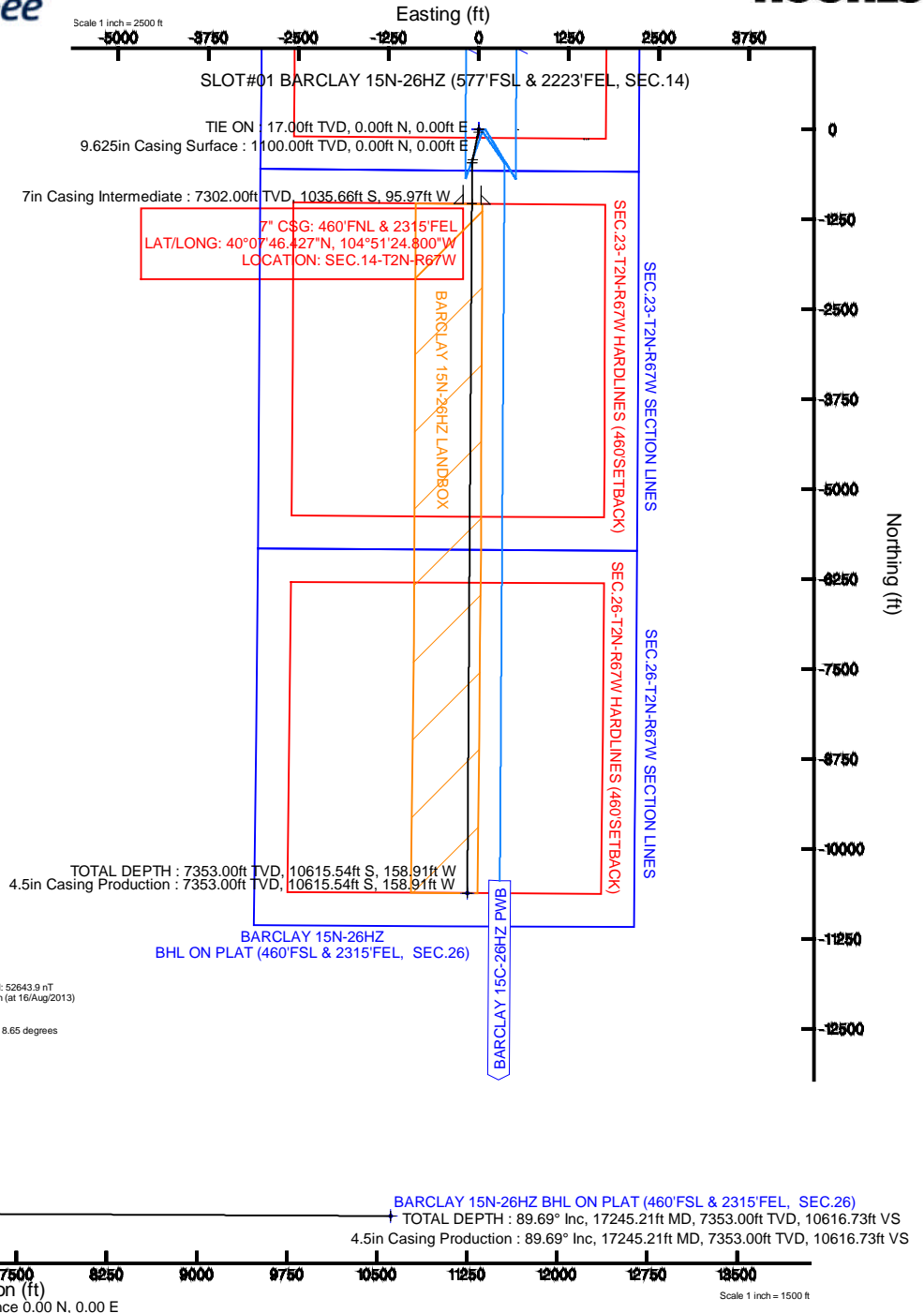
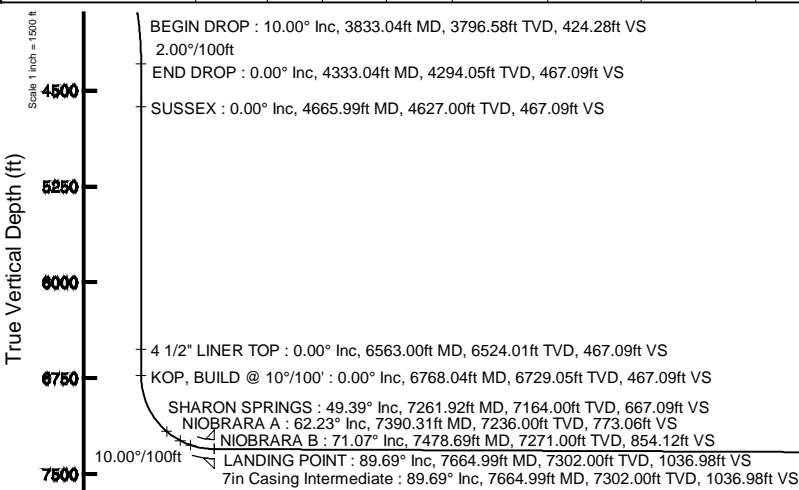
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	7664.99	NaviTrak	NaviTrak (Standard)		BARCLAY 15N-26HZ PWB
7664.99	17245.21	OnTrak	OnTrak (Standard)		BARCLAY 15N-26HZ PWB

## 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	0.00	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"W
SEC.23-T2N-R67W SECTION LINES		0.00	0.00	0.00	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"W
SEC.26-T2N-R67W SECTION LINES		0.00	0.00	0.00	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"W
BARCLAY 15N-26HZ BHL ON PLAT (460'FSL & 2315'FEL, SEC.26)	17245.21	7353.00	-10615.54	-158.91	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"W
BARCLAY 15N-26HZ LARBOX		7353.00	0.00	0.00	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"W
SEC.14-T2N-R67W HARDLINES (460' SETBACK)		7353.00	0.00	0.00	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"W
SEC.23-T2N-R67W HARDLINES (460' SETBACK)		7353.00	0.00	0.00	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"W
SEC.26-T2N-R67W HARDLINES (460' SETBACK)		7353.00	0.00	0.00	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"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	0.00	191.200	17.00	0.00	0.00	0.00	0.00
BEGIN NUJGE	1100.00	0.00	191.200	1100.00	0.00	0.00	0.00	0.00
END NUJGE	1600.00	10.00	191.200	1597.47	-42.69	-8.45	2.00	42.82
BEGIN DROP	3833.04	10.00	191.200	3796.58	-423.07	-83.77	0.00	424.28
END DROP	4333.04	0.00	180.376	4294.05	-465.77	-92.22	2.00	467.09
KOP, BUILD @ 10°/100'	6768.04	0.00	180.376	6729.05	-465.77	-92.22	0.00	467.09
LANDING POINT	7664.99	89.695	180.376	7302.00	-1035.66	-95.97	10.00	1036.98
TOTAL DEPTH	17245.21	89.695	180.376	7353.00	-10615.54	-158.91	0.00	10616.73





# Planned Wellpath Report

## BARCLAY 15N-26HZ (PERMIT REV-1) PWP

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### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BARCLAY 15N-26HZ (577'FSL & 2223'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 15N-26HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 15N-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 15:55
Convergence at slot	n/a	Database/Source file	WA_ANADARKO/BARCLAY_15N-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	0.00	0.00	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"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#01 BARCLAY 15N-26HZ (577'FSL & 2223'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	180.86°



# Planned Wellpath Report

## BARCLAY 15N-26HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BARCLAY 15N-26HZ (577'FSL & 2223'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 15N-26HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 15N-26HZ PWB
Facility	SEC.14-T2N-R67W		

WELLPATH DATA (187 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	191.200	0.00	0.00	0.00	0.00	40°07'56.662"N	104°51'23.565"W	0.00	
17.00	0.000	191.200	17.00	0.00	0.00	0.00	40°07'56.662"N	104°51'23.565"W	0.00	TIE ON
117.00†	0.000	191.200	117.00	0.00	0.00	0.00	40°07'56.662"N	104°51'23.565"W	0.00	
217.00†	0.000	191.200	217.00	0.00	0.00	0.00	40°07'56.662"N	104°51'23.565"W	0.00	
317.00†	0.000	191.200	317.00	0.00	0.00	0.00	40°07'56.662"N	104°51'23.565"W	0.00	
401.00†	0.000	191.200	401.00	0.00	0.00	0.00	40°07'56.662"N	104°51'23.565"W	0.00	FOX HILLS BASE
417.00†	0.000	191.200	417.00	0.00	0.00	0.00	40°07'56.662"N	104°51'23.565"W	0.00	
517.00†	0.000	191.200	517.00	0.00	0.00	0.00	40°07'56.662"N	104°51'23.565"W	0.00	
617.00†	0.000	191.200	617.00	0.00	0.00	0.00	40°07'56.662"N	104°51'23.565"W	0.00	
717.00†	0.000	191.200	717.00	0.00	0.00	0.00	40°07'56.662"N	104°51'23.565"W	0.00	
817.00†	0.000	191.200	817.00	0.00	0.00	0.00	40°07'56.662"N	104°51'23.565"W	0.00	
917.00†	0.000	191.200	917.00	0.00	0.00	0.00	40°07'56.662"N	104°51'23.565"W	0.00	
1017.00†	0.000	191.200	1017.00	0.00	0.00	0.00	40°07'56.662"N	104°51'23.565"W	0.00	
1100.00	0.000	191.200	1100.00	0.00	0.00	0.00	40°07'56.662"N	104°51'23.565"W	0.00	BEGIN NUDGE
1117.00†	0.340	191.200	1117.00	0.05	-0.05	-0.01	40°07'56.662"N	104°51'23.565"W	2.00	
1217.00†	2.340	191.200	1216.97	2.35	-2.34	-0.46	40°07'56.639"N	104°51'23.571"W	2.00	
1317.00†	4.340	191.200	1316.79	8.08	-8.06	-1.60	40°07'56.582"N	104°51'23.586"W	2.00	
1417.00†	6.340	191.200	1416.35	17.24	-17.19	-3.40	40°07'56.492"N	104°51'23.609"W	2.00	
1517.00†	8.340	191.200	1515.53	29.80	-29.72	-5.88	40°07'56.368"N	104°51'23.641"W	2.00	
1600.00	10.000	191.200	1597.47	42.82	-42.69	-8.45	40°07'56.240"N	104°51'23.674"W	2.00	END NUDGE
1617.00†	10.000	191.200	1614.21	45.72	-45.59	-9.03	40°07'56.211"N	104°51'23.681"W	0.00	
1717.00†	10.000	191.200	1712.69	62.80	-62.62	-12.40	40°07'56.043"N	104°51'23.725"W	0.00	
1817.00†	10.000	191.200	1811.17	79.88	-79.66	-15.77	40°07'55.875"N	104°51'23.768"W	0.00	
1917.00†	10.000	191.200	1909.65	96.97	-96.69	-19.15	40°07'55.706"N	104°51'23.811"W	0.00	
2017.00†	10.000	191.200	2008.13	114.05	-113.73	-22.52	40°07'55.538"N	104°51'23.855"W	0.00	
2117.00†	10.000	191.200	2106.61	131.13	-130.76	-25.89	40°07'55.370"N	104°51'23.898"W	0.00	
2217.00†	10.000	191.200	2205.09	148.22	-147.79	-29.26	40°07'55.201"N	104°51'23.942"W	0.00	
2317.00†	10.000	191.200	2303.57	165.30	-164.83	-32.64	40°07'55.033"N	104°51'23.985"W	0.00	
2417.00†	10.000	191.200	2402.05	182.38	-181.86	-36.01	40°07'54.865"N	104°51'24.029"W	0.00	
2517.00†	10.000	191.200	2500.53	199.46	-198.90	-39.38	40°07'54.696"N	104°51'24.072"W	0.00	
2617.00†	10.000	191.200	2599.01	216.55	-215.93	-42.76	40°07'54.528"N	104°51'24.115"W	0.00	
2717.00†	10.000	191.200	2697.50	233.63	-232.96	-46.13	40°07'54.360"N	104°51'24.159"W	0.00	
2817.00†	10.000	191.200	2795.98	250.71	-250.00	-49.50	40°07'54.191"N	104°51'24.202"W	0.00	
2917.00†	10.000	191.200	2894.46	267.79	-267.03	-52.87	40°07'54.023"N	104°51'24.246"W	0.00	
3017.00†	10.000	191.200	2992.94	284.88	-284.07	-56.25	40°07'53.855"N	104°51'24.289"W	0.00	
3117.00†	10.000	191.200	3091.42	301.96	-301.10	-59.62	40°07'53.686"N	104°51'24.333"W	0.00	
3217.00†	10.000	191.200	3189.90	319.04	-318.14	-62.99	40°07'53.518"N	104°51'24.376"W	0.00	
3317.00†	10.000	191.200	3288.38	336.13	-335.17	-66.37	40°07'53.350"N	104°51'24.419"W	0.00	
3417.00†	10.000	191.200	3386.86	353.21	-352.20	-69.74	40°07'53.181"N	104°51'24.463"W	0.00	
3517.00†	10.000	191.200	3485.34	370.29	-369.24	-73.11	40°07'53.013"N	104°51'24.506"W	0.00	
3617.00†	10.000	191.200	3583.82	387.37	-386.27	-76.48	40°07'52.845"N	104°51'24.550"W	0.00	
3717.00†	10.000	191.200	3682.30	404.46	-403.31	-79.86	40°07'52.676"N	104°51'24.593"W	0.00	
3817.00†	10.000	191.200	3780.78	421.54	-420.34	-83.23	40°07'52.508"N	104°51'24.637"W	0.00	
3833.04	10.000	191.200	3796.58	424.28	-423.07	-83.77	40°07'52.481"N	104°51'24.643"W	0.00	BEGIN DROP
3917.00†	8.321	191.200	3879.47	437.43	-436.18	-86.37	40°07'52.352"N	104°51'24.677"W	2.00	



# Planned Wellpath Report

## BARCLAY 15N-26HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP		Slot	SLOT#01 BARCLAY 15N-26HZ (577'FSL & 2223'FEL, SEC.14)
Area	COLORADO		Well	BARCLAY 15N-26HZ
Field	WELD COUNTY (KERR MCGEE)		Wellbore	BARCLAY 15N-26HZ PWB
Facility	SEC.14-T2N-R67W			

WELLPATH DATA (187 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4017.00†	6.321	191.200	3978.65	449.96	-448.68	-88.84	40°07'52.228"N	104°51'24.709"W	2.00	
4117.00†	4.321	191.200	4078.21	459.08	-457.78	-90.64	40°07'52.138"N	104°51'24.732"W	2.00	
4217.00†	2.321	191.200	4178.04	464.78	-463.46	-91.77	40°07'52.082"N	104°51'24.746"W	2.00	
4317.00†	0.321	191.200	4278.01	467.05	-465.72	-92.22	40°07'52.060"N	104°51'24.752"W	2.00	
4333.04	0.000	180.376	4294.05	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	2.00	END DROP
4417.00†	0.000	180.376	4378.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
4517.00†	0.000	180.376	4478.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
4617.00†	0.000	180.376	4578.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
4665.99†	0.000	180.376	4627.00	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	SUSSEX
4717.00†	0.000	180.376	4678.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
4817.00†	0.000	180.376	4778.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
4917.00†	0.000	180.376	4878.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
5017.00†	0.000	180.376	4978.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
5117.00†	0.000	180.376	5078.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
5217.00†	0.000	180.376	5178.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
5317.00†	0.000	180.376	5278.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
5417.00†	0.000	180.376	5378.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
5517.00†	0.000	180.376	5478.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
5617.00†	0.000	180.376	5578.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
5717.00†	0.000	180.376	5678.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
5817.00†	0.000	180.376	5778.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
5917.00†	0.000	180.376	5878.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
6017.00†	0.000	180.376	5978.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
6117.00†	0.000	180.376	6078.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
6217.00†	0.000	180.376	6178.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
6317.00†	0.000	180.376	6278.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
6417.00†	0.000	180.376	6378.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
6517.00†	0.000	180.376	6478.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
6563.00†	0.000	180.376	6524.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	4 1/2" LINER TOP
6617.00†	0.000	180.376	6578.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
6717.00†	0.000	180.376	6678.01	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	
6768.04	0.000	180.376	6729.05	467.09	-465.77	-92.22	40°07'52.059"N	104°51'24.752"W	0.00	KOP, BUILD @ 10°/100'
6817.00†	4.896	180.376	6777.95	469.18	-467.86	-92.24	40°07'52.039"N	104°51'24.752"W	10.00	
6917.00†	14.896	180.376	6876.33	486.35	-485.02	-92.35	40°07'51.869"N	104°51'24.754"W	10.00	
7017.00†	24.896	180.376	6970.25	520.34	-519.01	-92.57	40°07'51.533"N	104°51'24.757"W	10.00	
7117.00†	34.896	180.376	7056.83	570.11	-568.79	-92.90	40°07'51.041"N	104°51'24.761"W	10.00	
7217.00†	44.896	180.376	7133.45	634.17	-632.84	-93.32	40°07'50.408"N	104°51'24.766"W	10.00	
7261.92†	49.388	180.376	7164.00	667.09	-665.76	-93.54	40°07'50.083"N	104°51'24.769"W	10.00	SHARON SPRINGS
7317.00†	54.896	180.376	7197.79	710.56	-709.23	-93.82	40°07'49.653"N	104°51'24.773"W	10.00	
7390.31†	62.227	180.376	7236.00	773.06	-771.74	-94.23	40°07'49.036"N	104°51'24.778"W	10.00	NIOBRARA A
7417.00†	64.896	180.376	7247.88	796.96	-795.63	-94.39	40°07'48.799"N	104°51'24.780"W	10.00	
7478.69†	71.065	180.376	7271.00	854.12	-852.80	-94.77	40°07'48.235"N	104°51'24.785"W	10.00	NIOBRARA B
7517.00†	74.896	180.376	7282.21	890.74	-889.42	-95.01	40°07'47.873"N	104°51'24.788"W	10.00	
7617.00†	84.896	180.376	7299.73	989.06	-987.74	-95.65	40°07'46.901"N	104°51'24.796"W	10.00	
7664.99	89.695	180.376	7302.00	1036.98	-1035.66	-95.97	40°07'46.427"N	104°51'24.800"W	10.00	LANDING POINT



# Planned Wellpath Report

## BARCLAY 15N-26HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BARCLAY 15N-26HZ (577'FSL & 2223'FEL, SEC.14)	
Area	COLORADO	Well	BARCLAY 15N-26HZ	
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 15N-26HZ PWB	
Facility	SEC.14-T2N-R67W			

WELLPATH DATA (187 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7717.00†	89.695	180.376	7302.27	1088.99	-1087.67	-96.31	40°07'45.914"N	104°51'24.805"W	0.00	
7817.00†	89.695	180.376	7302.80	1188.98	-1187.67	-96.97	40°07'44.925"N	104°51'24.813"W	0.00	
7917.00†	89.695	180.376	7303.34	1288.98	-1287.66	-97.62	40°07'43.937"N	104°51'24.822"W	0.00	
8017.00†	89.695	180.376	7303.87	1388.97	-1387.66	-98.28	40°07'42.949"N	104°51'24.830"W	0.00	
8117.00†	89.695	180.376	7304.40	1488.97	-1487.66	-98.94	40°07'41.961"N	104°51'24.839"W	0.00	
8217.00†	89.695	180.376	7304.93	1588.96	-1587.65	-99.59	40°07'40.973"N	104°51'24.847"W	0.00	
8317.00†	89.695	180.376	7305.47	1688.96	-1687.65	-100.25	40°07'39.984"N	104°51'24.856"W	0.00	
8417.00†	89.695	180.376	7306.00	1788.95	-1787.64	-100.91	40°07'38.996"N	104°51'24.864"W	0.00	
8517.00†	89.695	180.376	7306.53	1888.95	-1887.64	-101.57	40°07'38.008"N	104°51'24.873"W	0.00	
8617.00†	89.695	180.376	7307.06	1988.95	-1987.64	-102.22	40°07'37.020"N	104°51'24.881"W	0.00	
8717.00†	89.695	180.376	7307.60	2088.94	-2087.63	-102.88	40°07'36.032"N	104°51'24.889"W	0.00	
8817.00†	89.695	180.376	7308.13	2188.94	-2187.63	-103.54	40°07'35.044"N	104°51'24.898"W	0.00	
8917.00†	89.695	180.376	7308.66	2288.93	-2287.63	-104.19	40°07'34.055"N	104°51'24.906"W	0.00	
9017.00†	89.695	180.376	7309.19	2388.93	-2387.62	-104.85	40°07'33.067"N	104°51'24.915"W	0.00	
9117.00†	89.695	180.376	7309.73	2488.92	-2487.62	-105.51	40°07'32.079"N	104°51'24.923"W	0.00	
9217.00†	89.695	180.376	7310.26	2588.92	-2587.62	-106.16	40°07'31.091"N	104°51'24.932"W	0.00	
9317.00†	89.695	180.376	7310.79	2688.91	-2687.61	-106.82	40°07'30.103"N	104°51'24.940"W	0.00	
9417.00†	89.695	180.376	7311.32	2788.91	-2787.61	-107.48	40°07'29.115"N	104°51'24.949"W	0.00	
9517.00†	89.695	180.376	7311.86	2888.90	-2887.61	-108.14	40°07'28.126"N	104°51'24.957"W	0.00	
9617.00†	89.695	180.376	7312.39	2988.90	-2987.60	-108.79	40°07'27.138"N	104°51'24.965"W	0.00	
9717.00†	89.695	180.376	7312.92	3088.89	-3087.60	-109.45	40°07'26.150"N	104°51'24.974"W	0.00	
9817.00†	89.695	180.376	7313.45	3188.89	-3187.59	-110.11	40°07'25.162"N	104°51'24.982"W	0.00	
9917.00†	89.695	180.376	7313.98	3288.88	-3287.59	-110.76	40°07'24.174"N	104°51'24.991"W	0.00	
10017.00†	89.695	180.376	7314.52	3388.88	-3387.59	-111.42	40°07'23.186"N	104°51'24.999"W	0.00	
10117.00†	89.695	180.376	7315.05	3488.87	-3487.58	-112.08	40°07'22.197"N	104°51'25.008"W	0.00	
10217.00†	89.695	180.376	7315.58	3588.87	-3587.58	-112.73	40°07'21.209"N	104°51'25.016"W	0.00	
10317.00†	89.695	180.376	7316.11	3688.86	-3687.58	-113.39	40°07'20.221"N	104°51'25.025"W	0.00	
10417.00†	89.695	180.376	7316.65	3788.86	-3787.57	-114.05	40°07'19.233"N	104°51'25.033"W	0.00	
10517.00†	89.695	180.376	7317.18	3888.85	-3887.57	-114.71	40°07'18.245"N	104°51'25.042"W	0.00	
10617.00†	89.695	180.376	7317.71	3988.85	-3987.57	-115.36	40°07'17.256"N	104°51'25.050"W	0.00	
10717.00†	89.695	180.376	7318.24	4088.84	-4087.56	-116.02	40°07'16.268"N	104°51'25.058"W	0.00	
10817.00†	89.695	180.376	7318.78	4188.84	-4187.56	-116.68	40°07'15.280"N	104°51'25.067"W	0.00	
10917.00†	89.695	180.376	7319.31	4288.83	-4287.56	-117.33	40°07'14.292"N	104°51'25.075"W	0.00	
11017.00†	89.695	180.376	7319.84	4388.83	-4387.55	-117.99	40°07'13.304"N	104°51'25.084"W	0.00	
11117.00†	89.695	180.376	7320.37	4488.82	-4487.55	-118.65	40°07'12.316"N	104°51'25.092"W	0.00	
11217.00†	89.695	180.376	7320.91	4588.82	-4587.54	-119.30	40°07'11.327"N	104°51'25.101"W	0.00	
11317.00†	89.695	180.376	7321.44	4688.81	-4687.54	-119.96	40°07'10.339"N	104°51'25.109"W	0.00	
11417.00†	89.695	180.376	7321.97	4788.81	-4787.54	-120.62	40°07'09.351"N	104°51'25.118"W	0.00	
11517.00†	89.695	180.376	7322.50	4888.80	-4887.53	-121.28	40°07'08.363"N	104°51'25.126"W	0.00	
11617.00†	89.695	180.376	7323.04	4988.80	-4987.53	-121.93	40°07'07.375"N	104°51'25.135"W	0.00	
11717.00†	89.695	180.376	7323.57	5088.79	-5087.53	-122.59	40°07'06.387"N	104°51'25.143"W	0.00	
11817.00†	89.695	180.376	7324.10	5188.79	-5187.52	-123.25	40°07'05.398"N	104°51'25.151"W	0.00	
11917.00†	89.695	180.376	7324.63	5288.78	-5287.52	-123.90	40°07'04.410"N	104°51'25.160"W	0.00	
12017.00†	89.695	180.376	7325.17	5388.78	-5387.52	-124.56	40°07'03.422"N	104°51'25.168"W	0.00	
12117.00†	89.695	180.376	7325.70	5488.77	-5487.51	-125.22	40°07'02.434"N	104°51'25.177"W	0.00	





# Planned Wellpath Report

## BARCLAY 15N-26HZ (PERMIT REV-1) PWP

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### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BARCLAY 15N-26HZ (577'FSL & 2223'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 15N-26HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 15N-26HZ PWB
Facility	SEC.14-T2N-R67W		

### WELLPATH DATA (187 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12217.00†	89.695	180.376	7326.23	5588.77	-5587.51	-125.87	40°07'01.446"N	104°51'25.185"W	0.00	
12317.00†	89.695	180.376	7326.76	5688.76	-5687.51	-126.53	40°07'00.457"N	104°51'25.194"W	0.00	
12417.00†	89.695	180.376	7327.29	5788.76	-5787.50	-127.19	40°06'59.469"N	104°51'25.202"W	0.00	
12517.00†	89.695	180.376	7327.83	5888.75	-5887.50	-127.85	40°06'58.481"N	104°51'25.211"W	0.00	
12617.00†	89.695	180.376	7328.36	5988.75	-5987.49	-128.50	40°06'57.493"N	104°51'25.219"W	0.00	
12717.00†	89.695	180.376	7328.89	6088.74	-6087.49	-129.16	40°06'56.505"N	104°51'25.227"W	0.00	
12817.00†	89.695	180.376	7329.42	6188.74	-6187.49	-129.82	40°06'55.517"N	104°51'25.236"W	0.00	
12917.00†	89.695	180.376	7329.96	6288.73	-6287.48	-130.47	40°06'54.528"N	104°51'25.244"W	0.00	
13017.00†	89.695	180.376	7330.49	6388.73	-6387.48	-131.13	40°06'53.540"N	104°51'25.253"W	0.00	
13117.00†	89.695	180.376	7331.02	6488.72	-6487.48	-131.79	40°06'52.552"N	104°51'25.261"W	0.00	
13217.00†	89.695	180.376	7331.55	6588.72	-6587.47	-132.44	40°06'51.564"N	104°51'25.270"W	0.00	
13317.00†	89.695	180.376	7332.09	6688.71	-6687.47	-133.10	40°06'50.576"N	104°51'25.278"W	0.00	
13417.00†	89.695	180.376	7332.62	6788.71	-6787.47	-133.76	40°06'49.588"N	104°51'25.287"W	0.00	
13517.00†	89.695	180.376	7333.15	6888.70	-6887.46	-134.41	40°06'48.599"N	104°51'25.295"W	0.00	
13617.00†	89.695	180.376	7333.68	6988.70	-6987.46	-135.07	40°06'47.611"N	104°51'25.303"W	0.00	
13717.00†	89.695	180.376	7334.22	7088.69	-7087.46	-135.73	40°06'46.623"N	104°51'25.312"W	0.00	
13817.00†	89.695	180.376	7334.75	7188.69	-7187.45	-136.39	40°06'45.635"N	104°51'25.320"W	0.00	
13917.00†	89.695	180.376	7335.28	7288.68	-7287.45	-137.04	40°06'44.647"N	104°51'25.329"W	0.00	
14017.00†	89.695	180.376	7335.81	7388.68	-7387.44	-137.70	40°06'43.658"N	104°51'25.337"W	0.00	
14117.00†	89.695	180.376	7336.35	7488.67	-7487.44	-138.36	40°06'42.670"N	104°51'25.346"W	0.00	
14217.00†	89.695	180.376	7336.88	7588.67	-7587.44	-139.01	40°06'41.682"N	104°51'25.354"W	0.00	
14317.00†	89.695	180.376	7337.41	7688.66	-7687.43	-139.67	40°06'40.694"N	104°51'25.363"W	0.00	
14417.00†	89.695	180.376	7337.94	7788.66	-7787.43	-140.33	40°06'39.706"N	104°51'25.371"W	0.00	
14517.00†	89.695	180.376	7338.48	7888.65	-7887.43	-140.98	40°06'38.718"N	104°51'25.380"W	0.00	
14617.00†	89.695	180.376	7339.01	7988.65	-7987.42	-141.64	40°06'37.729"N	104°51'25.388"W	0.00	
14717.00†	89.695	180.376	7339.54	8088.64	-8087.42	-142.30	40°06'36.741"N	104°51'25.396"W	0.00	
14817.00†	89.695	180.376	7340.07	8188.64	-8187.42	-142.96	40°06'35.753"N	104°51'25.405"W	0.00	
14917.00†	89.695	180.376	7340.60	8288.63	-8287.41	-143.61	40°06'34.765"N	104°51'25.413"W	0.00	
15017.00†	89.695	180.376	7341.14	8388.63	-8387.41	-144.27	40°06'33.777"N	104°51'25.422"W	0.00	
15117.00†	89.695	180.376	7341.67	8488.62	-8487.41	-144.93	40°06'32.789"N	104°51'25.430"W	0.00	
15217.00†	89.695	180.376	7342.20	8588.62	-8587.40	-145.58	40°06'31.800"N	104°51'25.439"W	0.00	
15317.00†	89.695	180.376	7342.73	8688.61	-8687.40	-146.24	40°06'30.812"N	104°51'25.447"W	0.00	
15417.00†	89.695	180.376	7343.27	8788.61	-8787.39	-146.90	40°06'29.824"N	104°51'25.456"W	0.00	
15517.00†	89.695	180.376	7343.80	8888.60	-8887.39	-147.55	40°06'28.836"N	104°51'25.464"W	0.00	
15617.00†	89.695	180.376	7344.33	8988.60	-8987.39	-148.21	40°06'27.848"N	104°51'25.472"W	0.00	
15717.00†	89.695	180.376	7344.86	9088.59	-9087.38	-148.87	40°06'26.859"N	104°51'25.481"W	0.00	
15817.00†	89.695	180.376	7345.40	9188.59	-9187.38	-149.53	40°06'25.871"N	104°51'25.489"W	0.00	
15917.00†	89.695	180.376	7345.93	9288.58	-9287.38	-150.18	40°06'24.883"N	104°51'25.498"W	0.00	
16017.00†	89.695	180.376	7346.46	9388.58	-9387.37	-150.84	40°06'23.895"N	104°51'25.506"W	0.00	
16117.00†	89.695	180.376	7346.99	9488.57	-9487.37	-151.50	40°06'22.907"N	104°51'25.515"W	0.00	
16217.00†	89.695	180.376	7347.53	9588.57	-9587.37	-152.15	40°06'21.919"N	104°51'25.523"W	0.00	
16317.00†	89.695	180.376	7348.06	9688.56	-9687.36	-152.81	40°06'20.930"N	104°51'25.532"W	0.00	
16417.00†	89.695	180.376	7348.59	9788.56	-9787.36	-153.47	40°06'19.942"N	104°51'25.540"W	0.00	
16517.00†	89.695	180.376	7349.12	9888.55	-9887.36	-154.12	40°06'18.954"N	104°51'25.548"W	0.00	
16617.00†	89.695	180.376	7349.66	9988.55	-9987.35	-154.78	40°06'17.966"N	104°51'25.557"W	0.00	



# Planned Wellpath Report

## BARCLAY 15N-26HZ (PERMIT REV-1) PWP

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### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BARCLAY 15N-26HZ (577'FSL & 2223'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 15N-26HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 15N-26HZ PWB
Facility	SEC.14-T2N-R67W		

### WELLPATH DATA (187 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16717.00†	89.695	180.376	7350.19	10088.54	-10087.35	-155.44	40°06'16.978"N	104°51'25.565"W	0.00	
16817.00†	89.695	180.376	7350.72	10188.54	-10187.34	-156.10	40°06'15.989"N	104°51'25.574"W	0.00	
16917.00†	89.695	180.376	7351.25	10288.53	-10287.34	-156.75	40°06'15.001"N	104°51'25.582"W	0.00	
17017.00†	89.695	180.376	7351.79	10388.53	-10387.34	-157.41	40°06'14.013"N	104°51'25.591"W	0.00	
17117.00†	89.695	180.376	7352.32	10488.52	-10487.33	-158.07	40°06'13.025"N	104°51'25.599"W	0.00	
17217.00†	89.695	180.376	7352.85	10588.52	-10587.33	-158.72	40°06'12.037"N	104°51'25.608"W	0.00	
17245.21	89.695	180.376	7353.00 <sup>1</sup>	10616.73	-10615.54	-158.91	40°06'11.758"N	104°51'25.610"W	0.00	TOTAL DEPTH

### HOLE & CASING SECTIONS -

Ref Wellbore: BARCLAY 15N-26HZ PWB Ref Wellpath: BARCLAY 15N-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	7664.99	6564.99	1100.00	7302.00	0.00	0.00	-1035.66	-95.97
7in Casing Intermediate	17.00	7664.99	7647.99	17.00	7302.00	0.00	0.00	-1035.66	-95.97
6.125in Open Hole	7664.99	17245.21	9580.22	7302.00	7353.00	-1035.66	-95.97	-10615.54	-158.91
4.5in Casing Production	17.00	17245.21	17228.21	17.00	7353.00	0.00	0.00	-10615.54	-158.91



# Planned Wellpath Report

## BARCLAY 15N-26HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BARCLAY 15N-26HZ (577'FSL & 2223'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 15N-26HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 15N-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	-3.54	514.04	3180428.45	1291732.23	40°07'56.627"N	104°51'16.947"W	polygon
SEC.23-T2N-R67W SECTION LINES		0.00	-3.54	514.04	3180428.45	1291732.23	40°07'56.627"N	104°51'16.947"W	polygon
SEC.26-T2N-R67W SECTION LINES		0.00	-3.54	514.04	3180428.45	1291732.23	40°07'56.627"N	104°51'16.947"W	polygon
1) BARCLAY 15N-26HZ BHL ON PLAT (460'FSL & 2315'FEL, SEC.26)	17245.21	7353.00	-10615.54	-158.91	3179832.55	1281116.07	40°06'11.758"N	104°51'25.610"W	point
BARCLAY 15N-26HZ LANDBOX		7353.00	0.00	0.00	3179914.43	1291732.03	40°07'56.662"N	104°51'23.565"W	polygon
SEC.14-T2N-R67W HARDLINES (460' SETBACK)		7353.00	-3.54	514.04	3180428.45	1291732.23	40°07'56.627"N	104°51'16.947"W	polygon
SEC.23-T2N-R67W HARDLINES (460' SETBACK)		7353.00	-3.54	514.04	3180428.45	1291732.23	40°07'56.627"N	104°51'16.947"W	polygon
SEC.26-T2N-R67W HARDLINES (460' SETBACK)		7353.00	-3.54	514.04	3180428.45	1291732.23	40°07'56.627"N	104°51'16.947"W	polygon

SURVEY PROGRAM - Ref Wellbore: BARCLAY 15N-26HZ PWB				Ref Wellpath: BARCLAY 15N-26HZ (PERMIT REV-1) PWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	
17.00	7664.99	NaviTrak (Standard)		BARCLAY 15N-26HZ PWB	
7664.99	17245.21	OnTrak (Standard)		BARCLAY 15N-26HZ PWB	





# Planned Wellpath Report

## BARCLAY 15N-26HZ (PERMIT REV-1) PWP

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### REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BARCLAY 15N-26HZ (577'FSL & 2223'FEL, SEC.14)
Area	COLORADO	Well	BARCLAY 15N-26HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BARCLAY 15N-26HZ PWB
Facility	SEC.14-T2N-R67W		

### WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
401.00	0.000	191.200	401.00	FOX HILLS BASE
4665.99	0.000	180.376	4627.00	SUSSEX
6563.00	0.000	180.376	6524.01	4 1/2" LINER TOP
7261.92	49.388	180.376	7164.00	SHARON SPRINGS
7390.31	62.227	180.376	7236.00	NIOBRARA A
7478.69	71.065	180.376	7271.00	NIOBRARA B

### DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	191.200	17.00	TIE ON
1100.00	0.000	191.200	1100.00	BEGIN NUDGE
1600.00	10.000	191.200	1597.47	END NUDGE
3833.04	10.000	191.200	3796.58	BEGIN DROP
4333.04	0.000	180.376	4294.05	END DROP
6768.04	0.000	180.376	6729.05	KOP, BUILD @ 10°/100'
7664.99	89.695	180.376	7302.00	LANDING POINT
17245.21	89.695	180.376	7353.00	TOTAL DEPTH