

Location:	COLORADO	Slot:	SLOT#06 TEDFORD 3N-28HZ (285'FSL & 1312'FWL, SEC.28)
Field:	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Well:	TEDFORD 3N-28HZ
Facility:	SEC.28-T2N-R66W	Wellbore:	TEDFORD 3N-28HZ PWB

Plot reference wellpath is TEDFORD 3N-28HZ (PERMIT REV-3) PWP

True vertical depths are referenced to PERMIT (17'KB) (RKB)

Measured depths are referenced to PERMIT (17'KB) (

PERMIT (17"KB) (RKB) to Mean Sea Level: 4980 feet

Mean Sea Level to Mud line (At Slot: SLOT#06 TEDFORD 3N-28HZ (285'FSL & 1312'FWL, SEC.28)): 0 feet

Coordinates are in feet referenced to Slot

Grid System: NAD83 / UTM Zone 13 North, US feet

North Reference: True north

Scale: Grid distance

Depths are in feet

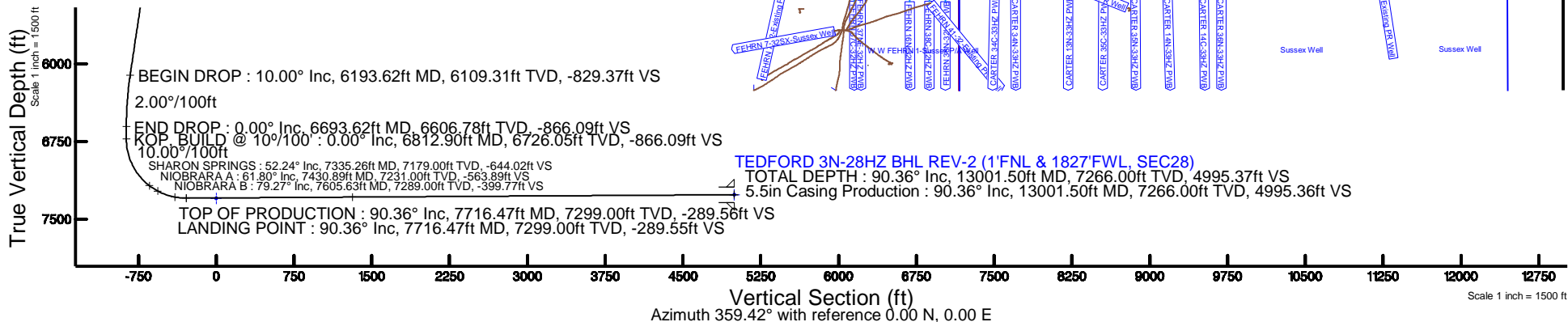
Created by: amarcarr on 04/May/2015

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.28-T2N-R66W			1700626.562	14568707.730	40°06'54.245"N	104°47'04.711"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#06 TEDFORO 3N-28R2 (285FSL & 1312FWL, SEC.28)	-4529.47	-646.01	1699991.524	14564176.715	40°06'09.466"N	104°47'13.028"W
PERMIT (17KB) (RKB) to Mud line (At Slot: SLOT#06 TEDFORO 3N-28R2 (285FSL & 1312FWL, SEC.28))					4980ft	
Mean Sea Level to Mud line (At Slot: SLOT#06 TEDFORO 3N-28R2 (285FSL & 1312FWL, SEC.28))					0ft	
PERMIT (17KB) (RKB) to Mean Sea Level					4980ft	

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	13001.50	ISCWSA MWD, Rev. 2, axial magnetic correction	Custom APC_ISCWSA REV 2 MWD+FR1+SC (approximation)		TEDFORD 3N-28HZ PW

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.33-T2N-R6W SECTION LINES		4.00	-1109.37	12.10	1700006.28	14563067.38	40°05'58.499"N	104°47'12.872"W
SEC.29-T2N-R6W SECTION LINES		41.00	-581.66	-2213.06	1697779.87	14563589.76	40°06'03.715"N	104°47'41.518"W
SEC.32-T2N-R6W SECTION LINES		41.00	-581.66	-2213.06	1697779.87	14563589.76	40°06'03.715"N	104°47'41.518"W
TFDOR 33-29R24 BHL REV.12 (1FTN. & 1827FWL SEC.28)	13001.50	7366.00	5000.66	500.87	1704080.41	14569178.55	40°06'58.903"N	104°47'06.578"W
SEC.28-T2N-R6W SECTION LINES		7361.00	-0.54	59.84	1700051.47	14561476.32	40°06'09.461"N	104°47'12.256"W

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE-ON	17.00	0.000	146.954	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	200.00	0.000	146.954	200.00	0.00	0.00	0.00	0.00
END NUDGE	866.67	10.000	146.954	863.29	-48.64	31.64	1.50	-48.96
BEGIN DROP	6193.62	10.000	146.954	6109.31	-824.02	536.06	0.00	-829.37
END DROP	6693.62	0.000	359.424	6606.78	-860.51	559.80	2.00	-866.09
KOP, BUILD @ 10°/100'	6812.90	0.000	359.424	6726.05	-860.51	559.80	0.00	-866.09
LANDING POINT	7716.47	90.358	359.424	7299.00	-284.00	554.00	10.00	-289.55
TOTAL DEPTH	13001.50	90.358	359.424	7266.00	5000.66	500.87	0.00	4995.37





Planned Wellpath Report

TEDFORD 3N-28HZ (PERMIT REV-3) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#06 TEDFORD 3N-28HZ (285'FSL & 1312'FWL, SEC.28)
Area	Compass Import	Well	TEDFORD 3N-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	TEDFORD 3N-28HZ PWB
Facility	SEC.28-T2N-R66W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 4.1.1
North Reference	True	User	Amarcar
Scale	0.999604	Report Generated	04/May/2015 at 10:22
Convergence at slot	0.14° East	Database/Source file	MAP CHECK./TEDFORD_3N-28HZ_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-4529.47	-646.01	1699991.52	14564176.72	40°06'09.466"N	104°47'13.028"W
Facility Reference Pt			1700626.56	14568707.73	40°06'54.245"N	104°47'04.711"W
Field Reference Pt			1700626.56	14568707.73	40°06'54.245"N	104°47'04.711"W

WELLPATH DATUM			
Calculation method	Minimum curvature	PERMIT (17'KB) (RKB) to 2N-66W-28 Offsets vertical datum	4980.00ft
Horizontal Reference Pt	Slot	PERMIT (17'KB) (RKB) to Mean Sea Level	4980.00ft
Vertical Reference Pt	PERMIT (17'KB) (RKB)	PERMIT (17'KB) (RKB) to Mud Line at Slot (SLOT#06 TEDFORD 3N-28HZ (285'FSL & 1312'FWL, SEC.28))	4980.00ft
MD Reference Pt	PERMIT (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.42°



Planned Wellpath Report

TEDFORD 3N-28HZ (PERMIT REV-3) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#06 TEDFORD 3N-28HZ (285'FSL & 1312'FWL, SEC.28)
Area	Compass Import	Well	TEDFORD 3N-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	TEDFORD 3N-28HZ PWB
Facility	SEC.28-T2N-R66W		

WELLPATH DATA (146 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	146.954	0.00	0.00	0.00	0.00	40°06'09.466"N	104°47'13.028"W	0.00	
17.00	0.000	146.954	17.00	0.00	0.00	0.00	40°06'09.466"N	104°47'13.028"W	0.00	TIE-ON
117.00†	0.000	146.954	117.00	0.00	0.00	0.00	40°06'09.466"N	104°47'13.028"W	0.00	
200.00	0.000	146.954	200.00	0.00	0.00	0.00	40°06'09.466"N	104°47'13.028"W	0.00	BEGIN NUDGE
217.00†	0.255	146.954	217.00	-0.03	-0.03	0.02	40°06'09.466"N	104°47'13.027"W	1.50	
317.00†	1.755	146.954	316.98	-1.51	-1.50	0.98	40°06'09.451"N	104°47'13.015"W	1.50	
417.00†	3.255	146.954	416.88	-5.20	-5.17	3.36	40°06'09.415"N	104°47'12.984"W	1.50	
517.00†	4.755	146.954	516.64	-11.09	-11.02	7.17	40°06'09.357"N	104°47'12.935"W	1.50	
617.00†	6.255	146.954	616.17	-19.18	-19.06	12.40	40°06'09.278"N	104°47'12.868"W	1.50	
717.00†	7.755	146.954	715.42	-29.47	-29.28	19.05	40°06'09.177"N	104°47'12.782"W	1.50	
817.00†	9.255	146.954	814.32	-41.95	-41.68	27.11	40°06'09.054"N	104°47'12.679"W	1.50	
866.67	10.000	146.954	863.29	-48.96	-48.64	31.64	40°06'08.985"N	104°47'12.620"W	1.50	END NUDGE
917.00†	10.000	146.954	912.86	-56.33	-55.97	36.41	40°06'08.913"N	104°47'12.559"W	0.00	
1017.00†	10.000	146.954	1011.34	-70.98	-70.53	45.88	40°06'08.769"N	104°47'12.437"W	0.00	
1049.15†	10.000	146.954	1043.00	-75.69	-75.21	48.92	40°06'08.723"N	104°47'12.398"W	0.00	FOX HILLS BASE
1117.00†	10.000	146.954	1109.82	-85.63	-85.08	55.35	40°06'08.625"N	104°47'12.315"W	0.00	
1217.00†	10.000	146.954	1208.30	-100.28	-99.64	64.82	40°06'08.481"N	104°47'12.193"W	0.00	
1317.00†	10.000	146.954	1306.78	-114.93	-114.19	74.29	40°06'08.337"N	104°47'12.071"W	0.00	
1417.00†	10.000	146.954	1405.26	-129.58	-128.75	83.76	40°06'08.194"N	104°47'11.949"W	0.00	
1517.00†	10.000	146.954	1503.74	-144.23	-143.30	93.23	40°06'08.050"N	104°47'11.828"W	0.00	
1617.00†	10.000	146.954	1602.22	-158.88	-157.86	102.69	40°06'07.906"N	104°47'11.706"W	0.00	
1717.00†	10.000	146.954	1700.70	-173.53	-172.42	112.16	40°06'07.762"N	104°47'11.584"W	0.00	
1817.00†	10.000	146.954	1799.18	-188.18	-186.97	121.63	40°06'07.618"N	104°47'11.462"W	0.00	
1917.00†	10.000	146.954	1897.66	-202.84	-201.53	131.10	40°06'07.474"N	104°47'11.340"W	0.00	
2017.00†	10.000	146.954	1996.14	-217.49	-216.08	140.57	40°06'07.330"N	104°47'11.218"W	0.00	
2117.00†	10.000	146.954	2094.63	-232.14	-230.64	150.04	40°06'07.186"N	104°47'11.096"W	0.00	
2217.00†	10.000	146.954	2193.11	-246.79	-245.19	159.51	40°06'07.042"N	104°47'10.974"W	0.00	
2317.00†	10.000	146.954	2291.59	-261.44	-259.75	168.98	40°06'06.898"N	104°47'10.852"W	0.00	
2417.00†	10.000	146.954	2390.07	-276.09	-274.31	178.45	40°06'06.754"N	104°47'10.730"W	0.00	
2517.00†	10.000	146.954	2488.55	-290.74	-288.86	187.92	40°06'06.611"N	104°47'10.609"W	0.00	
2617.00†	10.000	146.954	2587.03	-305.39	-303.42	197.39	40°06'06.467"N	104°47'10.487"W	0.00	
2717.00†	10.000	146.954	2685.51	-320.04	-317.97	206.86	40°06'06.323"N	104°47'10.365"W	0.00	
2817.00†	10.000	146.954	2783.99	-334.69	-332.53	216.32	40°06'06.179"N	104°47'10.243"W	0.00	
2917.00†	10.000	146.954	2882.47	-349.34	-347.09	225.79	40°06'06.035"N	104°47'10.121"W	0.00	
3017.00†	10.000	146.954	2980.95	-363.99	-361.64	235.26	40°06'05.891"N	104°47'09.999"W	0.00	
3117.00†	10.000	146.954	3079.43	-378.64	-376.20	244.73	40°06'05.747"N	104°47'09.877"W	0.00	
3217.00†	10.000	146.954	3177.91	-393.29	-390.75	254.20	40°06'05.603"N	104°47'09.755"W	0.00	
3317.00†	10.000	146.954	3276.39	-407.94	-405.31	263.67	40°06'05.459"N	104°47'09.633"W	0.00	
3417.00†	10.000	146.954	3374.88	-422.59	-419.86	273.14	40°06'05.315"N	104°47'09.511"W	0.00	
3517.00†	10.000	146.954	3473.36	-437.24	-434.42	282.61	40°06'05.172"N	104°47'09.389"W	0.00	
3617.00†	10.000	146.954	3571.84	-451.89	-448.98	292.08	40°06'05.028"N	104°47'09.268"W	0.00	
3717.00†	10.000	146.954	3670.32	-466.54	-463.53	301.55	40°06'04.884"N	104°47'09.146"W	0.00	
3817.00†	10.000	146.954	3768.80	-481.19	-478.09	311.02	40°06'04.740"N	104°47'09.024"W	0.00	
3917.00†	10.000	146.954	3867.28	-495.84	-492.64	320.49	40°06'04.596"N	104°47'08.902"W	0.00	
4017.00†	10.000	146.954	3965.76	-510.49	-507.20	329.95	40°06'04.452"N	104°47'08.780"W	0.00	



Planned Wellpath Report

TEDFORD 3N-28HZ (PERMIT REV-3) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#06 TEDFORD 3N-28HZ (285'FSL & 1312'FWL, SEC.28)
Area	Compass Import	Well	TEDFORD 3N-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	TEDFORD 3N-28HZ PWB
Facility	SEC.28-T2N-R66W		

WELLPATH DATA (146 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4096.45†	10.000	146.954	4044.00	-522.13	-518.76	337.48	40°06'04.338"N	104°47'08.683"W	0.00	PARKMAN
4117.00†	10.000	146.954	4064.24	-525.14	-521.76	339.42	40°06'04.308"N	104°47'08.658"W	0.00	
4217.00†	10.000	146.954	4162.72	-539.79	-536.31	348.89	40°06'04.164"N	104°47'08.536"W	0.00	
4317.00†	10.000	146.954	4261.20	-554.44	-550.87	358.36	40°06'04.020"N	104°47'08.414"W	0.00	
4417.00†	10.000	146.954	4359.68	-569.09	-565.42	367.83	40°06'03.876"N	104°47'08.292"W	0.00	
4517.00†	10.000	146.954	4458.16	-583.74	-579.98	377.30	40°06'03.733"N	104°47'08.170"W	0.00	
4615.33†	10.000	146.954	4555.00	-598.15	-594.29	386.61	40°06'03.591"N	104°47'08.051"W	0.00	SUSSEX
4617.00†	10.000	146.954	4556.64	-598.39	-594.53	386.77	40°06'03.589"N	104°47'08.049"W	0.00	
4717.00†	10.000	146.954	4655.13	-613.04	-609.09	396.24	40°06'03.445"N	104°47'07.927"W	0.00	
4817.00†	10.000	146.954	4753.61	-627.69	-623.65	405.71	40°06'03.301"N	104°47'07.805"W	0.00	
4917.00†	10.000	146.954	4852.09	-642.34	-638.20	415.18	40°06'03.157"N	104°47'07.683"W	0.00	
5017.00†	10.000	146.954	4950.57	-656.99	-652.76	424.65	40°06'03.013"N	104°47'07.561"W	0.00	
5117.00†	10.000	146.954	5049.05	-671.64	-667.31	434.12	40°06'02.869"N	104°47'07.439"W	0.00	
5217.00†	10.000	146.954	5147.53	-686.29	-681.87	443.58	40°06'02.725"N	104°47'07.317"W	0.00	
5317.00†	10.000	146.954	5246.01	-700.94	-696.42	453.05	40°06'02.581"N	104°47'07.195"W	0.00	
5417.00†	10.000	146.954	5344.49	-715.59	-710.98	462.52	40°06'02.437"N	104°47'07.073"W	0.00	
5517.00†	10.000	146.954	5442.97	-730.24	-725.54	471.99	40°06'02.294"N	104°47'06.951"W	0.00	
5617.00†	10.000	146.954	5541.45	-744.90	-740.09	481.46	40°06'02.150"N	104°47'06.830"W	0.00	
5717.00†	10.000	146.954	5639.93	-759.55	-754.65	490.93	40°06'02.006"N	104°47'06.708"W	0.00	
5817.00†	10.000	146.954	5738.41	-774.20	-769.20	500.40	40°06'01.862"N	104°47'06.586"W	0.00	
5917.00†	10.000	146.954	5836.89	-788.85	-783.76	509.87	40°06'01.718"N	104°47'06.464"W	0.00	
6017.00†	10.000	146.954	5935.38	-803.50	-798.32	519.34	40°06'01.574"N	104°47'06.342"W	0.00	
6117.00†	10.000	146.954	6033.86	-818.15	-812.87	528.81	40°06'01.430"N	104°47'06.220"W	0.00	
6193.62	10.000	146.954	6109.31	-829.37	-824.02	536.06	40°06'01.320"N	104°47'06.127"W	0.00	BEGIN DROP
6217.00†	9.532	146.954	6132.35	-832.72	-827.35	538.23	40°06'01.287"N	104°47'06.099"W	2.00	
6317.00†	7.532	146.954	6231.24	-845.23	-839.78	546.32	40°06'01.164"N	104°47'05.995"W	2.00	
6417.00†	5.532	146.954	6330.59	-854.83	-849.32	552.52	40°06'01.070"N	104°47'05.915"W	2.00	
6517.00†	3.532	146.954	6430.27	-861.50	-855.94	556.83	40°06'01.004"N	104°47'05.859"W	2.00	
6617.00†	1.532	146.954	6530.17	-865.23	-859.65	559.24	40°06'00.968"N	104°47'05.828"W	2.00	
6693.62	0.000	359.424	6606.78	-866.09	-860.51	559.80	40°06'00.959"N	104°47'05.821"W	2.00	END DROP
6717.00†	0.000	359.424	6630.16	-866.09	-860.51	559.80	40°06'00.959"N	104°47'05.821"W	0.00	
6812.90	0.000	359.424	6726.05	-866.09	-860.51	559.80	40°06'00.959"N	104°47'05.821"W	0.00	KOP, BUILD @ 10°/100'
6817.00†	0.410	359.424	6730.16	-866.08	-860.49	559.80	40°06'00.959"N	104°47'05.821"W	10.00	
6917.00†	10.410	359.424	6829.59	-856.66	-851.08	559.70	40°06'01.052"N	104°47'05.822"W	10.00	
7017.00†	20.410	359.424	6925.87	-830.12	-824.54	559.43	40°06'01.315"N	104°47'05.826"W	10.00	
7117.00†	30.410	359.424	7016.08	-787.26	-781.68	559.00	40°06'01.738"N	104°47'05.831"W	10.00	
7217.00†	40.410	359.424	7097.48	-729.39	-723.82	558.42	40°06'02.311"N	104°47'05.839"W	10.00	
7317.00†	50.410	359.424	7167.59	-658.27	-652.70	557.71	40°06'03.014"N	104°47'05.848"W	10.00	
7335.26†	52.236	359.424	7179.00	-644.02	-638.44	557.56	40°06'03.155"N	104°47'05.850"W	10.00	SHARON SPRINGS
7417.00†	60.410	359.424	7224.29	-576.05	-570.48	556.88	40°06'03.826"N	104°47'05.859"W	10.00	
7430.89†	61.799	359.424	7231.00	-563.89	-558.32	556.76	40°06'03.947"N	104°47'05.860"W	10.00	NIOBRARA A
7517.00†	70.410	359.424	7265.85	-485.23	-479.67	555.97	40°06'04.724"N	104°47'05.870"W	10.00	
7605.63†	79.274	359.424	7289.00	-399.77	-394.21	555.11	40°06'05.569"N	104°47'05.881"W	10.00	NIOBRARA B
7617.00†	80.410	359.424	7291.00	-388.58	-383.02	555.00	40°06'05.680"N	104°47'05.883"W	10.00	
7716.47†	90.357	359.424	7299.00	-289.56	-284.00	554.00	40°06'06.659"N	104°47'05.896"W	10.00	TOP OF PRODUCTION



Planned Wellpath Report

TEDFORD 3N-28HZ (PERMIT REV-3) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#06 TEDFORD 3N-28HZ (285'FSL & 1312'FWL, SEC.28)
Area	Compass Import	Well	TEDFORD 3N-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	TEDFORD 3N-28HZ PWB
Facility	SEC.28-T2N-R66W		

WELLPATH DATA (146 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7716.47	90.358	359.424	7299.00	-289.55	-284.00	554.00	40°06'06.659"N	104°47'05.896"W	10.00	LANDING POINT
7717.00†	90.358	359.424	7299.00	-289.03	-283.47	553.99	40°06'06.664"N	104°47'05.896"W	0.00	
7817.00†	90.358	359.424	7298.37	-189.03	-183.48	552.99	40°06'07.652"N	104°47'05.909"W	0.00	
7917.00†	90.358	359.424	7297.75	-89.03	-83.49	551.98	40°06'08.641"N	104°47'05.922"W	0.00	
8017.00†	90.358	359.424	7297.12	10.97	16.51	550.98	40°06'09.629"N	104°47'05.934"W	0.00	
8117.00†	90.358	359.424	7296.50	110.96	116.50	549.97	40°06'10.618"N	104°47'05.947"W	0.00	
8217.00†	90.358	359.424	7295.87	210.96	216.49	548.97	40°06'11.607"N	104°47'05.960"W	0.00	
8317.00†	90.358	359.424	7295.25	310.96	316.48	547.96	40°06'12.595"N	104°47'05.973"W	0.00	
8417.00†	90.358	359.424	7294.63	410.96	416.48	546.96	40°06'13.584"N	104°47'05.986"W	0.00	
8517.00†	90.358	359.424	7294.00	510.96	516.47	545.95	40°06'14.572"N	104°47'05.999"W	0.00	
8617.00†	90.358	359.424	7293.38	610.95	616.46	544.95	40°06'15.561"N	104°47'06.012"W	0.00	
8717.00†	90.358	359.424	7292.75	710.95	716.46	543.94	40°06'16.549"N	104°47'06.025"W	0.00	
8817.00†	90.358	359.424	7292.13	810.95	816.45	542.94	40°06'17.538"N	104°47'06.038"W	0.00	
8917.00†	90.358	359.424	7291.50	910.95	916.44	541.93	40°06'18.526"N	104°47'06.051"W	0.00	
9017.00†	90.358	359.424	7290.88	1010.95	1016.44	540.93	40°06'19.515"N	104°47'06.064"W	0.00	
9117.00†	90.358	359.424	7290.26	1110.94	1116.43	539.92	40°06'20.503"N	104°47'06.076"W	0.00	
9217.00†	90.358	359.424	7289.63	1210.94	1216.42	538.92	40°06'21.492"N	104°47'06.089"W	0.00	
9317.00†	90.358	359.424	7289.01	1310.94	1316.41	537.91	40°06'22.480"N	104°47'06.102"W	0.00	
9318.00†	90.358	359.424	7289.00	1311.94	1317.41	537.90	40°06'22.490"N	104°47'06.102"W	0.00	NIOBRARA B
9417.00†	90.358	359.424	7288.38	1410.94	1416.41	536.90	40°06'23.469"N	104°47'06.115"W	0.00	
9517.00†	90.358	359.424	7287.76	1510.94	1516.40	535.90	40°06'24.457"N	104°47'06.128"W	0.00	
9617.00†	90.358	359.424	7287.13	1610.93	1616.39	534.89	40°06'25.446"N	104°47'06.141"W	0.00	
9717.00†	90.358	359.424	7286.51	1710.93	1716.39	533.89	40°06'26.435"N	104°47'06.154"W	0.00	
9817.00†	90.358	359.424	7285.88	1810.93	1816.38	532.88	40°06'27.423"N	104°47'06.167"W	0.00	
9917.00†	90.358	359.424	7285.26	1910.93	1916.37	531.88	40°06'28.412"N	104°47'06.180"W	0.00	
10017.00†	90.358	359.424	7284.64	2010.93	2016.37	530.87	40°06'29.400"N	104°47'06.193"W	0.00	
10117.00†	90.358	359.424	7284.01	2110.92	2116.36	529.87	40°06'30.389"N	104°47'06.206"W	0.00	
10217.00†	90.358	359.424	7283.39	2210.92	2216.35	528.86	40°06'31.377"N	104°47'06.219"W	0.00	
10317.00†	90.358	359.424	7282.76	2310.92	2316.34	527.86	40°06'32.366"N	104°47'06.231"W	0.00	
10417.00†	90.358	359.424	7282.14	2410.92	2416.34	526.85	40°06'33.354"N	104°47'06.244"W	0.00	
10517.00†	90.358	359.424	7281.51	2510.92	2516.33	525.85	40°06'34.343"N	104°47'06.257"W	0.00	
10617.00†	90.358	359.424	7280.89	2610.92	2616.32	524.84	40°06'35.331"N	104°47'06.270"W	0.00	
10717.00†	90.358	359.424	7280.26	2710.91	2716.32	523.84	40°06'36.320"N	104°47'06.283"W	0.00	
10817.00†	90.358	359.424	7279.64	2810.91	2816.31	522.83	40°06'37.308"N	104°47'06.296"W	0.00	
10917.00†	90.358	359.424	7279.02	2910.91	2916.30	521.83	40°06'38.297"N	104°47'06.309"W	0.00	
11017.00†	90.358	359.424	7278.39	3010.91	3016.30	520.82	40°06'39.286"N	104°47'06.322"W	0.00	
11117.00†	90.358	359.424	7277.77	3110.91	3116.29	519.81	40°06'40.274"N	104°47'06.335"W	0.00	
11217.00†	90.358	359.424	7277.14	3210.90	3216.28	518.81	40°06'41.263"N	104°47'06.348"W	0.00	
11317.00†	90.358	359.424	7276.52	3310.90	3316.27	517.80	40°06'42.251"N	104°47'06.361"W	0.00	
11417.00†	90.358	359.424	7275.89	3410.90	3416.27	516.80	40°06'43.240"N	104°47'06.374"W	0.00	
11517.00†	90.358	359.424	7275.27	3510.90	3516.26	515.79	40°06'44.228"N	104°47'06.386"W	0.00	
11617.00†	90.358	359.424	7274.64	3610.90	3616.25	514.79	40°06'45.217"N	104°47'06.399"W	0.00	
11717.00†	90.358	359.424	7274.02	3710.89	3716.25	513.78	40°06'46.205"N	104°47'06.412"W	0.00	
11817.00†	90.358	359.424	7273.40	3810.89	3816.24	512.78	40°06'47.194"N	104°47'06.425"W	0.00	
11917.00†	90.358	359.424	7272.77	3910.89	3916.23	511.77	40°06'48.182"N	104°47'06.438"W	0.00	



Planned Wellpath Report

TEDFORD 3N-28HZ (PERMIT REV-3) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#06 TEDFORD 3N-28HZ (285'FSL & 1312'FWL, SEC.28)
Area	Compass Import	Well	TEDFORD 3N-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	TEDFORD 3N-28HZ PWB
Facility	SEC.28-T2N-R66W		

WELLPATH DATA (146 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12017.00†	90.358	359.424	7272.15	4010.89	4016.23	510.77	40°06'49.171"N	104°47'06.451"W	0.00	
12117.00†	90.358	359.424	7271.52	4110.89	4116.22	509.76	40°06'50.159"N	104°47'06.464"W	0.00	
12217.00†	90.358	359.424	7270.90	4210.88	4216.21	508.76	40°06'51.148"N	104°47'06.477"W	0.00	
12317.00†	90.358	359.424	7270.27	4310.88	4316.20	507.75	40°06'52.136"N	104°47'06.490"W	0.00	
12417.00†	90.358	359.424	7269.65	4410.88	4416.20	506.75	40°06'53.125"N	104°47'06.503"W	0.00	
12517.00†	90.358	359.424	7269.03	4510.88	4516.19	505.74	40°06'54.114"N	104°47'06.516"W	0.00	
12617.00†	90.358	359.424	7268.40	4610.88	4616.18	504.74	40°06'55.102"N	104°47'06.529"W	0.00	
12717.00†	90.358	359.424	7267.78	4710.87	4716.18	503.73	40°06'56.091"N	104°47'06.541"W	0.00	
12817.00†	90.358	359.424	7267.15	4810.87	4816.17	502.72	40°06'57.079"N	104°47'06.554"W	0.00	
12917.00†	90.358	359.424	7266.53	4910.87	4916.16	501.72	40°06'58.068"N	104°47'06.567"W	0.00	
13001.50	90.358	359.424	7266.00	4995.37	5000.66	500.87	40°06'58.903"N	104°47'06.578"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS

- Ref Wellbore: TEDFORD 3N-28HZ PWB Ref Wellpath: TEDFORD 3N-28HZ (PERMIT REV-3) 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	1817.83	1800.83	17.00	1800.00	0.00	0.00	-187.09	121.71
9.625in Casing Surface	17.00	1817.83	1800.83	17.00	1800.00	0.00	0.00	-187.09	121.71
7.875in Open Hole	1817.83	13001.50	11183.67	1800.00	7266.00	-187.09	121.71	5000.66	500.87
5.5in Casing Production	17.00	13001.50	12984.50	17.00	7266.00	0.00	0.00	5000.65	500.87

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.33-T2N-R66W SECTION LINES		4.00	-1109.37	12.10	1700006.28	14563067.38	40°05'58.499"N	104°47'12.872"W	polygon
SEC.29-T2N-R66W SECTION LINES		41.00	-581.66	-2213.06	1697779.87	14563589.76	40°06'03.715"N	104°47'41.518"W	polygon
SEC.32-T2N-R66W SECTION LINES		41.00	-581.66	-2213.06	1697779.87	14563589.76	40°06'03.715"N	104°47'41.518"W	polygon
1) TEDFORD 3N-28HZ BHL REV-2 (1'FNL & 1827'FWL, SEC28)	13001.50	7266.00	5000.66	500.87	1700480.41	14569178.55	40°06'58.903"N	104°47'06.578"W	point
SEC.28-T2N-R66W SECTION LINES		7301.00	-0.54	59.94	1700051.47	14564176.32	40°06'09.461"N	104°47'12.256"W	polygon

SURVEY PROGRAM -

Ref Wellbore: TEDFORD 3N-28HZ PWB Ref Wellpath: TEDFORD 3N-28HZ (PERMIT REV-3) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	13001.50	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)		TEDFORD 3N-28HZ PWB



Planned Wellpath Report

TEDFORD 3N-28HZ (PERMIT REV-3) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#06 TEDFORD 3N-28HZ (285'FSL & 1312'FWL, SEC.28)
Area	Compass Import	Well	TEDFORD 3N-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	TEDFORD 3N-28HZ PWB
Facility	SEC.28-T2N-R66W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1049.15	10.000	146.954	1043.00	FOX HILLS BASE
4096.45	10.000	146.954	4044.00	PARKMAN
4615.33	10.000	146.954	4555.00	SUSSEX
7335.26	52.236	359.424	7179.00	SHARON SPRINGS
7430.89	61.799	359.424	7231.00	NIOBRARA A
7605.63	79.274	359.424	7289.00	NIOBRARA B
7716.47	90.357	359.424	7299.00	TOP OF PRODUCTION
9318.00	90.358	359.424	7289.00	NIOBRARA B

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	146.954	17.00	TIE-ON
200.00	0.000	146.954	200.00	BEGIN NUDGE
866.67	10.000	146.954	863.29	END NUDGE
6193.62	10.000	146.954	6109.31	BEGIN DROP
6693.62	0.000	359.424	6606.78	END DROP
6812.90	0.000	359.424	6726.05	KOP, BUILD @ 10°/100'
7716.47	90.358	359.424	7299.00	LANDING POINT
13001.50	90.358	359.424	7266.00	TOTAL DEPTH