

Location:	COLORADO	Slot:	SLOT#07 TEDFORD 3C-28HZ (285'FSL & 1342'FWL, SEC.28)
Field:	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Well:	TEDFORD 3C-28HZ
Facility:	SEC.28-T2N-R66W	Wellbore:	TEDFORD 3C-28HZ PWB

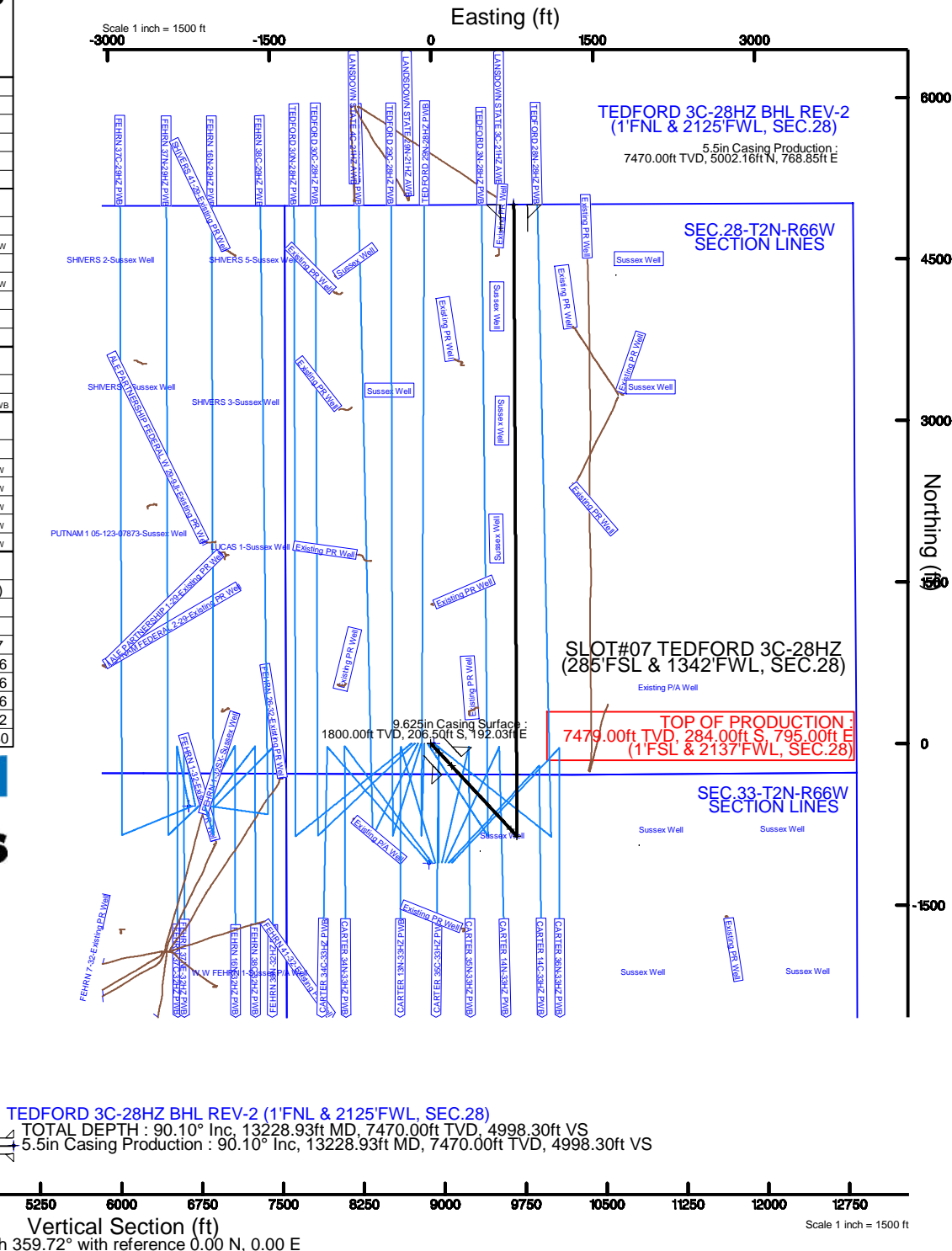
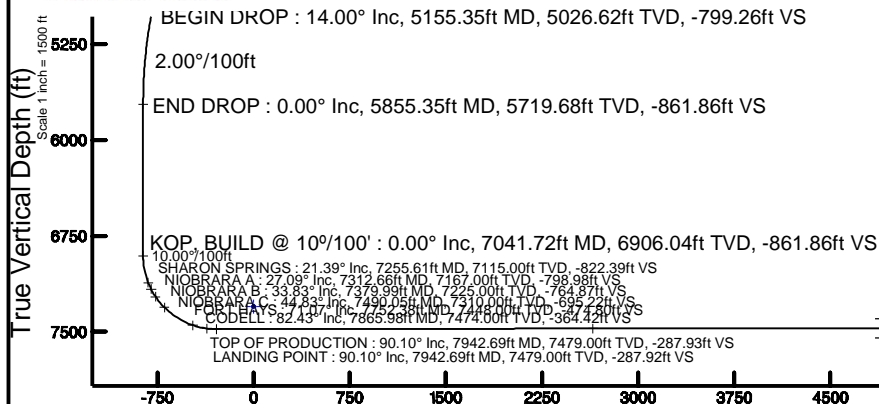
Plot reference wellpath is TEDFORD 3C-28HZ (PERMIT REV-5) PWP	
True vertical depths are referenced to PERMIT (17KB) (RKB)	Grid System: NAD83 / UTM Zone 13 North, US feet
Measured depths are referenced to PERMIT (17KB) (RKB)	North Reference: True north
PERMIT (17KB) (RKB) to Mean Sea Level: 4980 feet	Scale: Grid distance
Mean Sea Level to Mud line (At Slot: SLOT#07 TEDFORD 3C-28HZ (285FSL & 1342FWL, SEC.28)): 0 feet	Depths are in feet
Coordinates are in feet referenced to SLOT	Created by: amarcn on 04/May/2015

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.28-T2N-R66W			1700626.562	1456870.077	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#07 TEDFORD 3C-28HZ (285FSL & 1342FWL, SEC.28)	-4529.76	-616.02	1700021.513	14564176.502	40°06'09.464"N	104°47'12.642"W
PERMIT (17KB) (RKB) to Mud line (At Slot: SLOT#07 TEDFORD 3C-28HZ (285FSL & 1342FWL, SEC.28))					4980ft	
Mean Sea Level to Mud line (At Slot: SLOT#07 TEDFORD 3C-28HZ (285FSL & 1342FWL, 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	13228.93	ISCWSA MWD, Rev. 2, axial magnetic correction	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)		TEDFORD 3C-28HZ PWB

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.33-T2N-R66W SECTION LINES	4.00	-1109.09	-17.89	170006.28	14563067.38	40°05'58.499"N	104°47'12.872"W	
SEC.29-T2N-R66W SECTION LINES	41.00	-581.37	-2243.04	169779.87	14563589.76	40°06'03.715"N	104°47'41.518"W	
SEC.32-T2N-R66W SECTION LINES	41.00	-581.37	-2243.04	1697779.87	14563589.76	40°06'03.715"N	104°47'41.518"W	
SEC.28-T2N-R66W SECTION LINES	7301.00	-0.25	29.96	1700051.47	14564176.32	40°06'09.461"N	104°47'12.256"W	
TEDFOR SEC.20-2H2 B/L REV.2 (1 FNL & 2125FWL SEC.28)	13228.93	7470.00	5002.16	768.85	1700778.37	45°06'18.08	40°06'58.915"N	104°47'02.741"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	137.078	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	200.00	0.000	137.078	200.00	0.00	0.00	0.00	0.00
END NUDGE	1133.33	14.000	137.078	1124.07	-83.09	77.27	1.50	-83.47
BEGIN DROP	5155.35	14.000	137.078	5026.62	-795.61	739.89	0.00	-799.26
END DROP	5855.35	0.000	359.717	5719.68	-857.93	797.84	2.00	-861.86
KOP, BUILD @ 10°/100'	7041.72	0.000	359.717	6906.04	-857.93	797.84	0.00	-861.86
LANDING POINT	7942.69	90.098	359.717	7479.00	-284.00	795.00	10.00	-287.92
TOTAL DEPTH	13228.93	90.098	359.717	7470.00	5002.16	768.85	0.00	4998.30





Planned Wellpath Report

TEDFORD 3C-28HZ (PERMIT REV-5) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 TEDFORD 3C-28HZ (285'FSL & 1342'FWL, SEC.28)
Area	Compass Import	Well	TEDFORD 3C-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	TEDFORD 3C-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 10:50
Convergence at slot	0.14° East	Database/Source file	MAP CHECK./TEDFORD_3C-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	-4529.76	-616.02	1700021.51	14564176.50	40°06'09.464"N	104°47'12.642"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#07 TEDFORD 3C-28HZ (285'FSL & 1342'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	359.72°



Planned Wellpath Report

TEDFORD 3C-28HZ (PERMIT REV-5) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 TEDFORD 3C-28HZ (285'FSL & 1342'FWL, SEC.28)
Area	Compass Import	Well	TEDFORD 3C-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	TEDFORD 3C-28HZ PWB
Facility	SEC.28-T2N-R66W		

WELLPATH DATA (152 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	137.078	0.00	0.00	0.00	0.00	40°06'09.464"N	104°47'12.642"W	0.00	
17.00	0.000	137.078	17.00	0.00	0.00	0.00	40°06'09.464"N	104°47'12.642"W	0.00	TIE-ON
117.00†	0.000	137.078	117.00	0.00	0.00	0.00	40°06'09.464"N	104°47'12.642"W	0.00	
200.00	0.000	137.078	200.00	0.00	0.00	0.00	40°06'09.464"N	104°47'12.642"W	0.00	BEGIN NUDGE
217.00†	0.255	137.078	217.00	-0.03	-0.03	0.03	40°06'09.463"N	104°47'12.641"W	1.50	
317.00†	1.755	137.078	316.98	-1.32	-1.31	1.22	40°06'09.451"N	104°47'12.626"W	1.50	
417.00†	3.255	137.078	416.88	-4.53	-4.51	4.20	40°06'09.419"N	104°47'12.588"W	1.50	
517.00†	4.755	137.078	516.64	-9.67	-9.63	8.95	40°06'09.368"N	104°47'12.526"W	1.50	
617.00†	6.255	137.078	616.17	-16.73	-16.65	15.49	40°06'09.299"N	104°47'12.442"W	1.50	
717.00†	7.755	137.078	715.42	-25.70	-25.58	23.79	40°06'09.211"N	104°47'12.335"W	1.50	
817.00†	9.255	137.078	814.32	-36.58	-36.41	33.86	40°06'09.104"N	104°47'12.206"W	1.50	
917.00†	10.755	137.078	912.80	-49.36	-49.13	45.69	40°06'08.978"N	104°47'12.053"W	1.50	
1017.00†	12.255	137.078	1010.78	-64.03	-63.74	59.28	40°06'08.833"N	104°47'11.879"W	1.50	
1050.00†	12.750	137.078	1043.00	-69.29	-68.97	64.14	40°06'08.782"N	104°47'11.816"W	1.50	FOX HILLS BASE
1117.00†	13.755	137.078	1108.22	-80.59	-80.22	74.60	40°06'08.670"N	104°47'11.681"W	1.50	
1133.33	14.000	137.078	1124.07	-83.47	-83.09	77.27	40°06'08.642"N	104°47'11.647"W	1.50	END NUDGE
1217.00†	14.000	137.078	1205.25	-98.36	-97.91	91.05	40°06'08.496"N	104°47'11.469"W	0.00	
1317.00†	14.000	137.078	1302.28	-116.15	-115.62	107.53	40°06'08.320"N	104°47'11.257"W	0.00	
1417.00†	14.000	137.078	1399.31	-133.95	-133.34	124.00	40°06'08.145"N	104°47'11.045"W	0.00	
1517.00†	14.000	137.078	1496.34	-151.75	-151.06	140.48	40°06'07.970"N	104°47'10.833"W	0.00	
1617.00†	14.000	137.078	1593.37	-169.54	-168.77	156.95	40°06'07.795"N	104°47'10.621"W	0.00	
1717.00†	14.000	137.078	1690.40	-187.34	-186.49	173.43	40°06'07.620"N	104°47'10.409"W	0.00	
1817.00†	14.000	137.078	1787.43	-205.14	-204.20	189.90	40°06'07.445"N	104°47'10.197"W	0.00	
1917.00†	14.000	137.078	1884.46	-222.93	-221.92	206.38	40°06'07.270"N	104°47'09.985"W	0.00	
2017.00†	14.000	137.078	1981.49	-240.73	-239.63	222.85	40°06'07.094"N	104°47'09.773"W	0.00	
2117.00†	14.000	137.078	2078.52	-258.53	-257.35	239.32	40°06'06.919"N	104°47'09.561"W	0.00	
2217.00†	14.000	137.078	2175.55	-276.32	-275.06	255.80	40°06'06.744"N	104°47'09.349"W	0.00	
2317.00†	14.000	137.078	2272.58	-294.12	-292.78	272.27	40°06'06.569"N	104°47'09.136"W	0.00	
2417.00†	14.000	137.078	2369.61	-311.92	-310.50	288.75	40°06'06.394"N	104°47'08.924"W	0.00	
2517.00†	14.000	137.078	2466.64	-329.71	-328.21	305.22	40°06'06.219"N	104°47'08.712"W	0.00	
2617.00†	14.000	137.078	2563.67	-347.51	-345.93	321.70	40°06'06.044"N	104°47'08.500"W	0.00	
2717.00†	14.000	137.078	2660.70	-365.31	-363.64	338.17	40°06'05.868"N	104°47'08.288"W	0.00	
2817.00†	14.000	137.078	2757.73	-383.10	-381.36	354.65	40°06'05.693"N	104°47'08.076"W	0.00	
2917.00†	14.000	137.078	2854.76	-400.90	-399.07	371.12	40°06'05.518"N	104°47'07.864"W	0.00	
3017.00†	14.000	137.078	2951.79	-418.70	-416.79	387.60	40°06'05.343"N	104°47'07.652"W	0.00	
3117.00†	14.000	137.078	3048.82	-436.50	-434.50	404.07	40°06'05.168"N	104°47'07.440"W	0.00	
3217.00†	14.000	137.078	3145.85	-454.29	-452.22	420.55	40°06'04.993"N	104°47'07.228"W	0.00	
3317.00†	14.000	137.078	3242.88	-472.09	-469.94	437.02	40°06'04.818"N	104°47'07.016"W	0.00	
3417.00†	14.000	137.078	3339.91	-489.89	-487.65	453.50	40°06'04.643"N	104°47'06.803"W	0.00	
3517.00†	14.000	137.078	3436.94	-507.68	-505.37	469.97	40°06'04.467"N	104°47'06.591"W	0.00	
3617.00†	14.000	137.078	3533.96	-525.48	-523.08	486.45	40°06'04.292"N	104°47'06.379"W	0.00	
3717.00†	14.000	137.078	3630.99	-543.28	-540.80	502.92	40°06'04.117"N	104°47'06.167"W	0.00	
3817.00†	14.000	137.078	3728.02	-561.07	-558.51	519.40	40°06'03.942"N	104°47'05.955"W	0.00	
3917.00†	14.000	137.078	3825.05	-578.87	-576.23	535.87	40°06'03.767"N	104°47'05.743"W	0.00	
4017.00†	14.000	137.078	3922.08	-596.67	-593.94	552.35	40°06'03.592"N	104°47'05.531"W	0.00	



Planned Wellpath Report

TEDFORD 3C-28HZ (PERMIT REV-5) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 TEDFORD 3C-28HZ (285'FSL & 1342'FWL, SEC.28)
Area	Compass Import	Well	TEDFORD 3C-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	TEDFORD 3C-28HZ PWB
Facility	SEC.28-T2N-R66W		

WELLPATH DATA (152 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4076.69†	14.000	137.078	3980.00	-607.29	-604.52	562.18	40°06'03.487"N	104°47'05.404"W	0.00	PARKMAN
4117.00†	14.000	137.078	4019.11	-614.46	-611.66	568.82	40°06'03.417"N	104°47'05.319"W	0.00	
4217.00†	14.000	137.078	4116.14	-632.26	-629.38	585.30	40°06'03.241"N	104°47'05.107"W	0.00	
4317.00†	14.000	137.078	4213.17	-650.06	-647.09	601.77	40°06'03.066"N	104°47'04.895"W	0.00	
4417.00†	14.000	137.078	4310.20	-667.85	-664.81	618.25	40°06'02.891"N	104°47'04.683"W	0.00	
4517.00†	14.000	137.078	4407.23	-685.65	-682.52	634.72	40°06'02.716"N	104°47'04.470"W	0.00	
4603.33†	14.000	137.078	4491.00	-701.01	-697.82	648.94	40°06'02.565"N	104°47'04.287"W	0.00	SUSSEX
4617.00†	14.000	137.078	4504.26	-703.45	-700.24	651.20	40°06'02.541"N	104°47'04.258"W	0.00	
4717.00†	14.000	137.078	4601.29	-721.24	-717.95	667.67	40°06'02.366"N	104°47'04.046"W	0.00	
4817.00†	14.000	137.078	4698.32	-739.04	-735.67	684.15	40°06'02.191"N	104°47'03.834"W	0.00	
4917.00†	14.000	137.078	4795.35	-756.84	-753.39	700.62	40°06'02.015"N	104°47'03.622"W	0.00	
5017.00†	14.000	137.078	4892.38	-774.63	-771.10	717.09	40°06'01.840"N	104°47'03.410"W	0.00	
5117.00†	14.000	137.078	4989.41	-792.43	-788.82	733.57	40°06'01.665"N	104°47'03.198"W	0.00	
5155.35	14.000	137.078	5026.62	-799.26	-795.61	739.89	40°06'01.598"N	104°47'03.117"W	0.00	BEGIN DROP
5217.00†	12.767	137.078	5086.59	-809.75	-806.06	749.61	40°06'01.495"N	104°47'02.992"W	2.00	
5317.00†	10.767	137.078	5184.49	-824.75	-820.99	763.49	40°06'01.347"N	104°47'02.813"W	2.00	
5417.00†	8.767	137.078	5283.03	-837.23	-833.41	775.04	40°06'01.224"N	104°47'02.664"W	2.00	
5517.00†	6.767	137.078	5382.11	-847.17	-843.31	784.25	40°06'01.126"N	104°47'02.546"W	2.00	
5617.00†	4.767	137.078	5481.60	-854.57	-850.67	791.09	40°06'01.054"N	104°47'02.457"W	2.00	
5717.00†	2.767	137.078	5581.38	-859.40	-855.48	795.56	40°06'01.006"N	104°47'02.400"W	2.00	
5817.00†	0.767	137.078	5681.33	-861.67	-857.74	797.66	40°06'00.984"N	104°47'02.373"W	2.00	
5855.35	0.000	359.717	5719.68	-861.86	-857.93	797.84	40°06'00.982"N	104°47'02.371"W	2.00	END DROP
5917.00†	0.000	359.717	5781.32	-861.86	-857.93	797.84	40°06'00.982"N	104°47'02.371"W	0.00	
6017.00†	0.000	359.717	5881.32	-861.86	-857.93	797.84	40°06'00.982"N	104°47'02.371"W	0.00	
6117.00†	0.000	359.717	5981.32	-861.86	-857.93	797.84	40°06'00.982"N	104°47'02.371"W	0.00	
6217.00†	0.000	359.717	6081.32	-861.86	-857.93	797.84	40°06'00.982"N	104°47'02.371"W	0.00	
6317.00†	0.000	359.717	6181.32	-861.86	-857.93	797.84	40°06'00.982"N	104°47'02.371"W	0.00	
6417.00†	0.000	359.717	6281.32	-861.86	-857.93	797.84	40°06'00.982"N	104°47'02.371"W	0.00	
6517.00†	0.000	359.717	6381.32	-861.86	-857.93	797.84	40°06'00.982"N	104°47'02.371"W	0.00	
6617.00†	0.000	359.717	6481.32	-861.86	-857.93	797.84	40°06'00.982"N	104°47'02.371"W	0.00	
6717.00†	0.000	359.717	6581.32	-861.86	-857.93	797.84	40°06'00.982"N	104°47'02.371"W	0.00	
6817.00†	0.000	359.717	6681.32	-861.86	-857.93	797.84	40°06'00.982"N	104°47'02.371"W	0.00	
6917.00†	0.000	359.717	6781.32	-861.86	-857.93	797.84	40°06'00.982"N	104°47'02.371"W	0.00	
7017.00†	0.000	359.717	6881.32	-861.86	-857.93	797.84	40°06'00.982"N	104°47'02.371"W	0.00	
7041.72	0.000	359.717	6906.04	-861.86	-857.93	797.84	40°06'00.982"N	104°47'02.371"W	0.00	KOP, BUILD @ 10°/100'
7117.00†	7.528	359.717	6981.11	-856.92	-852.99	797.81	40°06'01.031"N	104°47'02.371"W	10.00	
7217.00†	17.528	359.717	7078.60	-835.25	-831.32	797.71	40°06'01.245"N	104°47'02.372"W	10.00	
7255.61†	21.389	359.717	7115.00	-822.39	-818.46	797.64	40°06'01.372"N	104°47'02.373"W	10.00	SHARON SPRINGS
7312.66†	27.095	359.717	7167.00	-798.98	-795.05	797.53	40°06'01.603"N	104°47'02.375"W	10.00	NIOBRARA A
7317.00†	27.528	359.717	7170.85	-796.99	-793.06	797.52	40°06'01.623"N	104°47'02.375"W	10.00	
7379.99†	33.827	359.717	7225.00	-764.87	-760.94	797.36	40°06'01.941"N	104°47'02.377"W	10.00	NIOBRARA B
7417.00†	37.528	359.717	7255.06	-743.28	-739.36	797.25	40°06'02.154"N	104°47'02.378"W	10.00	
7490.05†	44.833	359.717	7310.00	-695.22	-691.29	797.01	40°06'02.629"N	104°47'02.381"W	10.00	NIOBRARA C
7517.00†	47.528	359.717	7328.66	-675.77	-671.85	796.92	40°06'02.821"N	104°47'02.382"W	10.00	
7617.00†	57.528	359.717	7389.42	-596.51	-592.58	796.53	40°06'03.605"N	104°47'02.387"W	10.00	



Planned Wellpath Report

TEDFORD 3C-28HZ (PERMIT REV-5) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 TEDFORD 3C-28HZ (285'FSL & 1342'FWL, SEC.28)
Area	Compass Import	Well	TEDFORD 3C-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	TEDFORD 3C-28HZ PWB
Facility	SEC.28-T2N-R66W		

WELLPATH DATA (152 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7717.00†	67.528	359.717	7435.49	-507.90	-503.97	796.09	40°06'04.481"N	104°47'02.393"W	10.00	
7752.38†	71.067	359.717	7448.00	-474.80	-470.88	795.92	40°06'04.808"N	104°47'02.395"W	10.00	FORT HAYS
7817.00†	77.528	359.717	7465.48	-412.63	-408.71	795.62	40°06'05.423"N	104°47'02.399"W	10.00	
7865.98†	82.426	359.717	7474.00	-364.42	-360.49	795.38	40°06'05.900"N	104°47'02.402"W	10.00	CODELL
7917.00†	87.528	359.717	7478.47	-313.61	-309.68	795.13	40°06'06.402"N	104°47'02.405"W	10.00	
7942.69†	90.097	359.717	7479.00	-287.93	-284.00	795.00	40°06'06.656"N	104°47'02.407"W	10.00	TOP OF PRODUCTION
7942.69	90.098	359.717	7479.00	-287.92	-284.00	795.00	40°06'06.656"N	104°47'02.407"W	10.00	LANDING POINT
8017.00†	90.098	359.717	7478.87	-213.62	-209.69	794.63	40°06'07.390"N	104°47'02.412"W	0.00	
8117.00†	90.098	359.717	7478.70	-113.62	-109.69	794.14	40°06'08.379"N	104°47'02.418"W	0.00	
8217.00†	90.098	359.717	7478.53	-13.62	-9.70	793.64	40°06'09.368"N	104°47'02.424"W	0.00	
8317.00†	90.098	359.717	7478.36	86.38	90.30	793.15	40°06'10.356"N	104°47'02.431"W	0.00	
8417.00†	90.098	359.717	7478.19	186.38	190.30	792.65	40°06'11.345"N	104°47'02.437"W	0.00	
8517.00†	90.098	359.717	7478.02	286.38	290.30	792.16	40°06'12.333"N	104°47'02.443"W	0.00	
8617.00†	90.098	359.717	7477.85	386.38	390.30	791.66	40°06'13.322"N	104°47'02.450"W	0.00	
8717.00†	90.098	359.717	7477.68	486.38	490.30	791.17	40°06'14.310"N	104°47'02.456"W	0.00	
8817.00†	90.098	359.717	7477.51	586.38	590.30	790.67	40°06'15.299"N	104°47'02.462"W	0.00	
8917.00†	90.098	359.717	7477.34	686.38	690.29	790.18	40°06'16.288"N	104°47'02.469"W	0.00	
9017.00†	90.098	359.717	7477.17	786.38	790.29	789.69	40°06'17.276"N	104°47'02.475"W	0.00	
9117.00†	90.098	359.717	7477.00	886.38	890.29	789.19	40°06'18.265"N	104°47'02.481"W	0.00	
9217.00†	90.098	359.717	7476.83	986.38	990.29	788.70	40°06'19.253"N	104°47'02.488"W	0.00	
9317.00†	90.098	359.717	7476.66	1086.38	1090.29	788.20	40°06'20.242"N	104°47'02.494"W	0.00	
9417.00†	90.098	359.717	7476.49	1186.38	1190.29	787.71	40°06'21.231"N	104°47'02.500"W	0.00	
9517.00†	90.098	359.717	7476.32	1286.38	1290.29	787.21	40°06'22.219"N	104°47'02.507"W	0.00	
9617.00†	90.098	359.717	7476.15	1386.38	1390.29	786.72	40°06'23.208"N	104°47'02.513"W	0.00	
9717.00†	90.098	359.717	7475.98	1486.38	1490.28	786.22	40°06'24.196"N	104°47'02.519"W	0.00	
9817.00†	90.098	359.717	7475.81	1586.38	1590.28	785.73	40°06'25.185"N	104°47'02.526"W	0.00	
9917.00†	90.098	359.717	7475.64	1686.38	1690.28	785.23	40°06'26.174"N	104°47'02.532"W	0.00	
10017.00†	90.098	359.717	7475.47	1786.38	1790.28	784.74	40°06'27.162"N	104°47'02.538"W	0.00	
10117.00†	90.098	359.717	7475.30	1886.38	1890.28	784.24	40°06'28.151"N	104°47'02.545"W	0.00	
10217.00†	90.098	359.717	7475.13	1986.38	1990.28	783.75	40°06'29.139"N	104°47'02.551"W	0.00	
10317.00†	90.098	359.717	7474.96	2086.38	2090.28	783.25	40°06'30.128"N	104°47'02.557"W	0.00	
10417.00†	90.098	359.717	7474.79	2186.38	2190.27	782.76	40°06'31.117"N	104°47'02.564"W	0.00	
10517.00†	90.098	359.717	7474.62	2286.38	2290.27	782.27	40°06'32.105"N	104°47'02.570"W	0.00	
10617.00†	90.098	359.717	7474.45	2386.38	2390.27	781.77	40°06'33.094"N	104°47'02.576"W	0.00	
10717.00†	90.098	359.717	7474.28	2486.38	2490.27	781.28	40°06'34.082"N	104°47'02.582"W	0.00	
10817.00†	90.098	359.717	7474.11	2586.38	2590.27	780.78	40°06'35.071"N	104°47'02.589"W	0.00	
10878.90†	90.098	359.717	7474.00	2648.28	2652.17	780.48	40°06'35.683"N	104°47'02.593"W	0.00	CODELL
10917.00†	90.098	359.717	7473.94	2686.38	2690.27	780.29	40°06'36.060"N	104°47'02.595"W	0.00	
11017.00†	90.098	359.717	7473.76	2786.38	2790.27	779.79	40°06'37.048"N	104°47'02.601"W	0.00	
11117.00†	90.098	359.717	7473.59	2886.38	2890.26	779.30	40°06'38.037"N	104°47'02.608"W	0.00	
11217.00†	90.098	359.717	7473.42	2986.38	2990.26	778.80	40°06'39.025"N	104°47'02.614"W	0.00	
11317.00†	90.098	359.717	7473.25	3086.38	3090.26	778.31	40°06'40.014"N	104°47'02.620"W	0.00	
11417.00†	90.098	359.717	7473.08	3186.38	3190.26	777.81	40°06'41.002"N	104°47'02.627"W	0.00	
11517.00†	90.098	359.717	7472.91	3286.38	3290.26	777.32	40°06'41.991"N	104°47'02.633"W	0.00	
11617.00†	90.098	359.717	7472.74	3386.38	3390.26	776.82	40°06'42.980"N	104°47'02.639"W	0.00	



Planned Wellpath Report

TEDFORD 3C-28HZ (PERMIT REV-5) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 TEDFORD 3C-28HZ (285'FSL & 1342'FWL, SEC.28)
Area	Compass Import	Well	TEDFORD 3C-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	TEDFORD 3C-28HZ PWB
Facility	SEC.28-T2N-R66W		

WELLPATH DATA (152 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11717.00†	90.098	359.717	7472.57	3486.38	3490.26	776.33	40°06'43.968"N	104°47'02.646"W	0.00	
11817.00†	90.098	359.717	7472.40	3586.38	3590.26	775.83	40°06'44.957"N	104°47'02.652"W	0.00	
11917.00†	90.098	359.717	7472.23	3686.38	3690.25	775.34	40°06'45.945"N	104°47'02.658"W	0.00	
12017.00†	90.098	359.717	7472.06	3786.38	3790.25	774.85	40°06'46.934"N	104°47'02.665"W	0.00	
12117.00†	90.098	359.717	7471.89	3886.38	3890.25	774.35	40°06'47.923"N	104°47'02.671"W	0.00	
12217.00†	90.098	359.717	7471.72	3986.38	3990.25	773.86	40°06'48.911"N	104°47'02.677"W	0.00	
12317.00†	90.098	359.717	7471.55	4086.38	4090.25	773.36	40°06'49.900"N	104°47'02.684"W	0.00	
12417.00†	90.098	359.717	7471.38	4186.38	4190.25	772.87	40°06'50.888"N	104°47'02.690"W	0.00	
12517.00†	90.098	359.717	7471.21	4286.38	4290.25	772.37	40°06'51.877"N	104°47'02.696"W	0.00	
12617.00†	90.098	359.717	7471.04	4386.38	4390.24	771.88	40°06'52.866"N	104°47'02.703"W	0.00	
12717.00†	90.098	359.717	7470.87	4486.38	4490.24	771.38	40°06'53.854"N	104°47'02.709"W	0.00	
12817.00†	90.098	359.717	7470.70	4586.38	4590.24	770.89	40°06'54.843"N	104°47'02.715"W	0.00	
12917.00†	90.098	359.717	7470.53	4686.38	4690.24	770.39	40°06'55.831"N	104°47'02.722"W	0.00	
13017.00†	90.098	359.717	7470.36	4786.38	4790.24	769.90	40°06'56.820"N	104°47'02.728"W	0.00	
13117.00†	90.098	359.717	7470.19	4886.38	4890.24	769.40	40°06'57.809"N	104°47'02.734"W	0.00	
13217.00†	90.098	359.717	7470.02	4986.38	4990.24	768.91	40°06'58.797"N	104°47'02.741"W	0.00	
13228.93	90.098	359.717	7470.00†	4998.30	5002.16	768.85	40°06'58.915"N	104°47'02.741"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS

- Ref Wellbore: TEDFORD 3C-28HZ PWB Ref Wellpath: TEDFORD 3C-28HZ (PERMIT REV-5) 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	1829.95	1812.95	17.00	1800.00	0.00	0.00	-206.50	192.03
9.625in Casing Surface	17.00	1829.95	1812.95	17.00	1800.00	0.00	0.00	-206.50	192.03
7.875in Open Hole	1829.95	13228.93	11398.98	1800.00	7470.00	-206.50	192.03	5002.16	768.85
5.5in Casing Production	17.00	13228.93	13211.93	17.00	7470.00	0.00	0.00	5002.16	768.85

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	-1109.09	-17.89	1700006.28	14563067.38	40°05'58.499"N	104°47'12.872"W	polygon
SEC.29-T2N-R66W SECTION LINES		41.00	-581.37	-2243.04	1697779.87	14563589.76	40°06'03.715"N	104°47'41.518"W	polygon
SEC.32-T2N-R66W SECTION LINES		41.00	-581.37	-2243.04	1697779.87	14563589.76	40°06'03.715"N	104°47'41.518"W	polygon
SEC.28-T2N-R66W SECTION LINES		7301.00	-0.25	29.96	1700051.47	14564176.32	40°06'09.461"N	104°47'12.256"W	polygon
1) TEDFORD 3C-28HZ BHL REV-2 (1'FNL & 2125'FWL, SEC.28)	13228.93	7470.00	5002.16	768.85	1700778.37	14569180.48	40°06'58.915"N	104°47'02.741"W	point



Planned Wellpath Report

TEDFORD 3C-28HZ (PERMIT REV-5) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 TEDFORD 3C-28HZ (285'FSL & 1342'FWL, SEC.28)
Area	Compass Import	Well	TEDFORD 3C-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	TEDFORD 3C-28HZ PWB
Facility	SEC.28-T2N-R66W		

SURVEY PROGRAM -				
Ref Wellbore: TEDFORD 3C-28HZ PWB		Ref Wellpath: TEDFORD 3C-28HZ (PERMIT REV-5) PWP		
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	13228.93	Custom APC_ISCWSA REV 2 MWD+IFR1+SC (approximation)		TEDFORD 3C-28HZ PWB



Planned Wellpath Report

TEDFORD 3C-28HZ (PERMIT REV-5) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 TEDFORD 3C-28HZ (285'FSL & 1342'FWL, SEC.28)
Area	Compass Import	Well	TEDFORD 3C-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	TEDFORD 3C-28HZ PWB
Facility	SEC.28-T2N-R66W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1050.00	12.750	137.078	1043.00	FOX HILLS BASE
4076.69	14.000	137.078	3980.00	PARKMAN
4603.33	14.000	137.078	4491.00	SUSSEX
7255.61	21.389	359.717	7115.00	SHARON SPRINGS
7312.66	27.095	359.717	7167.00	NIOBRARA A
7379.99	33.827	359.717	7225.00	NIOBRARA B
7490.05	44.833	359.717	7310.00	NIOBRARA C
7752.38	71.067	359.717	7448.00	FORT HAYS
7865.98	82.426	359.717	7474.00	CODELL
7942.69	90.097	359.717	7479.00	TOP OF PRODUCTION
10878.90	90.098	359.717	7474.00	CODELL

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	137.078	17.00	TIE-ON
200.00	0.000	137.078	200.00	BEGIN NUDGE
1133.33	14.000	137.078	1124.07	END NUDGE
5155.35	14.000	137.078	5026.62	BEGIN DROP
5855.35	0.000	359.717	5719.68	END DROP
7041.72	0.000	359.717	6906.04	KOP, BUILD @ 10°/100'
7942.69	90.098	359.717	7479.00	LANDING POINT
13228.93	90.098	359.717	7470.00	TOTAL DEPTH