

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#14 MAVERICK 27N-13HZ (301'FSL & 1646'FEL, SEC.13)
 Field: WELD COUNTY (KERR MCGEE) Well: MAVERICK 27N-13HZ
 Facility: SEC.13-T3N-R66W Wellbore: MAVERICK 27N-13HZ PWB

Plot reference wellpath is MAVERICK 27N-13HZ (PERMIT REV-1) PWP

True vertical depths are referenced to PERMIT (17RKB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to PERMIT (17RKB) (RKB)	North Reference: True north
PERMIT (17RKB) (RKB) to Mean Sea Level: 5063 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#14 MAVERICK 27N-13HZ (301'FSL & 1646'FEL, SEC.13): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: noblake01 on 15/Nov/2013

Location Information

Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.13-T3N-R66W		3217047.322	1323895.667	40°13'11.568"N	104°43'21.864"W
Slot		Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
SLOT#14 MAVERICK 27N-13HZ (301'FSL & 1646'FEL, SEC.13)		-351.95	305.49	3217355.869	1323546.421
PERMIT (17RKB) (RKB) to Mud line (At Slot: SLOT#14 MAVERICK 27N-13HZ (301'FSL & 1646'FEL, SEC.13)		5063ft			
Mean Sea Level to Mud line (At Slot: SLOT#14 MAVERICK 27N-13HZ (301'FSL & 1646'FEL, SEC.13)		0ft			
PERMIT (17RKB) (RKB) to Mean Sea Level		5063ft			

Survey Program

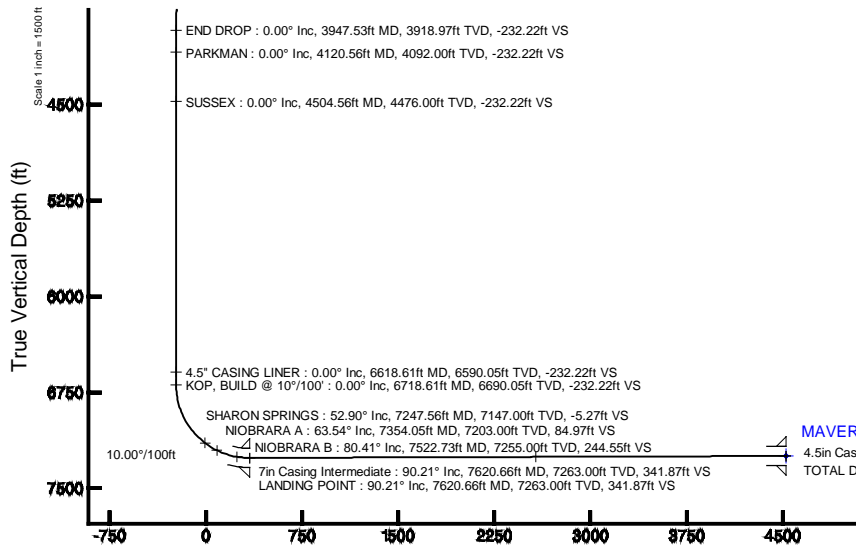
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	11810.39	NaviTrak	NaviTrak (MagCorr)		MAVERICK 27N-13HZ PWB

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
MAVERICK 27N-13HZ BHL ON PLAT REV-1 (460'FNL & 1390'FEL, SEC.13)	11810.39	7248.00	4517.74	254.12	3217570.31	1328066.01	40°13'52.734"N	104°43'14.690"W
MAVERICK 27N-13HZ LANDBOX	7248.00	0.00	0.00	0.00	3217355.87	1323546.42	40°13'08.090"N	104°43'17.926"W
SEC.13-T3N-R66W HARDLINES (460' SETBACKS)	7287.00	-7.58	-499.03	-499.03	3216856.94	1323034.46	40°13'08.015"N	104°43'24.399"W
SEC.13-T3N-R66W SECTION LINES	7287.00	-7.58	-499.03	-499.03	3216856.94	1323034.46	40°13'08.015"N	104°43'24.399"W

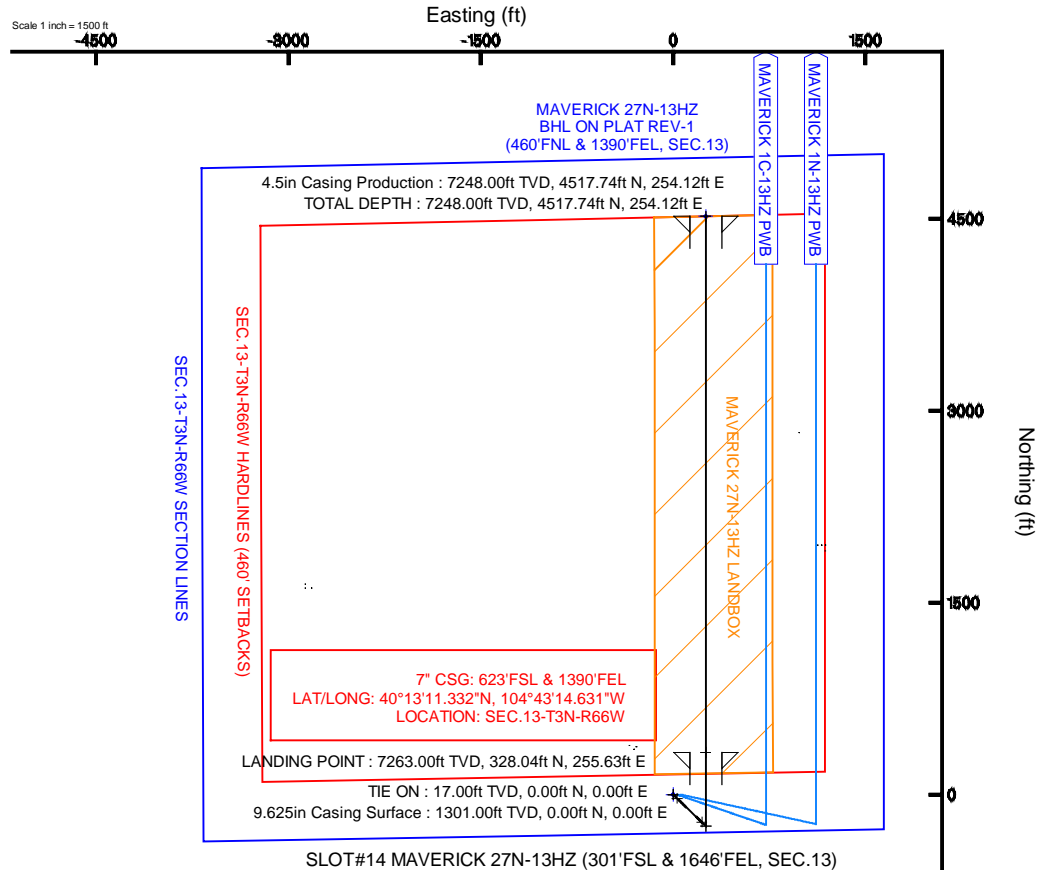
Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE ON	17.00	0.000	133.990	17.00	0.00	0.00	0.00	0.00
BEGIN NUDDGE	1401.00	0.000	133.990	1401.00	0.00	0.00	0.00	0.00
END NUDDGE	1901.00	10.000	133.990	1898.47	-30.23	31.31	2.00	-28.42
BEGIN DROP	3447.53	10.000	133.990	3421.50	-216.75	224.53	0.00	-203.79
END DROP	3947.53	0.000	359.979	3918.97	-246.97	255.84	2.00	-232.22
KOP, BUILD @ 10°/100'	6718.61	0.000	359.979	6690.05	-246.97	255.84	0.00	-232.22
LANDING POINT	7620.66	90.205	359.979	7263.00	328.04	255.63	10.00	341.87
TOTAL DEPTH	11810.39	90.205	359.979	7248.00	4517.74	254.12	0.00	4524.88



MAVERICK 27N-13HZ BHL ON PLAT REV-1 (460'FNL & 1390'FEL, SEC.13)

4.5in Casing Production : 90.21° Inc, 11810.39ft MD, 7248.00ft TVD, 4524.88ft VS
 TOTAL DEPTH : 90.21° Inc, 11810.39ft MD, 7248.00ft TVD, 4524.88ft VS



SLOT#14 MAVERICK 27N-13HZ (301'FSL & 1646'FEL, SEC.13)

Vertical Section (ft)
 Azimuth 3.22° with reference 0.00 N, 0.00 E

Scale 1 inch = 1500 ft



Planned Wellpath Report

MAVERICK 27N-13HZ (PERMIT REV-1) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#14 MAVERICK 27N-13HZ (301'FSL & 1646'FEL, SEC.13)
Area	COLORADO	Well	MAVERICK 27N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MAVERICK 27N-13HZ PWB
Facility	SEC.13-T3N-R66W		

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	0.999957	Report Generated	15/Nov/2013 at 14:02
Convergence at slot	n/a	Database/Source file	WellArchitectDB/MAVERICK_27N-13HZ_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-351.95	305.49	3217355.87	1323546.42	40°13'08.090"N	104°43'17.926"W
Facility Reference Pt			3217047.32	1323895.67	40°13'11.568"N	104°43'21.864"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'RKB) (RKB) to Facility Vertical Datum	5063.00ft
Horizontal Reference Pt	Slot	PERMIT (17'RKB) (RKB) to Mean Sea Level	5063.00ft
Vertical Reference Pt	PERMIT (17'RKB) (RKB)	PERMIT (17'RKB) (RKB) to Mud Line at Slot (SLOT#14 MAVERICK 27N-13HZ (301'FSL & 1646'FEL, SEC.13))	5063.00ft
MD Reference Pt	PERMIT (17'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	3.22°



Planned Wellpath Report

MAVERICK 27N-13HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#14 MAVERICK 27N-13HZ (301'FSL & 1646'FEL, SEC.13
Area	COLORADO	Well	MAVERICK 27N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MAVERICK 27N-13HZ PWB
Facility	SEC.13-T3N-R66W		

WELLPATH DATA (134 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	133.990	0.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	
17.00	0.000	133.990	17.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	TIE ON
117.00†	0.000	133.990	117.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	
217.00†	0.000	133.990	217.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	
317.00†	0.000	133.990	317.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	
417.00†	0.000	133.990	417.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	
517.00†	0.000	133.990	517.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	
617.00†	0.000	133.990	617.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	
717.00†	0.000	133.990	717.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	
817.00†	0.000	133.990	817.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	
917.00†	0.000	133.990	917.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	
1017.00†	0.000	133.990	1017.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	
1117.00†	0.000	133.990	1117.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	
1217.00†	0.000	133.990	1217.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	
1251.00†	0.000	133.990	1251.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	FOX HILLS MARKER
1317.00†	0.000	133.990	1317.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	
1401.00	0.000	133.990	1401.00	0.00	0.00	0.00	40°13'08.090"N	104°43'17.926"W	0.00	BEGIN NUDGE
1417.00†	0.320	133.990	1417.00	-0.03	-0.03	0.03	40°13'08.090"N	104°43'17.926"W	2.00	
1517.00†	2.320	133.990	1516.97	-1.53	-1.63	1.69	40°13'08.074"N	104°43'17.904"W	2.00	
1617.00†	4.320	133.990	1616.80	-5.32	-5.65	5.86	40°13'08.034"N	104°43'17.851"W	2.00	
1717.00†	6.320	133.990	1716.36	-11.37	-12.09	12.53	40°13'07.971"N	104°43'17.765"W	2.00	
1817.00†	8.320	133.990	1815.54	-19.69	-20.94	21.69	40°13'07.883"N	104°43'17.646"W	2.00	
1901.00	10.000	133.990	1898.47	-28.42	-30.23	31.31	40°13'07.791"N	104°43'17.522"W	2.00	END NUDGE
1917.00†	10.000	133.990	1914.22	-30.24	-32.16	33.31	40°13'07.772"N	104°43'17.497"W	0.00	
2017.00†	10.000	133.990	2012.70	-41.58	-44.22	45.81	40°13'07.653"N	104°43'17.336"W	0.00	
2117.00†	10.000	133.990	2111.18	-52.92	-56.28	58.30	40°13'07.534"N	104°43'17.174"W	0.00	
2217.00†	10.000	133.990	2209.66	-64.26	-68.34	70.79	40°13'07.415"N	104°43'17.013"W	0.00	
2317.00†	10.000	133.990	2308.15	-75.60	-80.40	83.28	40°13'07.295"N	104°43'16.852"W	0.00	
2417.00†	10.000	133.990	2406.63	-86.93	-92.46	95.78	40°13'07.176"N	104°43'16.691"W	0.00	
2517.00†	10.000	133.990	2505.11	-98.27	-104.52	108.27	40°13'07.057"N	104°43'16.530"W	0.00	
2617.00†	10.000	133.990	2603.59	-109.61	-116.58	120.76	40°13'06.938"N	104°43'16.369"W	0.00	
2717.00†	10.000	133.990	2702.07	-120.95	-128.64	133.26	40°13'06.819"N	104°43'16.208"W	0.00	
2817.00†	10.000	133.990	2800.55	-132.29	-140.70	145.75	40°13'06.700"N	104°43'16.047"W	0.00	
2917.00†	10.000	133.990	2899.03	-143.63	-152.76	158.24	40°13'06.580"N	104°43'15.886"W	0.00	
3017.00†	10.000	133.990	2997.51	-154.97	-164.82	170.74	40°13'06.461"N	104°43'15.725"W	0.00	
3117.00†	10.000	133.990	3095.99	-166.31	-176.88	183.23	40°13'06.342"N	104°43'15.564"W	0.00	
3217.00†	10.000	133.990	3194.47	-177.65	-188.94	195.72	40°13'06.223"N	104°43'15.403"W	0.00	
3317.00†	10.000	133.990	3292.95	-188.99	-201.00	208.22	40°13'06.104"N	104°43'15.242"W	0.00	
3417.00†	10.000	133.990	3391.43	-200.33	-213.06	220.71	40°13'05.985"N	104°43'15.081"W	0.00	
3447.53	10.000	133.990	3421.50	-203.79	-216.75	224.53	40°13'05.948"N	104°43'15.032"W	0.00	BEGIN DROP
3517.00†	8.611	133.990	3490.05	-211.13	-224.55	232.61	40°13'05.871"N	104°43'14.928"W	2.00	
3617.00†	6.611	133.990	3589.17	-219.78	-233.75	242.14	40°13'05.780"N	104°43'14.805"W	2.00	
3717.00†	4.611	133.990	3688.68	-226.16	-240.54	249.17	40°13'05.713"N	104°43'14.714"W	2.00	
3817.00†	2.611	133.990	3788.48	-230.27	-244.91	253.70	40°13'05.670"N	104°43'14.656"W	2.00	
3917.00†	0.611	133.990	3888.44	-232.11	-246.86	255.72	40°13'05.651"N	104°43'14.630"W	2.00	



Planned Wellpath Report

MAVERICK 27N-13HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#14 MAVERICK 27N-13HZ (301'FSL & 1646'FEL, SEC.13)
Area	COLORADO	Well	MAVERICK 27N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MAVERICK 27N-13HZ PWB
Facility	SEC.13-T3N-R66W		

WELLPATH DATA (134 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3947.53	0.000	359.979	3918.97	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	2.00	END DROP
4017.00†	0.000	359.979	3988.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
4117.00†	0.000	359.979	4088.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
4120.56†	0.000	359.979	4092.00	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	PARKMAN
4217.00†	0.000	359.979	4188.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
4317.00†	0.000	359.979	4288.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
4417.00†	0.000	359.979	4388.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
4504.56†	0.000	359.979	4476.00	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	SUSSEX
4517.00†	0.000	359.979	4488.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
4617.00†	0.000	359.979	4588.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
4717.00†	0.000	359.979	4688.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
4817.00†	0.000	359.979	4788.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
4917.00†	0.000	359.979	4888.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
5017.00†	0.000	359.979	4988.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
5117.00†	0.000	359.979	5088.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
5217.00†	0.000	359.979	5188.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
5317.00†	0.000	359.979	5288.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
5417.00†	0.000	359.979	5388.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
5517.00†	0.000	359.979	5488.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
5617.00†	0.000	359.979	5588.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
5717.00†	0.000	359.979	5688.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
5817.00†	0.000	359.979	5788.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
5917.00†	0.000	359.979	5888.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
6017.00†	0.000	359.979	5988.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
6117.00†	0.000	359.979	6088.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
6217.00†	0.000	359.979	6188.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
6317.00†	0.000	359.979	6288.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
6417.00†	0.000	359.979	6388.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
6517.00†	0.000	359.979	6488.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
6617.00†	0.000	359.979	6588.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
6618.61†	0.000	359.979	6590.05	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	4.5" CASING LINER
6717.00†	0.000	359.979	6688.44	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	
6718.61	0.000	359.979	6690.05	-232.22	-246.97	255.84	40°13'05.649"N	104°43'14.628"W	0.00	KOP, BUILD @ 10°/100'
6817.00†	9.839	359.979	6787.95	-223.80	-238.55	255.84	40°13'05.733"N	104°43'14.628"W	10.00	
6917.00†	19.839	359.979	6884.49	-198.27	-212.97	255.83	40°13'05.985"N	104°43'14.628"W	10.00	
7017.00†	29.839	359.979	6975.13	-156.38	-171.02	255.81	40°13'06.400"N	104°43'14.628"W	10.00	
7117.00†	39.839	359.979	7057.10	-99.42	-113.96	255.79	40°13'06.964"N	104°43'14.629"W	10.00	
7217.00†	49.839	359.979	7127.92	-29.11	-43.54	255.76	40°13'07.660"N	104°43'14.629"W	10.00	
7247.56†	52.895	359.979	7147.00	-5.27	-19.67	255.76	40°13'07.896"N	104°43'14.629"W	10.00	SHARON SPRINGS
7317.00†	59.839	359.979	7185.43	52.41	38.11	255.74	40°13'08.467"N	104°43'14.629"W	10.00	
7354.05†	63.544	359.979	7203.00	84.97	70.72	255.72	40°13'08.789"N	104°43'14.629"W	10.00	NIOBRARA A
7417.00†	69.839	359.979	7227.90	142.67	128.51	255.70	40°13'09.360"N	104°43'14.630"W	10.00	
7517.00†	79.839	359.979	7254.02	238.91	224.91	255.67	40°13'10.312"N	104°43'14.630"W	10.00	
7522.73†	80.412	359.979	7255.00	244.55	230.55	255.67	40°13'10.368"N	104°43'14.630"W	10.00	NIOBRARA B
7617.00†	89.839	359.979	7263.00	338.22	324.37	255.63	40°13'11.295"N	104°43'14.631"W	10.00	



Planned Wellpath Report

MAVERICK 27N-13HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#14 MAVERICK 27N-13HZ (301'FSL & 1646'FEL, SEC.13)
Area	COLORADO	Well	MAVERICK 27N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MAVERICK 27N-13HZ PWB
Facility	SEC.13-T3N-R66W		

WELLPATH DATA (134 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7620.66	90.205	359.979	7263.00	341.87	328.04	255.63	40°13'11.332"N	104°43'14.631"W	10.00	LANDING POINT
7717.00†	90.205	359.979	7262.65	438.06	424.37	255.60	40°13'12.284"N	104°43'14.631"W	0.00	
7817.00†	90.205	359.979	7262.30	537.90	524.37	255.56	40°13'13.272"N	104°43'14.632"W	0.00	
7917.00†	90.205	359.979	7261.94	637.74	624.37	255.52	40°13'14.260"N	104°43'14.632"W	0.00	
8017.00†	90.205	359.979	7261.58	737.58	724.37	255.49	40°13'15.248"N	104°43'14.632"W	0.00	
8117.00†	90.205	359.979	7261.22	837.42	824.37	255.45	40°13'16.236"N	104°43'14.633"W	0.00	
8217.00†	90.205	359.979	7260.86	937.26	924.37	255.42	40°13'17.225"N	104°43'14.633"W	0.00	
8317.00†	90.205	359.979	7260.51	1037.09	1024.37	255.38	40°13'18.213"N	104°43'14.634"W	0.00	
8417.00†	90.205	359.979	7260.15	1136.93	1124.37	255.34	40°13'19.201"N	104°43'14.634"W	0.00	
8517.00†	90.205	359.979	7259.79	1236.77	1224.37	255.31	40°13'20.189"N	104°43'14.635"W	0.00	
8617.00†	90.205	359.979	7259.43	1336.61	1324.37	255.27	40°13'21.177"N	104°43'14.635"W	0.00	
8717.00†	90.205	359.979	7259.07	1436.45	1424.37	255.23	40°13'22.166"N	104°43'14.636"W	0.00	
8817.00†	90.205	359.979	7258.72	1536.29	1524.37	255.20	40°13'23.154"N	104°43'14.636"W	0.00	
8917.00†	90.205	359.979	7258.36	1636.13	1624.37	255.16	40°13'24.142"N	104°43'14.637"W	0.00	
9017.00†	90.205	359.979	7258.00	1735.97	1724.36	255.13	40°13'25.130"N	104°43'14.637"W	0.00	
9117.00†	90.205	359.979	7257.64	1835.81	1824.36	255.09	40°13'26.118"N	104°43'14.637"W	0.00	
9217.00†	90.205	359.979	7257.28	1935.65	1924.36	255.05	40°13'27.106"N	104°43'14.638"W	0.00	
9317.00†	90.205	359.979	7256.93	2035.49	2024.36	255.02	40°13'28.095"N	104°43'14.638"W	0.00	
9417.00†	90.205	359.979	7256.57	2135.33	2124.36	254.98	40°13'29.083"N	104°43'14.639"W	0.00	
9517.00†	90.205	359.979	7256.21	2235.17	2224.36	254.95	40°13'30.071"N	104°43'14.639"W	0.00	
9617.00†	90.205	359.979	7255.85	2335.01	2324.36	254.91	40°13'31.059"N	104°43'14.640"W	0.00	
9717.00†	90.205	359.979	7255.49	2434.85	2424.36	254.87	40°13'32.047"N	104°43'14.640"W	0.00	
9817.00†	90.205	359.979	7255.14	2534.69	2524.36	254.84	40°13'33.036"N	104°43'14.641"W	0.00	
9855.12†	90.205	359.979	7255.00	2572.75	2562.48	254.82	40°13'33.412"N	104°43'14.641"W	0.00	NIOBRARA B
9917.00†	90.205	359.979	7254.78	2634.53	2624.36	254.80	40°13'34.024"N	104°43'14.641"W	0.00	
10017.00†	90.205	359.979	7254.42	2734.37	2724.36	254.77	40°13'35.012"N	104°43'14.641"W	0.00	
10117.00†	90.205	359.979	7254.06	2834.21	2824.36	254.73	40°13'36.000"N	104°43'14.642"W	0.00	
10217.00†	90.205	359.979	7253.70	2934.05	2924.36	254.69	40°13'36.988"N	104°43'14.642"W	0.00	
10317.00†	90.205	359.979	7253.35	3033.88	3024.36	254.66	40°13'37.976"N	104°43'14.643"W	0.00	
10417.00†	90.205	359.979	7252.99	3133.72	3124.36	254.62	40°13'38.965"N	104°43'14.643"W	0.00	
10517.00†	90.205	359.979	7252.63	3233.56	3224.36	254.58	40°13'39.953"N	104°43'14.644"W	0.00	
10617.00†	90.205	359.979	7252.27	3333.40	3324.35	254.55	40°13'40.941"N	104°43'14.644"W	0.00	
10717.00†	90.205	359.979	7251.91	3433.24	3424.35	254.51	40°13'41.929"N	104°43'14.645"W	0.00	
10817.00†	90.205	359.979	7251.56	3533.08	3524.35	254.48	40°13'42.917"N	104°43'14.645"W	0.00	
10917.00†	90.205	359.979	7251.20	3632.92	3624.35	254.44	40°13'43.906"N	104°43'14.646"W	0.00	
11017.00†	90.205	359.979	7250.84	3732.76	3724.35	254.40	40°13'44.894"N	104°43'14.646"W	0.00	
11117.00†	90.205	359.979	7250.48	3832.60	3824.35	254.37	40°13'45.882"N	104°43'14.646"W	0.00	
11217.00†	90.205	359.979	7250.12	3932.44	3924.35	254.33	40°13'46.870"N	104°43'14.647"W	0.00	
11317.00†	90.205	359.979	7249.77	4032.28	4024.35	254.30	40°13'47.858"N	104°43'14.647"W	0.00	
11417.00†	90.205	359.979	7249.41	4132.12	4124.35	254.26	40°13'48.847"N	104°43'14.648"W	0.00	
11517.00†	90.205	359.979	7249.05	4231.96	4224.35	254.22	40°13'49.835"N	104°43'14.648"W	0.00	
11617.00†	90.205	359.979	7248.69	4331.80	4324.35	254.19	40°13'50.823"N	104°43'14.649"W	0.00	
11717.00†	90.205	359.979	7248.33	4431.64	4424.35	254.15	40°13'51.811"N	104°43'14.649"W	0.00	
11810.39	90.205	359.979	7248.00 ¹	4524.88	4517.74	254.12	40°13'52.734"N	104°43'14.650"W	0.00	TOTAL DEPTH



Planned Wellpath Report

MAVERICK 27N-13HZ (PERMIT REV-1) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#14 MAVERICK 27N-13HZ (301'FSL & 1646'FEL, SEC.13)
Area	COLORADO	Well	MAVERICK 27N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MAVERICK 27N-13HZ PWB
Facility	SEC.13-T3N-R66W		

HOLE & CASING SECTIONS - Ref Wellbore: MAVERICK 27N-13HZ PWB Ref Wellpath: MAVERICK 27N-13HZ (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	1301.00	1284.00	17.00	1301.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	1301.00	1284.00	17.00	1301.00	0.00	0.00	0.00	0.00
8.75in Open Hole	1301.00	7620.66	6319.66	1301.00	7263.00	0.00	0.00	328.03	255.63
7in Casing Intermediate	17.00	7620.66	7603.66	17.00	7263.00	0.00	0.00	328.03	255.63
6.125in Open Hole	7620.66	11810.39	4189.73	7263.00	7248.00	328.03	255.63	4517.74	254.12
4.5in Casing Production	17.00	11810.39	11793.39	17.00	7248.00	0.00	0.00	4517.74	254.12

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) MAVERICK 27N-13HZ BHL ON PLAT REV-1 (460'FNL & 1390'FEL, SEC.13)	11810.39	7248.00	4517.74	254.12	3217570.31	1328066.01	40°13'52.734"N	104°43'14.650"W	point
MAVERICK 27N-13HZ LANDBOX		7248.00	0.00	0.00	3217355.87	1323546.42	40°13'08.090"N	104°43'17.926"W	polygon
SEC.13-T3N-R66W HARDLINES (460' SETBACKS)		7287.00	-7.58	-499.03	3216856.94	1323534.46	40°13'08.015"N	104°43'24.359"W	polygon
SEC.13-T3N-R66W SECTION LINES		7287.00	-7.58	-499.03	3216856.94	1323534.46	40°13'08.015"N	104°43'24.359"W	polygon

SURVEY PROGRAM - Ref Wellbore: MAVERICK 27N-13HZ PWB Ref Wellpath: MAVERICK 27N-13HZ (PERMIT REV-1) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	11810.39	NaviTrak (MagCorr)		MAVERICK 27N-13HZ PWB



Planned Wellpath Report

MAVERICK 27N-13HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#14 MAVERICK 27N-13HZ (301'FSL & 1646'FEL, SEC.13
Area	COLORADO	Well	MAVERICK 27N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	MAVERICK 27N-13HZ PWB
Facility	SEC.13-T3N-R66W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1251.00	0.000	133.990	1251.00	FOX HILLS MARKER
4120.56	0.000	359.979	4092.00	PARKMAN
4504.56	0.000	359.979	4476.00	SUSSEX
6618.61	0.000	359.979	6590.05	4.5" CASING LINER
7247.56	52.895	359.979	7147.00	SHARON SPRINGS
7354.05	63.544	359.979	7203.00	NIOBRARA A
7522.73	80.412	359.979	7255.00	NIOBRARA B
9855.12	90.205	359.979	7255.00	NIOBRARA B

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	133.990	17.00	TIE ON
1401.00	0.000	133.990	1401.00	BEGIN NUDGE
1901.00	10.000	133.990	1898.47	END NUDGE
3447.53	10.000	133.990	3421.50	BEGIN DROP
3947.53	0.000	359.979	3918.97	END DROP
6718.61	0.000	359.979	6690.05	KOP, BUILD @ 10°/100'
7620.66	90.205	359.979	7263.00	LANDING POINT
11810.39	90.205	359.979	7248.00	TOTAL DEPTH