

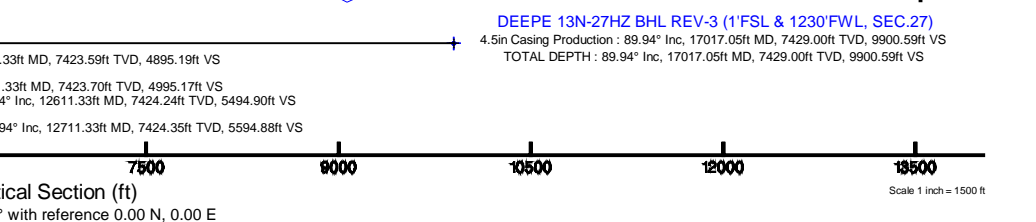
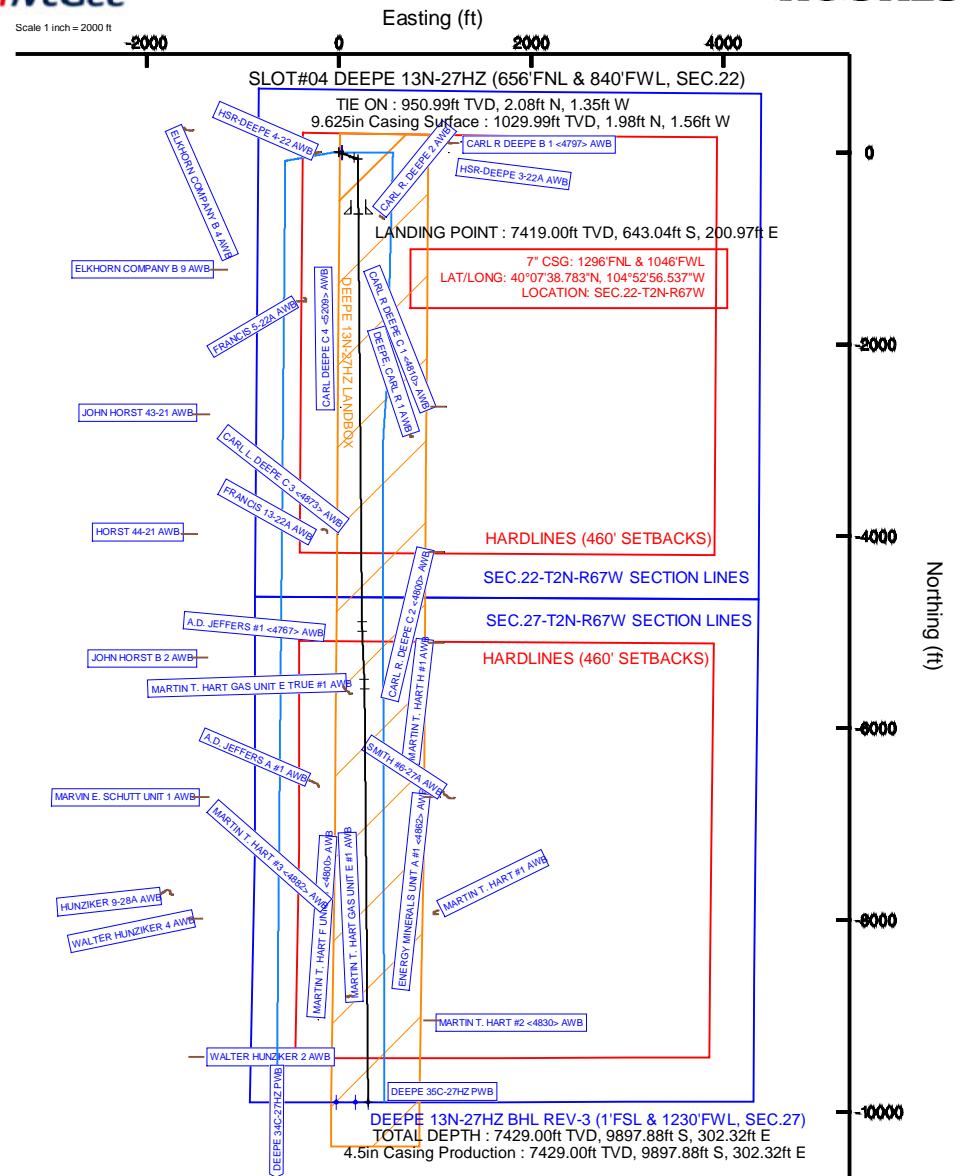
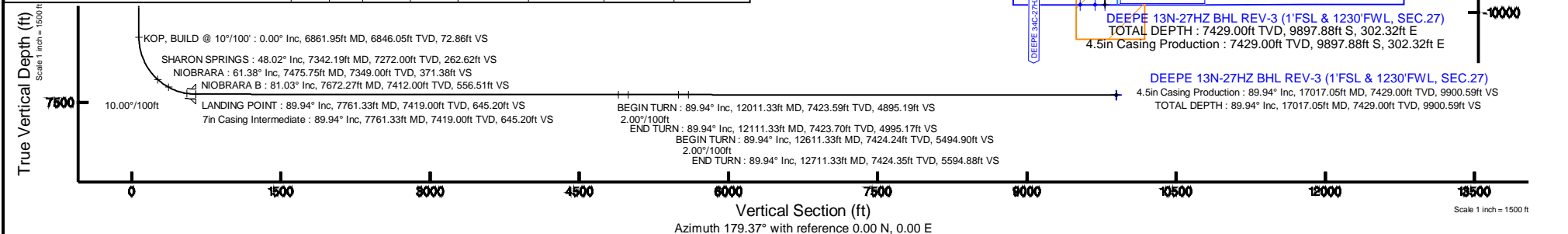
Location:	COLORADO	Slot:	SLOT#04 DEEPE 13N-27HZ (656°FNL & 840°FWL, SEC.22)
Field:	WELD COUNTY (KERR MCGEE)	Well:	DEEPE 13N-27HZ
Facility:	SEC.22-T2N-R67W	Wellbore:	DEEPE 13N-27HZ PWB

Location Information						
Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.22-T2N-R67W			317370.270	1290629.950	40°07'46.204"N	104°52'42.769"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#04 DEEPE 13N-27HZ (#56FNL & #40FWL, SEC.22)	-107.84	-1270.39	3172500.720	1290513.216	40°07'45.138"N	104°52'59.124"W
PRECISION 595 (25KB) (RKB) to Mud line (At Slot: SLOT#04 DEEPE 13N-27HZ (#56FNL & #40FWL, SEC.22))					5032R	
Mean Sea Level to Mud line (At Slot: SLOT#04 DEEPE 13N-27HZ (#56FNL & #40FWL, SEC.22))					0R	
PRECISION 595 (25KB) (RKB) to Mean Sea Level					5032R	

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
25.00	951.00	Generic gyro - continuous	Generic gyro - continuous (Standard)		DEEPE 13N-27HZ AWB
951.00	7761.33	NaviTrak	NaviTrak (MAGCORR,IFR)		DEEPE 13N-27HZ PWB
7761.33	17017.05	NaviTrak	NaviTrak (MAGCORR,IFR)		DEEPE 13N-27HZ PWB

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE ON	951.00	0.170	245.700	950.99	2.08	-1.35	0.87	-2.09
BEGIN NUDGE	1140.01	0.170	245.700	1140.00	1.84	-1.86	0.00	-1.86
END NUDGE	1646.13	10.000	110.000	1643.58	-13.53	38.86	2.00	13.96
BEGIN DROP	2358.37	10.000	110.000	2345.00	-55.83	155.08	0.00	57.53
END DROP	2858.37	0.000	179.500	2842.47	-70.72	195.97	2.00	72.86
KOP, BUILD @ 10°/100'	6861.95	0.000	179.500	6846.05	-70.72	195.97	0.00	72.86
LANDING POINT	7761.33	89.938	179.500	7419.00	-643.04	200.97	10.00	645.20
BEGIN TURN	12011.33	89.938	179.500	7423.59	-4892.87	238.06	0.00	4895.19
END TURN	12111.33	89.938	177.500	7423.70	-4992.83	240.67	2.00	4995.17
BEGIN TURN	12611.33	89.938	177.500	7424.24	-5492.36	262.48	0.00	5494.90
END TURN	12711.33	89.938	179.500	7424.35	-5592.32	265.10	2.00	5594.88
TOTAL DEPTH	17017.05	89.938	179.509	7429.00	-9897.88	302.32	0.00	9900.53

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC 22-T2N-R67W SECTION LINES		0.00	-0.40	29.91	3172530.63	1290513.02	40°07'45.134"N	104°52'58.739"W
SEC 27-T2N-R67W SECTION LINES		0.00	-0.40	29.91	3172530.63	1290513.02	40°07'45.134"N	104°52'58.739"W
DEEPE 13N-27HZ BHL ON PLAT REV-1 (1FSL & 898FWL, SEC.27)		7429.00	-8987.88	-29.68	3172539.89	1280615.80	40°06'07.326"N	104°52'59.506"W
DEEPE 13N-27HZ BHL REV-2 (1FSL & 1098FWL, SEC.27)		7429.00	-8987.88	170.32	3172738.88	1280617.19	40°06'07.326"N	104°52'56.932"W
DEEPE 13N-27HZ BHL REV-3 (1FSL & 1230FWL, SEC.27)	17017.05	7429.00	-8987.88	302.32	3172871.88	1280618.11	40°06'07.326"N	104°52'55.234"W
DEEPE 13N-27HZ LINDBOX		7447.00	-0.40	29.91	3172530.63	1290513.02	40°07'45.134"N	104°52'58.739"W
SEC 22-T2N-R67W HARDLINES (460' SETBACKS)		7700.00	-0.40	29.91	3172530.63	1290513.02	40°07'45.134"N	104°52'58.739"W
SEC 27-T2N-R67W HARDLINES (460' SETBACKS)		7700.00	-0.40	29.91	3172530.63	1290513.02	40°07'45.134"N	104°52'58.739"W

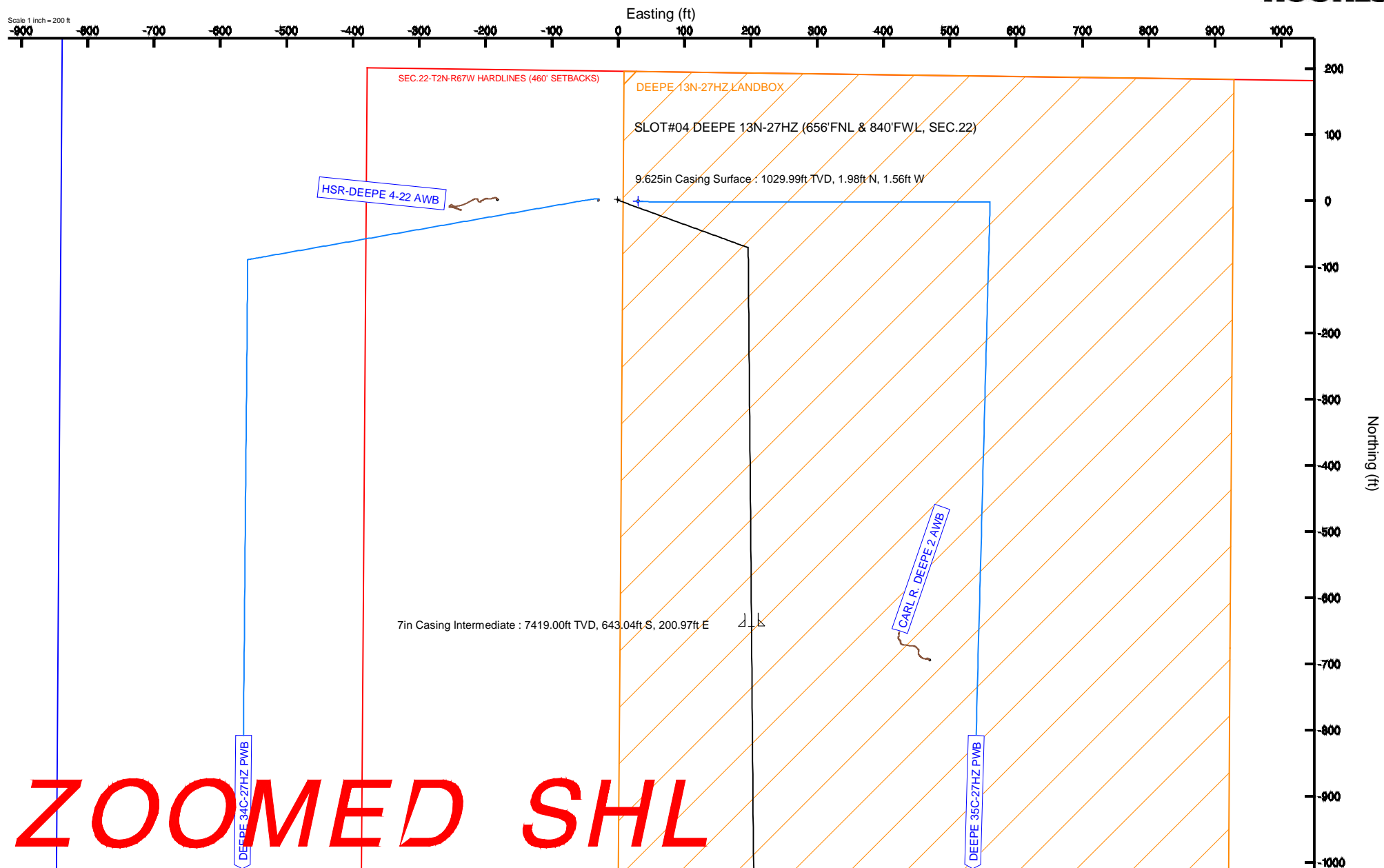


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#04 DEEPE 13N-27HZ (656'FNL & 840'FWL, SEC.22)
Field: WELD COUNTY (KERR MCGEE) Well: DEEPE 13N-27HZ
Facility: SEC.22-T2N-R67W Wellbore: DEEPE 13N-27HZ PWB

Plot reference wellpath is DEEPE 13N-27HZ (REV-C.0) PWP

True vertical depths are referenced to PRECISION 595 (25'KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to PRECISION 595 (25'KB) (RKB)	North Reference: True north
PRECISION 595 (25'KB) (RKB) to Mean Sea Level: 5032 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#04 DEEPE 13N-27HZ (656'FNL & 840'FWL, SEC.22)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robials01 on 24/Apr/2014



Planned Wellpath Report

DEEPE 13N-27HZ (REV-C.0) PWP

Page 1 of 8

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 DEEPE 13N-27HZ (656'FNL & 840'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 13N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 13N-27HZ PWB
Facility	SEC.22-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	24/Apr/2014 at 13:07
Convergence at slot	n/a	Database/Source file	WellArchitectDB/DEEPE_13N-27HZ_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-107.84	-1270.39	3172500.72	1290513.22	40°07'45.138"N	104°52'59.124"W
Facility Reference Pt			3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	PRECISION 595 (25'KB) (RKB) to Facility Vertical Datum	5032.00ft
Horizontal Reference Pt	Slot	PRECISION 595 (25'KB) (RKB) to Mean Sea Level	5032.00ft
Vertical Reference Pt	PRECISION 595 (25'KB) (RKB)	PRECISION 595 (25'KB) (RKB) to Mud Line at Slot (SLOT#04 DEEPE 13N-27HZ (656'FNL & 840'FWL, SEC.22))	5032.00ft
MD Reference Pt	PRECISION 595 (25'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.37°

Planned Wellpath Report

DEEPE 13N-27HZ (REV-C.0) PWP

Page 2 of 8

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 DEEPE 13N-27HZ (656'FNL & 840'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 13N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 13N-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (189 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	18.240	0.00	0.00	0.00	0.00	40°07'45.138"N	104°52'59.124"W	0.00	
25.00	0.000	18.240	25.00	0.00	0.00	0.00	40°07'45.138"N	104°52'59.124"W	0.00	TIE ON
125.00	0.170	18.240	125.00	-0.14	0.14	0.05	40°07'45.139"N	104°52'59.123"W	0.17	BEGIN GYRO SURVEYS
225.00	0.450	5.930	225.00	-0.67	0.67	0.13	40°07'45.145"N	104°52'59.122"W	0.29	
325.00	0.130	320.450	325.00	-1.15	1.15	0.10	40°07'45.149"N	104°52'59.123"W	0.37	
425.00	0.250	104.730	425.00	-1.18	1.18	0.24	40°07'45.150"N	104°52'59.121"W	0.36	
458.00†	0.145	45.792	458.00	-1.19	1.19	0.34	40°07'45.150"N	104°52'59.120"W	0.65	FOX HILLS BASE
525.00	0.470	338.130	525.00	-1.50	1.51	0.30	40°07'45.153"N	104°52'59.120"W	0.65	
625.00	0.420	279.230	624.99	-1.95	1.95	-0.22	40°07'45.157"N	104°52'59.127"W	0.44	
725.00	0.120	255.460	724.99	-1.99	1.98	-0.68	40°07'45.158"N	104°52'59.133"W	0.31	
825.00	0.120	326.160	824.99	-2.05	2.04	-0.84	40°07'45.158"N	104°52'59.135"W	0.14	
925.00	0.380	265.040	924.99	-2.11	2.10	-1.23	40°07'45.159"N	104°52'59.140"W	0.34	
951.00	0.170	245.700	950.99	-2.09	2.08	-1.35	40°07'45.159"N	104°52'59.141"W	0.87	TIE ON; TIE ONTO GYRO SURVEYS
1051.00†	0.170	245.700	1050.99	-1.97	1.95	-1.62	40°07'45.157"N	104°52'59.145"W	0.00	
1140.01	0.170	245.700	1140.00	-1.86	1.84	-1.86	40°07'45.156"N	104°52'59.148"W	0.00	BEGIN NUDGE
1151.00†	0.152	159.819	1150.99	-1.84	1.82	-1.87	40°07'45.156"N	104°52'59.148"W	2.00	
1251.00†	2.100	112.536	1250.97	-1.00	1.00	-0.13	40°07'45.148"N	104°52'59.126"W	2.00	
1351.00†	4.098	110.972	1350.81	1.04	-0.98	4.90	40°07'45.128"N	104°52'59.061"W	2.00	
1451.00†	6.098	110.433	1450.41	4.26	-4.12	13.21	40°07'45.097"N	104°52'58.954"W	2.00	
1551.00†	8.098	110.159	1549.64	8.67	-8.40	24.80	40°07'45.055"N	104°52'58.805"W	2.00	
1646.13	10.000	110.000	1643.58	13.96	-13.53	38.86	40°07'45.004"N	104°52'58.624"W	2.00	END NUDGE
1651.00†	10.000	110.000	1648.38	14.26	-13.82	39.65	40°07'45.001"N	104°52'58.614"W	0.00	
1751.00†	10.000	110.000	1746.86	20.37	-19.76	55.97	40°07'44.943"N	104°52'58.403"W	0.00	
1851.00†	10.000	110.000	1845.34	26.49	-25.70	72.29	40°07'44.884"N	104°52'58.193"W	0.00	
1951.00†	10.000	110.000	1943.82	32.61	-31.64	88.60	40°07'44.825"N	104°52'57.983"W	0.00	
2051.00†	10.000	110.000	2042.30	38.73	-37.58	104.92	40°07'44.767"N	104°52'57.773"W	0.00	
2151.00†	10.000	110.000	2140.78	44.84	-43.52	121.24	40°07'44.708"N	104°52'57.563"W	0.00	
2251.00†	10.000	110.000	2239.27	50.96	-49.46	137.56	40°07'44.649"N	104°52'57.353"W	0.00	
2351.00†	10.000	110.000	2337.75	57.08	-55.40	153.87	40°07'44.591"N	104°52'57.143"W	0.00	
2358.37	10.000	110.000	2345.00	57.53	-55.83	155.08	40°07'44.586"N	104°52'57.128"W	0.00	BEGIN DROP
2451.00†	8.147	110.000	2436.47	62.67	-60.83	168.80	40°07'44.537"N	104°52'56.951"W	2.00	
2551.00†	6.147	110.000	2535.69	67.06	-65.09	180.49	40°07'44.495"N	104°52'56.800"W	2.00	
2651.00†	4.147	110.000	2635.28	70.22	-68.15	188.92	40°07'44.464"N	104°52'56.692"W	2.00	
2751.00†	2.147	110.000	2735.12	72.15	-70.03	194.08	40°07'44.446"N	104°52'56.625"W	2.00	
2851.00†	0.147	110.000	2835.10	72.86	-70.72	195.96	40°07'44.439"N	104°52'56.601"W	2.00	
2858.37	0.000	179.500	2842.47	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	2.00	END DROP
2951.00†	0.000	179.500	2935.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
3051.00†	0.000	179.500	3035.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
3151.00†	0.000	179.500	3135.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
3251.00†	0.000	179.500	3235.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
3351.00†	0.000	179.500	3335.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
3451.00†	0.000	179.500	3435.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
3551.00†	0.000	179.500	3535.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
3651.00†	0.000	179.500	3635.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
3751.00†	0.000	179.500	3735.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	

Planned Wellpath Report

DEEPE 13N-27HZ (REV-C.0) PWP

Page 3 of 8

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 DEEPE 13N-27HZ (656'FNL & 840'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 13N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 13N-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (189 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3851.00†	0.000	179.500	3835.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
3951.00†	0.000	179.500	3935.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
4051.00†	0.000	179.500	4035.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
4151.00†	0.000	179.500	4135.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
4251.00†	0.000	179.500	4235.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
4351.00†	0.000	179.500	4335.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
4451.00†	0.000	179.500	4435.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
4542.90†	0.000	179.500	4527.00	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	SUSSEX
4551.00†	0.000	179.500	4535.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
4651.00†	0.000	179.500	4635.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
4751.00†	0.000	179.500	4735.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
4851.00†	0.000	179.500	4835.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
4951.00†	0.000	179.500	4935.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
5051.00†	0.000	179.500	5035.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
5091.90†	0.000	179.500	5076.00	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	SHANNON
5151.00†	0.000	179.500	5135.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
5251.00†	0.000	179.500	5235.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
5351.00†	0.000	179.500	5335.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
5451.00†	0.000	179.500	5435.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
5551.00†	0.000	179.500	5535.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
5651.00†	0.000	179.500	5635.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
5751.00†	0.000	179.500	5735.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
5851.00†	0.000	179.500	5835.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
5951.00†	0.000	179.500	5935.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
6051.00†	0.000	179.500	6035.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
6151.00†	0.000	179.500	6135.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
6251.00†	0.000	179.500	6235.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
6351.00†	0.000	179.500	6335.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
6451.00†	0.000	179.500	6435.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
6551.00†	0.000	179.500	6535.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
6651.00†	0.000	179.500	6635.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
6751.00†	0.000	179.500	6735.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
6851.00†	0.000	179.500	6835.10	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	
6861.95	0.000	179.500	6846.05	72.86	-70.72	195.97	40°07'44.439"N	104°52'56.601"W	0.00	KOP, BUILD @ 10°/100'
6951.00†	8.905	179.500	6934.74	79.77	-77.63	196.03	40°07'44.371"N	104°52'56.600"W	10.00	
7051.00†	18.905	179.500	7031.69	103.77	-101.63	196.24	40°07'44.134"N	104°52'56.598"W	10.00	
7151.00†	28.905	179.500	7122.99	144.24	-142.10	196.60	40°07'43.734"N	104°52'56.593"W	10.00	
7251.00†	38.905	179.500	7205.88	199.95	-197.81	197.08	40°07'43.183"N	104°52'56.587"W	10.00	
7342.19†	48.025	179.500	7272.00	262.62	-260.47	197.63	40°07'42.564"N	104°52'56.580"W	10.00	SHARON SPRINGS
7351.00†	48.905	179.500	7277.84	269.21	-267.06	197.69	40°07'42.499"N	104°52'56.579"W	10.00	
7451.00†	58.905	179.500	7336.68	349.91	-347.76	198.39	40°07'41.701"N	104°52'56.570"W	10.00	
7475.75†	61.381	179.500	7349.00	371.38	-369.23	198.58	40°07'41.489"N	104°52'56.568"W	10.00	NIOBRARA
7551.00†	68.905	179.500	7380.61	439.60	-437.45	199.17	40°07'40.815"N	104°52'56.560"W	10.00	
7651.00†	78.905	179.500	7408.30	535.56	-533.41	200.01	40°07'39.867"N	104°52'56.549"W	10.00	
7672.27†	81.033	179.500	7412.00	556.51	-554.35	200.19	40°07'39.660"N	104°52'56.547"W	10.00	NIOBRARA B

Planned Wellpath Report

DEEPE 13N-27HZ (REV-C.0) PWP

Page 4 of 8

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 DEEPE 13N-27HZ (656'FNL & 840'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 13N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 13N-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (189 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7751.00†	88.905	179.500	7418.90	634.87	-632.71	200.88	40°07'38.885"N	104°52'56.538"W	10.00	
7761.33	89.938	179.500	7419.00	645.20	-643.04	200.97	40°07'38.783"N	104°52'56.537"W	10.00	LANDING POINT
7851.00†	89.938	179.500	7419.10	734.87	-732.71	201.75	40°07'37.897"N	104°52'56.527"W	0.00	
7951.00†	89.938	179.500	7419.21	834.87	-832.70	202.62	40°07'36.909"N	104°52'56.516"W	0.00	
8051.00†	89.938	179.500	7419.32	934.87	-932.70	203.50	40°07'35.921"N	104°52'56.504"W	0.00	
8151.00†	89.938	179.500	7419.42	1034.87	-1032.70	204.37	40°07'34.933"N	104°52'56.493"W	0.00	
8251.00†	89.938	179.500	7419.53	1134.87	-1132.69	205.24	40°07'33.945"N	104°52'56.482"W	0.00	
8351.00†	89.938	179.500	7419.64	1234.87	-1232.69	206.11	40°07'32.956"N	104°52'56.471"W	0.00	
8451.00†	89.938	179.500	7419.75	1334.87	-1332.68	206.99	40°07'31.968"N	104°52'56.459"W	0.00	
8551.00†	89.938	179.500	7419.86	1434.87	-1432.68	207.86	40°07'30.980"N	104°52'56.448"W	0.00	
8651.00†	89.938	179.500	7419.96	1534.87	-1532.68	208.73	40°07'29.992"N	104°52'56.437"W	0.00	
8751.00†	89.938	179.500	7420.07	1634.87	-1632.67	209.60	40°07'29.004"N	104°52'56.426"W	0.00	
8851.00†	89.938	179.500	7420.18	1734.87	-1732.67	210.48	40°07'28.016"N	104°52'56.415"W	0.00	
8951.00†	89.938	179.500	7420.29	1834.87	-1832.66	211.35	40°07'27.027"N	104°52'56.403"W	0.00	
9051.00†	89.938	179.500	7420.40	1934.87	-1932.66	212.22	40°07'26.039"N	104°52'56.392"W	0.00	
9151.00†	89.938	179.500	7420.50	2034.87	-2032.66	213.09	40°07'25.051"N	104°52'56.381"W	0.00	
9251.00†	89.938	179.500	7420.61	2134.87	-2132.65	213.97	40°07'24.063"N	104°52'56.370"W	0.00	
9351.00†	89.938	179.500	7420.72	2234.87	-2232.65	214.84	40°07'23.075"N	104°52'56.358"W	0.00	
9451.00†	89.938	179.500	7420.83	2334.87	-2332.64	215.71	40°07'22.087"N	104°52'56.347"W	0.00	
9551.00†	89.938	179.500	7420.94	2434.87	-2432.64	216.59	40°07'21.098"N	104°52'56.336"W	0.00	
9651.00†	89.938	179.500	7421.04	2534.87	-2532.64	217.46	40°07'20.110"N	104°52'56.325"W	0.00	
9751.00†	89.938	179.500	7421.15	2634.86	-2632.63	218.33	40°07'19.122"N	104°52'56.314"W	0.00	
9851.00†	89.938	179.500	7421.26	2734.86	-2732.63	219.20	40°07'18.134"N	104°52'56.302"W	0.00	
9951.00†	89.938	179.500	7421.37	2834.86	-2832.63	220.08	40°07'17.146"N	104°52'56.291"W	0.00	
10051.00†	89.938	179.500	7421.48	2934.86	-2932.62	220.95	40°07'16.158"N	104°52'56.280"W	0.00	
10151.00†	89.938	179.500	7421.58	3034.86	-3032.62	221.82	40°07'15.169"N	104°52'56.269"W	0.00	
10251.00†	89.938	179.500	7421.69	3134.86	-3132.61	222.69	40°07'14.181"N	104°52'56.257"W	0.00	
10351.00†	89.938	179.500	7421.80	3234.86	-3232.61	223.57	40°07'13.193"N	104°52'56.246"W	0.00	
10451.00†	89.938	179.500	7421.91	3334.86	-3332.61	224.44	40°07'12.205"N	104°52'56.235"W	0.00	
10551.00†	89.938	179.500	7422.02	3434.86	-3432.60	225.31	40°07'11.217"N	104°52'56.224"W	0.00	
10651.00†	89.938	179.500	7422.12	3534.86	-3532.60	226.18	40°07'10.228"N	104°52'56.213"W	0.00	
10751.00†	89.938	179.500	7422.23	3634.86	-3632.59	227.06	40°07'09.240"N	104°52'56.201"W	0.00	
10851.00†	89.938	179.500	7422.34	3734.86	-3732.59	227.93	40°07'08.252"N	104°52'56.190"W	0.00	
10951.00†	89.938	179.500	7422.45	3834.86	-3832.59	228.80	40°07'07.264"N	104°52'56.179"W	0.00	
11051.00†	89.938	179.500	7422.56	3934.86	-3932.58	229.68	40°07'06.276"N	104°52'56.168"W	0.00	
11151.00†	89.938	179.500	7422.66	4034.86	-4032.58	230.55	40°07'05.288"N	104°52'56.156"W	0.00	
11251.00†	89.938	179.500	7422.77	4134.86	-4132.58	231.42	40°07'04.299"N	104°52'56.145"W	0.00	
11351.00†	89.938	179.500	7422.88	4234.86	-4232.57	232.29	40°07'03.311"N	104°52'56.134"W	0.00	
11451.00†	89.938	179.500	7422.99	4334.86	-4332.57	233.17	40°07'02.323"N	104°52'56.123"W	0.00	
11551.00†	89.938	179.500	7423.10	4434.86	-4432.56	234.04	40°07'01.335"N	104°52'56.112"W	0.00	
11651.00†	89.938	179.500	7423.20	4534.86	-4532.56	234.91	40°07'00.347"N	104°52'56.100"W	0.00	
11751.00†	89.938	179.500	7423.31	4634.86	-4632.56	235.78	40°06'59.359"N	104°52'56.089"W	0.00	
11851.00†	89.938	179.500	7423.42	4734.86	-4732.55	236.66	40°06'58.370"N	104°52'56.078"W	0.00	
11951.00†	89.938	179.500	7423.53	4834.86	-4832.55	237.53	40°06'57.382"N	104°52'56.067"W	0.00	
12011.33	89.938	179.500	7423.59	4895.19	-4892.87	238.06	40°06'56.786"N	104°52'56.060"W	0.00	BEGIN TURN

Planned Wellpath Report

DEEPE 13N-27HZ (REV-C.0) PWP

Page 5 of 8

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 DEEPE 13N-27HZ (656'FNL & 840'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 13N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 13N-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (189 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12051.00†	89.938	178.707	7423.64	4934.86	-4932.54	238.68	40°06'56.394"N	104°52'56.052"W	2.00	
12111.33	89.938	177.500	7423.70	4995.17	-4992.83	240.67	40°06'55.798"N	104°52'56.026"W	2.00	END TURN
12151.00†	89.938	177.500	7423.74	5034.82	-5032.47	242.40	40°06'55.407"N	104°52'56.004"W	0.00	
12251.00†	89.938	177.500	7423.85	5134.77	-5132.37	246.77	40°06'54.419"N	104°52'55.948"W	0.00	
12351.00†	89.938	177.500	7423.96	5234.71	-5232.28	251.13	40°06'53.432"N	104°52'55.892"W	0.00	
12451.00†	89.938	177.500	7424.07	5334.66	-5332.18	255.49	40°06'52.445"N	104°52'55.836"W	0.00	
12551.00†	89.938	177.500	7424.18	5434.61	-5432.09	259.85	40°06'51.457"N	104°52'55.779"W	0.00	
12611.33	89.938	177.500	7424.24	5494.90	-5492.36	262.48	40°06'50.862"N	104°52'55.746"W	0.00	BEGIN TURN
12651.00†	89.938	178.293	7424.29	5534.56	-5532.00	263.94	40°06'50.470"N	104°52'55.727"W	2.00	
12711.33	89.938	179.500	7424.35	5594.88	-5592.32	265.10	40°06'49.874"N	104°52'55.712"W	2.00	END TURN
12751.00†	89.938	179.500	7424.39	5634.56	-5631.99	265.45	40°06'49.482"N	104°52'55.707"W	0.00	
12851.00†	89.938	179.500	7424.50	5734.56	-5731.99	266.32	40°06'48.494"N	104°52'55.696"W	0.00	
12951.00†	89.938	179.501	7424.61	5834.56	-5831.98	267.19	40°06'47.506"N	104°52'55.685"W	0.00	
13051.00†	89.938	179.501	7424.72	5934.56	-5931.98	268.06	40°06'46.518"N	104°52'55.674"W	0.00	
13151.00†	89.938	179.501	7424.83	6034.56	-6031.97	268.93	40°06'45.529"N	104°52'55.663"W	0.00	
13251.00†	89.938	179.501	7424.93	6134.56	-6131.97	269.80	40°06'44.541"N	104°52'55.651"W	0.00	
13351.00†	89.938	179.501	7425.04	6234.56	-6231.97	270.67	40°06'43.553"N	104°52'55.640"W	0.00	
13451.00†	89.938	179.502	7425.15	6334.55	-6331.96	271.54	40°06'42.565"N	104°52'55.629"W	0.00	
13551.00†	89.938	179.502	7425.26	6434.55	-6431.96	272.41	40°06'41.577"N	104°52'55.618"W	0.00	
13651.00†	89.938	179.502	7425.37	6534.55	-6531.95	273.28	40°06'40.588"N	104°52'55.607"W	0.00	
13751.00†	89.938	179.502	7425.48	6634.55	-6631.95	274.15	40°06'39.600"N	104°52'55.596"W	0.00	
13851.00†	89.938	179.502	7425.58	6734.55	-6731.95	275.02	40°06'38.612"N	104°52'55.584"W	0.00	
13951.00†	89.938	179.503	7425.69	6834.55	-6831.94	275.89	40°06'37.624"N	104°52'55.573"W	0.00	
14051.00†	89.938	179.503	7425.80	6934.55	-6931.94	276.76	40°06'36.636"N	104°52'55.562"W	0.00	
14151.00†	89.938	179.503	7425.91	7034.55	-7031.94	277.62	40°06'35.648"N	104°52'55.551"W	0.00	
14251.00†	89.938	179.503	7426.02	7134.55	-7131.93	278.49	40°06'34.659"N	104°52'55.540"W	0.00	
14351.00†	89.938	179.504	7426.12	7234.55	-7231.93	279.36	40°06'33.671"N	104°52'55.529"W	0.00	
14451.00†	89.938	179.504	7426.23	7334.55	-7331.92	280.22	40°06'32.683"N	104°52'55.517"W	0.00	
14551.00†	89.938	179.504	7426.34	7434.55	-7431.92	281.09	40°06'31.695"N	104°52'55.506"W	0.00	
14651.00†	89.938	179.504	7426.45	7534.55	-7531.92	281.95	40°06'30.707"N	104°52'55.495"W	0.00	
14751.00†	89.938	179.504	7426.56	7634.55	-7631.91	282.82	40°06'29.719"N	104°52'55.484"W	0.00	
14851.00†	89.938	179.505	7426.66	7734.55	-7731.91	283.68	40°06'28.730"N	104°52'55.473"W	0.00	
14951.00†	89.938	179.505	7426.77	7834.55	-7831.91	284.55	40°06'27.742"N	104°52'55.462"W	0.00	
15051.00†	89.938	179.505	7426.88	7934.55	-7931.90	285.41	40°06'26.754"N	104°52'55.451"W	0.00	
15151.00†	89.938	179.505	7426.99	8034.55	-8031.90	286.28	40°06'25.766"N	104°52'55.440"W	0.00	
15251.00†	89.938	179.506	7427.10	8134.55	-8131.89	287.14	40°06'24.778"N	104°52'55.429"W	0.00	
15351.00†	89.938	179.506	7427.20	8234.55	-8231.89	288.00	40°06'23.789"N	104°52'55.418"W	0.00	
15451.00†	89.938	179.506	7427.31	8334.55	-8331.89	288.86	40°06'22.801"N	104°52'55.406"W	0.00	
15551.00†	89.938	179.506	7427.42	8434.55	-8431.88	289.73	40°06'21.813"N	104°52'55.395"W	0.00	
15651.00†	89.938	179.506	7427.53	8534.55	-8531.88	290.59	40°06'20.825"N	104°52'55.384"W	0.00	
15751.00†	89.938	179.507	7427.64	8634.55	-8631.88	291.45	40°06'19.837"N	104°52'55.373"W	0.00	
15851.00†	89.938	179.507	7427.74	8734.55	-8731.87	292.31	40°06'18.849"N	104°52'55.362"W	0.00	
15951.00†	89.938	179.507	7427.85	8834.55	-8831.87	293.17	40°06'17.860"N	104°52'55.351"W	0.00	
16051.00†	89.938	179.507	7427.96	8934.55	-8931.86	294.03	40°06'16.872"N	104°52'55.340"W	0.00	
16151.00†	89.938	179.508	7428.07	9034.55	-9031.86	294.89	40°06'15.884"N	104°52'55.329"W	0.00	

Planned Wellpath Report

DEEPE 13N-27HZ (REV-C.0) PWP

Page 6 of 8

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 DEEPE 13N-27HZ (656'FNL & 840'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 13N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 13N-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (189 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16251.00†	89.938	179.508	7428.17	9134.55	-9131.86	295.75	40°06'14.896"N	104°52'55.318"W	0.00	
16351.00†	89.938	179.508	7428.28	9234.55	-9231.85	296.61	40°06'13.908"N	104°52'55.307"W	0.00	
16451.00†	89.938	179.508	7428.39	9334.55	-9331.85	297.47	40°06'12.920"N	104°52'55.296"W	0.00	
16551.00†	89.938	179.508	7428.50	9434.54	-9431.84	298.33	40°06'11.931"N	104°52'55.285"W	0.00	
16651.00†	89.938	179.509	7428.61	9534.54	-9531.84	299.18	40°06'10.943"N	104°52'55.274"W	0.00	
16751.00†	89.938	179.509	7428.71	9634.54	-9631.84	300.04	40°06'09.955"N	104°52'55.263"W	0.00	
16851.00†	89.938	179.509	7428.82	9734.54	-9731.83	300.90	40°06'08.967"N	104°52'55.252"W	0.00	
16951.00†	89.938	179.509	7428.93	9834.54	-9831.83	301.75	40°06'07.979"N	104°52'55.241"W	0.00	
17017.05	89.938	179.509	7429.00 ¹	9900.59	-9897.88	302.32	40°06'07.326"N	104°52'55.234"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: DEEPE 13N-27HZ PWB Ref Wellpath: DEEPE 13N-27HZ (REV-C.0) 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	25.00	1040.00	1015.00	25.00	1039.99	0.00	0.00	1.97	-1.59
9.625in Casing Surface	25.00	1030.00	1005.00	25.00	1029.99	0.00	0.00	1.98	-1.56
8.75in Open Hole	1040.00	7761.33	6721.33	1039.99	7419.00	1.97	-1.59	-643.04	200.97
7in Casing Intermediate	25.00	7761.33	7736.33	25.00	7419.00	0.00	0.00	-643.04	200.97
6.125in Open Hole	7761.33	17017.05	9255.72	7419.00	7429.00	-643.04	200.97	-9897.88	302.32
4.5in Casing Production	25.00	17017.05	16992.05	25.00	7429.00	0.00	0.00	-9897.88	302.32

Planned Wellpath Report

DEEPE 13N-27HZ (REV-C.0) PWP

Page 7 of 8

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 DEEPE 13N-27HZ (656'FNL & 840'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 13N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 13N-27HZ PWB
Facility	SEC.22-T2N-R67W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.22-T2N-R67W SECTION LINES		0.00	-0.40	29.91	3172530.63	1290513.02	40°07'45.134"N	104°52'58.739"W	polygon
SEC.27-T2N-R67W SECTION LINES		0.00	-0.40	29.91	3172530.63	1290513.02	40°07'45.134"N	104°52'58.739"W	polygon
DEEPE 13N-27HZ BHL ON PLAT REV-1 (1'FSL & 898'FWL, SEC.27)		7429.00	-9897.88	-29.68	3172539.89	1280615.80	40°06'07.326"N	104°52'59.506"W	point
DEEPE 13N-27HZ BHL REV-2 (1'FSL & 1098'FWL, SEC.27)		7429.00	-9897.88	170.32	3172739.88	1280617.19	40°06'07.326"N	104°52'56.932"W	point
1) DEEPE 13N-27HZ BHL REV-3 (1'FSL & 1230'FWL, SEC.27)	17017.05	7429.00	-9897.88	302.32	3172871.88	1280618.11	40°06'07.326"N	104°52'55.234"W	point
DEEPE 13N-27HZ LANDBOX		7447.00	-0.40	29.91	3172530.63	1290513.02	40°07'45.134"N	104°52'58.739"W	polygon
SEC.22-T2N-R67W HARDLINES (460' SETBACKS)		7700.00	-0.40	29.91	3172530.63	1290513.02	40°07'45.134"N	104°52'58.739"W	polygon
SEC.27-T2N-R67W HARDLINES (460' SETBACKS)		7700.00	-0.40	29.91	3172530.63	1290513.02	40°07'45.134"N	104°52'58.739"W	polygon

SURVEY PROGRAM - Ref Wellbore: DEEPE 13N-27HZ PWB Ref Wellpath: DEEPE 13N-27HZ (REV-C.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	951.00	Generic gyro - continuous (Standard)		DEEPE 13N-27HZ AWB
951.00	7761.33	NaviTrak (MAGCORR,IFR)		DEEPE 13N-27HZ PWB
7761.33	17017.05	NaviTrak (MAGCORR,IFR)		DEEPE 13N-27HZ PWB

Planned Wellpath Report

DEEPE 13N-27HZ (REV-C.0) PWP

Page 8 of 8

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 DEEPE 13N-27HZ (656'FNL & 840'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 13N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 13N-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
25.00	0.000	18.240	25.00	TIE ON
125.00	0.170	18.240	125.00	BEGIN GYRO SURVEYS
458.00	0.145	45.792	458.00	FOX HILLS BASE
951.00	0.170	245.700	950.99	TIE ONTO GYRO SURVEYS
4542.90	0.000	179.500	4527.00	SUSSEX
5091.90	0.000	179.500	5076.00	SHANNON
7342.19	48.025	179.500	7272.00	SHARON SPRINGS
7475.75	61.381	179.500	7349.00	NIOBRARA
7672.27	81.033	179.500	7412.00	NIOBRARA B

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
951.00	0.170	245.700	950.99	TIE ON
1140.01	0.170	245.700	1140.00	BEGIN NUDGE
1646.13	10.000	110.000	1643.58	END NUDGE
2358.37	10.000	110.000	2345.00	BEGIN DROP
2858.37	0.000	179.500	2842.47	END DROP
6861.95	0.000	179.500	6846.05	KOP, BUILD @ 10°/100'
7761.33	89.938	179.500	7419.00	LANDING POINT
12011.33	89.938	179.500	7423.59	BEGIN TURN
12111.33	89.938	177.500	7423.70	END TURN
12611.33	89.938	177.500	7424.24	BEGIN TURN
12711.33	89.938	179.500	7424.35	END TURN
17017.05	89.938	179.509	7429.00	TOTAL DEPTH