

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22)
 Field: WELD COUNTY (KERR MCGEE) Well: DEEPE 14N-27HZ
 Facility: SEC.22-T2N-R67W Wellbore: DEEPE 14N-27HZ PWB

Plot reference wellpath is DEEPE 14N-27HZ (PERMIT REV-1) PWP

True vertical depths are referenced to Rig on SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to Rig on SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22) (RKB)	North Reference: True north
Rig on SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22) to Mean Sea Level: 5024 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wjsej02 on 6/19/2013

Location Information

Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SEC.22-T2N-R67W		3173770.270	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#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22)	0.00	0.00	3173770.275	1290629.951	40°07'46.204"N	104°52'42.769"W
Rig on SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22) (RKB) to Mud line (At Slot: SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22))						5024ft
Mean Sea Level to Mud line (At Slot: SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22))						OR
Rig on SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22) (RKB) to Mean Sea Level						5024ft

Survey Program

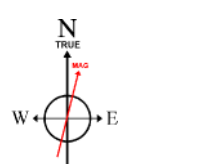
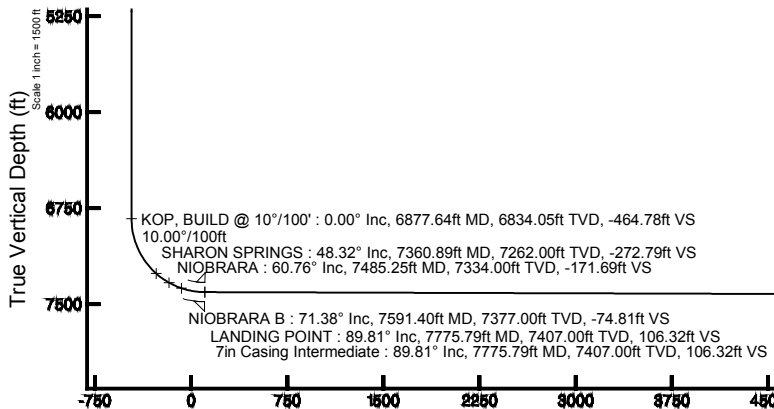
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	7775.79	NaviTrak	NaviTrak (Standard)		DEEPE 14N-27HZ PWB
7775.79	17676.79	OnTrak	OnTrak (Standard)		DEEPE 14N-27HZ PWB

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	332.300	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1000.00	0.000	332.300	1000.00	0.00	0.00	0.00	0.00
END NUDGE	1500.00	10.000	332.300	1497.47	38.53	-20.23	2.00	-38.35
BEGIN DROP	4036.06	10.000	332.300	3995.00	428.45	-224.94	0.00	-426.43
END DROP	4536.06	0.000	180.509	4492.47	466.98	-245.17	2.00	-464.78
KOP, BUILD @ 10°/100'	6877.64	0.000	180.509	6834.05	466.98	-245.17	0.00	-464.78
LANDING POINT	7775.79	89.815	180.509	7407.00	-104.10	-250.25	10.00	106.32
TOTAL DEPTH	17676.79	89.815	180.509	7439.00	-10004.65	-338.23	0.00	10007.26

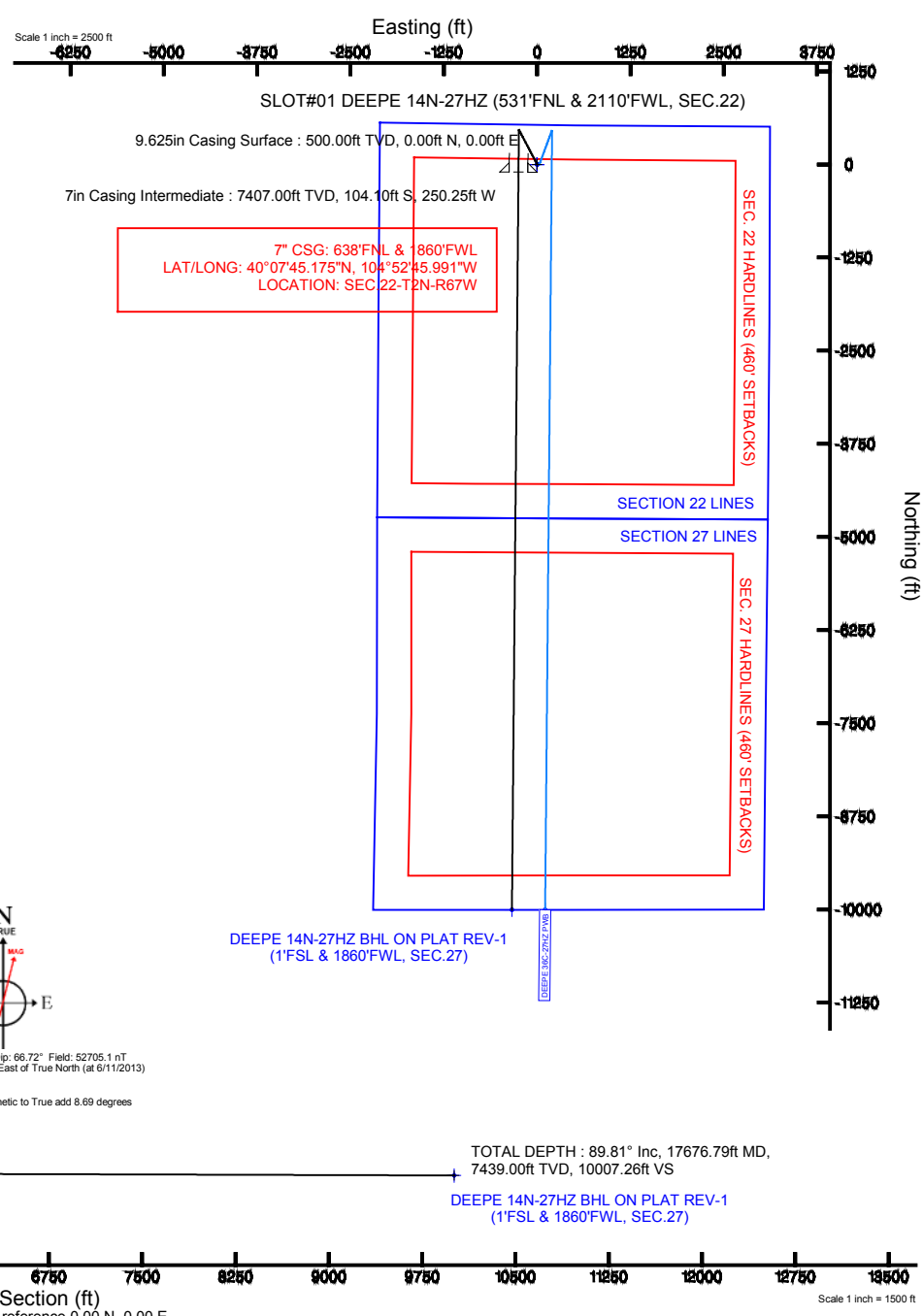
Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
DEEPE 2 PAD SECTION 22 LINES		0.00	0.00	0.00	3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"W
DEEPE 2 PAD SECTION 27 LINES		0.00	0.00	0.00	3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"W
DEEPE 14N-27HZ BHL ON PLAT REV-1 (1'FSL & 1860'FWL, SEC.27)	17676.79	7439.00	-10004.65	-338.23	3173502.18	1289623.60	40°06'07.337"N	104°52'47.122"W
DEEPE 2 PAD SEC. 22 HARDLINES (460' SETBACKS)		8000.00	0.00	0.00	3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"W
DEEPE 2 PAD SEC. 27 HARDLINES (460' SETBACKS)		8000.00	0.00	0.00	3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"W



BGGM (1945.0 to 2014.0) Dip: 66.72° Field: 52705.1 nT
 Magnetic North is 8.69 degrees East of True North (at 6/11/2013)
 To correct azimuth from Magnetic to True add 8.69 degrees

Vertical Section (ft)
 Asimuth 180.51° with reference 0.00 N, 0.00 E





Planned Wellpath Report

DEEPE 14N-27HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 14N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 14N-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	Wilsjef02
Scale	0.999959	Report Generated	6/19/2013 at 12:52:41
Convergence at slot	n/a	Database/Source file	WellArchitectDB/DEEPE_14N-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	0.00	0.00	3173770.28	1290629.95	40°07'46.204"N	104°52'42.769"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	Rig on SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22) (RKB) to Facility Vertical Datum	5024.00ft
Horizontal Reference Pt	Slot	Rig on SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22) (RKB) to Mean Sea Level	5024.00ft
Vertical Reference Pt	Rig on SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22) (RKB)	Rig on SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22) (RKB) to Mud Line at Slot (SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22))	5024.00ft
MD Reference Pt	Rig on SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	180.51°



Planned Wellpath Report

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Area	COLORADO	Well	DEEPE 14N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 14N-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (190 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	332.300	0.00	0.00	0.00	0.00	40°07'46.204"N	104°52'42.769"W	0.00	
17.00	0.000	332.300	17.00	0.00	0.00	0.00	40°07'46.204"N	104°52'42.769"W	0.00	TIE-ON
117.00†	0.000	332.300	117.00	0.00	0.00	0.00	40°07'46.204"N	104°52'42.769"W	0.00	
217.00†	0.000	332.300	217.00	0.00	0.00	0.00	40°07'46.204"N	104°52'42.769"W	0.00	
317.00†	0.000	332.300	317.00	0.00	0.00	0.00	40°07'46.204"N	104°52'42.769"W	0.00	
417.00†	0.000	332.300	417.00	0.00	0.00	0.00	40°07'46.204"N	104°52'42.769"W	0.00	
517.00†	0.000	332.300	517.00	0.00	0.00	0.00	40°07'46.204"N	104°52'42.769"W	0.00	
617.00†	0.000	332.300	617.00	0.00	0.00	0.00	40°07'46.204"N	104°52'42.769"W	0.00	
717.00†	0.000	332.300	717.00	0.00	0.00	0.00	40°07'46.204"N	104°52'42.769"W	0.00	
817.00†	0.000	332.300	817.00	0.00	0.00	0.00	40°07'46.204"N	104°52'42.769"W	0.00	
917.00†	0.000	332.300	917.00	0.00	0.00	0.00	40°07'46.204"N	104°52'42.769"W	0.00	
1000.00	0.000	332.300	1000.00	0.00	0.00	0.00	40°07'46.204"N	104°52'42.769"W	0.00	BEGIN NUDGE
1017.00†	0.340	332.300	1017.00	-0.04	0.04	-0.02	40°07'46.204"N	104°52'42.769"W	2.00	
1117.00†	2.340	332.300	1116.97	-2.11	2.12	-1.11	40°07'46.225"N	104°52'42.783"W	2.00	
1217.00†	4.340	332.300	1216.79	-7.24	7.27	-3.82	40°07'46.276"N	104°52'42.818"W	2.00	
1317.00†	6.340	332.300	1316.35	-15.44	15.51	-8.14	40°07'46.357"N	104°52'42.874"W	2.00	
1417.00†	8.340	332.300	1415.53	-26.70	26.82	-14.08	40°07'46.469"N	104°52'42.950"W	2.00	
1500.00	10.000	332.300	1497.47	-38.35	38.53	-20.23	40°07'46.585"N	104°52'43.029"W	2.00	END NUDGE
1517.00†	10.000	332.300	1514.21	-40.95	41.15	-21.60	40°07'46.611"N	104°52'43.047"W	0.00	
1617.00†	10.000	332.300	1612.69	-56.26	56.52	-29.68	40°07'46.763"N	104°52'43.151"W	0.00	
1717.00†	10.000	332.300	1711.17	-71.56	71.90	-37.75	40°07'46.915"N	104°52'43.255"W	0.00	
1817.00†	10.000	332.300	1809.65	-86.86	87.27	-45.82	40°07'47.066"N	104°52'43.359"W	0.00	
1917.00†	10.000	332.300	1908.13	-102.16	102.65	-53.89	40°07'47.218"N	104°52'43.463"W	0.00	
2017.00†	10.000	332.300	2006.61	-117.47	118.02	-61.96	40°07'47.370"N	104°52'43.567"W	0.00	
2117.00†	10.000	332.300	2105.09	-132.77	133.40	-70.03	40°07'47.522"N	104°52'43.671"W	0.00	
2217.00†	10.000	332.300	2203.57	-148.07	148.77	-78.11	40°07'47.674"N	104°52'43.775"W	0.00	
2317.00†	10.000	332.300	2302.05	-163.37	164.15	-86.18	40°07'47.826"N	104°52'43.878"W	0.00	
2417.00†	10.000	332.300	2400.53	-178.68	179.52	-94.25	40°07'47.978"N	104°52'43.982"W	0.00	
2517.00†	10.000	332.300	2499.01	-193.98	194.90	-102.32	40°07'48.130"N	104°52'44.086"W	0.00	
2617.00†	10.000	332.300	2597.50	-209.28	210.27	-110.39	40°07'48.282"N	104°52'44.190"W	0.00	
2717.00†	10.000	332.300	2695.98	-224.58	225.64	-118.47	40°07'48.434"N	104°52'44.294"W	0.00	
2817.00†	10.000	332.300	2794.46	-239.89	241.02	-126.54	40°07'48.586"N	104°52'44.398"W	0.00	
2917.00†	10.000	332.300	2892.94	-255.19	256.39	-134.61	40°07'48.738"N	104°52'44.502"W	0.00	
3017.00†	10.000	332.300	2991.42	-270.49	271.77	-142.68	40°07'48.890"N	104°52'44.606"W	0.00	
3117.00†	10.000	332.300	3089.90	-285.79	287.14	-150.75	40°07'49.042"N	104°52'44.710"W	0.00	
3217.00†	10.000	332.300	3188.38	-301.10	302.52	-158.83	40°07'49.194"N	104°52'44.814"W	0.00	
3317.00†	10.000	332.300	3286.86	-316.40	317.89	-166.90	40°07'49.345"N	104°52'44.918"W	0.00	
3417.00†	10.000	332.300	3385.34	-331.70	333.27	-174.97	40°07'49.497"N	104°52'45.022"W	0.00	
3517.00†	10.000	332.300	3483.82	-347.00	348.64	-183.04	40°07'49.649"N	104°52'45.126"W	0.00	
3617.00†	10.000	332.300	3582.30	-362.30	364.02	-191.11	40°07'49.801"N	104°52'45.229"W	0.00	
3717.00†	10.000	332.300	3680.78	-377.61	379.39	-199.19	40°07'49.953"N	104°52'45.333"W	0.00	
3817.00†	10.000	332.300	3779.26	-392.91	394.77	-207.26	40°07'50.105"N	104°52'45.437"W	0.00	
3917.00†	10.000	332.300	3877.75	-408.21	410.14	-215.33	40°07'50.257"N	104°52'45.541"W	0.00	
4017.00†	10.000	332.300	3976.23	-423.51	425.52	-223.40	40°07'50.409"N	104°52'45.645"W	0.00	
4036.06	10.000	332.300	3995.00	-426.43	428.45	-224.94	40°07'50.438"N	104°52'45.665"W	0.00	BEGIN DROP



Planned Wellpath Report

DEEPE 14N-27HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 14N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 14N-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (190 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4117.00†	8.381	332.300	4074.90	-437.82	439.89	-230.95	40°07'50.551"N	104°52'45.742"W	2.00	
4217.00†	6.381	332.300	4174.06	-449.14	451.27	-236.92	40°07'50.663"N	104°52'45.819"W	2.00	
4317.00†	4.381	332.300	4273.62	-457.41	459.57	-241.28	40°07'50.745"N	104°52'45.875"W	2.00	
4417.00†	2.381	332.300	4373.44	-462.60	464.79	-244.02	40°07'50.797"N	104°52'45.911"W	2.00	
4517.00†	0.381	332.300	4473.40	-464.73	466.93	-245.14	40°07'50.818"N	104°52'45.925"W	2.00	
4536.06	0.000	180.509	4492.47	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	2.00	END DROP
4562.60†	0.000	180.509	4519.00	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	SUSSEX
4617.00†	0.000	180.509	4573.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
4717.00†	0.000	180.509	4673.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
4817.00†	0.000	180.509	4773.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
4917.00†	0.000	180.509	4873.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
5017.00†	0.000	180.509	4973.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
5111.60†	0.000	180.509	5068.00	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	SHANNON
5117.00†	0.000	180.509	5073.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
5217.00†	0.000	180.509	5173.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
5317.00†	0.000	180.509	5273.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
5417.00†	0.000	180.509	5373.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
5517.00†	0.000	180.509	5473.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
5617.00†	0.000	180.509	5573.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
5717.00†	0.000	180.509	5673.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
5817.00†	0.000	180.509	5773.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
5917.00†	0.000	180.509	5873.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
6017.00†	0.000	180.509	5973.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
6117.00†	0.000	180.509	6073.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
6217.00†	0.000	180.509	6173.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
6317.00†	0.000	180.509	6273.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
6417.00†	0.000	180.509	6373.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
6517.00†	0.000	180.509	6473.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
6617.00†	0.000	180.509	6573.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
6717.00†	0.000	180.509	6673.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
6817.00†	0.000	180.509	6773.40	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	
6877.64	0.000	180.509	6834.05	-464.78	466.98	-245.17	40°07'50.819"N	104°52'45.925"W	0.00	KOP, BUILD @ 10°/100'
6917.00†	3.936	180.509	6873.37	-463.43	465.63	-245.18	40°07'50.805"N	104°52'45.926"W	10.00	
7017.00†	13.936	180.509	6972.03	-447.92	450.12	-245.32	40°07'50.652"N	104°52'45.927"W	10.00	
7117.00†	23.936	180.509	7066.50	-415.51	417.71	-245.61	40°07'50.332"N	104°52'45.931"W	10.00	
7217.00†	33.936	180.509	7153.91	-367.19	369.39	-246.04	40°07'49.854"N	104°52'45.937"W	10.00	
7317.00†	43.936	180.509	7231.59	-304.42	306.63	-246.60	40°07'49.234"N	104°52'45.944"W	10.00	
7360.89†	48.324	180.509	7262.00	-272.79	275.00	-246.88	40°07'48.922"N	104°52'45.947"W	10.00	SHARON SPRINGS
7417.00†	53.936	180.509	7297.20	-229.12	231.33	-247.26	40°07'48.490"N	104°52'45.952"W	10.00	
7485.25†	60.760	180.509	7334.00	-171.69	173.90	-247.78	40°07'47.923"N	104°52'45.959"W	10.00	NIOBRARA
7517.00†	63.936	180.509	7348.73	-143.57	145.78	-248.03	40°07'47.645"N	104°52'45.962"W	10.00	
7591.40†	71.376	180.509	7377.00	-74.81	77.02	-248.64	40°07'46.965"N	104°52'45.970"W	10.00	NIOBRARA B
7617.00†	73.936	180.509	7384.63	-50.37	52.59	-248.85	40°07'46.724"N	104°52'45.973"W	10.00	
7717.00†	83.936	180.509	7403.80	47.64	-45.43	-249.72	40°07'45.755"N	104°52'45.984"W	10.00	
7775.79	89.815	180.509	7407.00	106.32	-104.10	-250.25	40°07'45.175"N	104°52'45.991"W	10.00	LANDING POINT



Planned Wellpath Report

DEEPE 14N-27HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 14N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 14N-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (190 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7817.00†	89.815	180.509	7407.13	147.53	-145.31	-250.61	40°07'44.768"N	104°52'45.995"W	0.00	
7917.00†	89.815	180.509	7407.46	247.53	-245.30	-251.50	40°07'43.780"N	104°52'46.007"W	0.00	
8017.00†	89.815	180.509	7407.78	347.53	-345.30	-252.39	40°07'42.792"N	104°52'46.018"W	0.00	
8117.00†	89.815	180.509	7408.10	447.53	-445.30	-253.28	40°07'41.804"N	104°52'46.030"W	0.00	
8217.00†	89.815	180.509	7408.43	547.53	-545.29	-254.17	40°07'40.815"N	104°52'46.041"W	0.00	
8317.00†	89.815	180.509	7408.75	647.53	-645.29	-255.06	40°07'39.827"N	104°52'46.052"W	0.00	
8417.00†	89.815	180.509	7409.07	747.53	-745.28	-255.94	40°07'38.839"N	104°52'46.064"W	0.00	
8517.00†	89.815	180.509	7409.40	847.53	-845.28	-256.83	40°07'37.851"N	104°52'46.075"W	0.00	
8617.00†	89.815	180.509	7409.72	947.53	-945.27	-257.72	40°07'36.863"N	104°52'46.087"W	0.00	
8717.00†	89.815	180.509	7410.04	1047.52	-1045.27	-258.61	40°07'35.875"N	104°52'46.098"W	0.00	
8817.00†	89.815	180.509	7410.37	1147.52	-1145.26	-259.50	40°07'34.886"N	104°52'46.110"W	0.00	
8917.00†	89.815	180.509	7410.69	1247.52	-1245.26	-260.39	40°07'33.898"N	104°52'46.121"W	0.00	
9017.00†	89.815	180.509	7411.01	1347.52	-1345.26	-261.28	40°07'32.910"N	104°52'46.132"W	0.00	
9117.00†	89.815	180.509	7411.33	1447.52	-1445.25	-262.16	40°07'31.922"N	104°52'46.144"W	0.00	
9217.00†	89.815	180.509	7411.66	1547.52	-1545.25	-263.05	40°07'30.934"N	104°52'46.155"W	0.00	
9317.00†	89.815	180.509	7411.98	1647.52	-1645.24	-263.94	40°07'29.946"N	104°52'46.167"W	0.00	
9417.00†	89.815	180.509	7412.30	1747.52	-1745.24	-264.83	40°07'28.957"N	104°52'46.178"W	0.00	
9517.00†	89.815	180.509	7412.63	1847.52	-1845.23	-265.72	40°07'27.969"N	104°52'46.190"W	0.00	
9617.00†	89.815	180.509	7412.95	1947.52	-1945.23	-266.61	40°07'26.981"N	104°52'46.201"W	0.00	
9717.00†	89.815	180.509	7413.27	2047.52	-2045.22	-267.50	40°07'25.993"N	104°52'46.212"W	0.00	
9817.00†	89.815	180.509	7413.60	2147.52	-2145.22	-268.38	40°07'25.005"N	104°52'46.224"W	0.00	
9917.00†	89.815	180.509	7413.92	2247.52	-2245.22	-269.27	40°07'24.017"N	104°52'46.235"W	0.00	
10017.00†	89.815	180.509	7414.24	2347.52	-2345.21	-270.16	40°07'23.028"N	104°52'46.247"W	0.00	
10117.00†	89.815	180.509	7414.57	2447.52	-2445.21	-271.05	40°07'22.040"N	104°52'46.258"W	0.00	
10217.00†	89.815	180.509	7414.89	2547.52	-2545.20	-271.94	40°07'21.052"N	104°52'46.270"W	0.00	
10317.00†	89.815	180.509	7415.21	2647.52	-2645.20	-272.83	40°07'20.064"N	104°52'46.281"W	0.00	
10417.00†	89.815	180.509	7415.54	2747.52	-2745.19	-273.72	40°07'19.076"N	104°52'46.292"W	0.00	
10517.00†	89.815	180.509	7415.86	2847.52	-2845.19	-274.60	40°07'18.088"N	104°52'46.304"W	0.00	
10617.00†	89.815	180.509	7416.18	2947.51	-2945.18	-275.49	40°07'17.099"N	104°52'46.315"W	0.00	
10717.00†	89.815	180.509	7416.51	3047.51	-3045.18	-276.38	40°07'16.111"N	104°52'46.327"W	0.00	
10817.00†	89.815	180.509	7416.83	3147.51	-3145.17	-277.27	40°07'15.123"N	104°52'46.338"W	0.00	
10917.00†	89.815	180.509	7417.15	3247.51	-3245.17	-278.16	40°07'14.135"N	104°52'46.350"W	0.00	
11017.00†	89.815	180.509	7417.48	3347.51	-3345.17	-279.05	40°07'13.147"N	104°52'46.361"W	0.00	
11117.00†	89.815	180.509	7417.80	3447.51	-3445.16	-279.94	40°07'12.159"N	104°52'46.372"W	0.00	
11217.00†	89.815	180.509	7418.12	3547.51	-3545.16	-280.83	40°07'11.170"N	104°52'46.384"W	0.00	
11317.00†	89.815	180.509	7418.45	3647.51	-3645.15	-281.71	40°07'10.182"N	104°52'46.395"W	0.00	
11417.00†	89.815	180.509	7418.77	3747.51	-3745.15	-282.60	40°07'09.194"N	104°52'46.407"W	0.00	
11517.00†	89.815	180.509	7419.09	3847.51	-3845.14	-283.49	40°07'08.206"N	104°52'46.418"W	0.00	
11617.00†	89.815	180.509	7419.41	3947.51	-3945.14	-284.38	40°07'07.218"N	104°52'46.430"W	0.00	
11717.00†	89.815	180.509	7419.74	4047.51	-4045.13	-285.27	40°07'06.230"N	104°52'46.441"W	0.00	
11817.00†	89.815	180.509	7420.06	4147.51	-4145.13	-286.16	40°07'05.241"N	104°52'46.452"W	0.00	
11917.00†	89.815	180.509	7420.38	4247.51	-4245.13	-287.05	40°07'04.253"N	104°52'46.464"W	0.00	
12017.00†	89.815	180.509	7420.71	4347.51	-4345.12	-287.93	40°07'03.265"N	104°52'46.475"W	0.00	
12117.00†	89.815	180.509	7421.03	4447.51	-4445.12	-288.82	40°07'02.277"N	104°52'46.487"W	0.00	
12217.00†	89.815	180.509	7421.35	4547.51	-4545.11	-289.71	40°07'01.289"N	104°52'46.498"W	0.00	



Planned Wellpath Report

DEEPE 14N-27HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 14N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 14N-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (190 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12317.00†	89.815	180.509	7421.68	4647.51	-4645.11	-290.60	40°07'00.301"N	104°52'46.509"W	0.00	
12417.00†	89.815	180.509	7422.00	4747.51	-4745.10	-291.49	40°06'59.312"N	104°52'46.521"W	0.00	
12517.00†	89.815	180.509	7422.32	4847.51	-4845.10	-292.38	40°06'58.324"N	104°52'46.532"W	0.00	
12617.00†	89.815	180.509	7422.65	4947.50	-4945.09	-293.27	40°06'57.336"N	104°52'46.544"W	0.00	
12717.00†	89.815	180.509	7422.97	5047.50	-5045.09	-294.15	40°06'56.348"N	104°52'46.555"W	0.00	
12817.00†	89.815	180.509	7423.29	5147.50	-5145.09	-295.04	40°06'55.360"N	104°52'46.567"W	0.00	
12917.00†	89.815	180.509	7423.62	5247.50	-5245.08	-295.93	40°06'54.372"N	104°52'46.578"W	0.00	
13017.00†	89.815	180.509	7423.94	5347.50	-5345.08	-296.82	40°06'53.383"N	104°52'46.589"W	0.00	
13117.00†	89.815	180.509	7424.26	5447.50	-5445.07	-297.71	40°06'52.395"N	104°52'46.601"W	0.00	
13217.00†	89.815	180.509	7424.59	5547.50	-5545.07	-298.60	40°06'51.407"N	104°52'46.612"W	0.00	
13317.00†	89.815	180.509	7424.91	5647.50	-5645.06	-299.49	40°06'50.419"N	104°52'46.624"W	0.00	
13417.00†	89.815	180.509	7425.23	5747.50	-5745.06	-300.38	40°06'49.431"N	104°52'46.635"W	0.00	
13517.00†	89.815	180.509	7425.56	5847.50	-5845.05	-301.26	40°06'48.443"N	104°52'46.647"W	0.00	
13617.00†	89.815	180.509	7425.88	5947.50	-5945.05	-302.15	40°06'47.454"N	104°52'46.658"W	0.00	
13717.00†	89.815	180.509	7426.20	6047.50	-6045.05	-303.04	40°06'46.466"N	104°52'46.669"W	0.00	
13817.00†	89.815	180.509	7426.53	6147.50	-6145.04	-303.93	40°06'45.478"N	104°52'46.681"W	0.00	
13917.00†	89.815	180.509	7426.85	6247.50	-6245.04	-304.82	40°06'44.490"N	104°52'46.692"W	0.00	
14017.00†	89.815	180.509	7427.17	6347.50	-6345.03	-305.71	40°06'43.502"N	104°52'46.704"W	0.00	
14117.00†	89.815	180.509	7427.49	6447.50	-6445.03	-306.60	40°06'42.513"N	104°52'46.715"W	0.00	
14217.00†	89.815	180.509	7427.82	6547.50	-6545.02	-307.48	40°06'41.525"N	104°52'46.727"W	0.00	
14317.00†	89.815	180.509	7428.14	6647.50	-6645.02	-308.37	40°06'40.537"N	104°52'46.738"W	0.00	
14417.00†	89.815	180.509	7428.46	6747.50	-6745.01	-309.26	40°06'39.549"N	104°52'46.749"W	0.00	
14517.00†	89.815	180.509	7428.79	6847.49	-6845.01	-310.15	40°06'38.561"N	104°52'46.761"W	0.00	
14617.00†	89.815	180.509	7429.11	6947.49	-6945.00	-311.04	40°06'37.573"N	104°52'46.772"W	0.00	
14717.00†	89.815	180.509	7429.43	7047.49	-7045.00	-311.93	40°06'36.584"N	104°52'46.784"W	0.00	
14817.00†	89.815	180.509	7429.76	7147.49	-7145.00	-312.82	40°06'35.596"N	104°52'46.795"W	0.00	
14917.00†	89.815	180.509	7430.08	7247.49	-7244.99	-313.70	40°06'34.608"N	104°52'46.806"W	0.00	
15017.00†	89.815	180.509	7430.40	7347.49	-7344.99	-314.59	40°06'33.620"N	104°52'46.818"W	0.00	
15117.00†	89.815	180.509	7430.73	7447.49	-7444.98	-315.48	40°06'32.632"N	104°52'46.829"W	0.00	
15217.00†	89.815	180.509	7431.05	7547.49	-7544.98	-316.37	40°06'31.644"N	104°52'46.841"W	0.00	
15317.00†	89.815	180.509	7431.37	7647.49	-7644.97	-317.26	40°06'30.655"N	104°52'46.852"W	0.00	
15417.00†	89.815	180.509	7431.70	7747.49	-7744.97	-318.15	40°06'29.667"N	104°52'46.864"W	0.00	
15517.00†	89.815	180.509	7432.02	7847.49	-7844.96	-319.04	40°06'28.679"N	104°52'46.875"W	0.00	
15617.00†	89.815	180.509	7432.34	7947.49	-7944.96	-319.93	40°06'27.691"N	104°52'46.886"W	0.00	
15717.00†	89.815	180.509	7432.67	8047.49	-8044.96	-320.81	40°06'26.703"N	104°52'46.898"W	0.00	
15817.00†	89.815	180.509	7432.99	8147.49	-8144.95	-321.70	40°06'25.715"N	104°52'46.909"W	0.00	
15917.00†	89.815	180.509	7433.31	8247.49	-8244.95	-322.59	40°06'24.726"N	104°52'46.921"W	0.00	
16017.00†	89.815	180.509	7433.64	8347.49	-8344.94	-323.48	40°06'23.738"N	104°52'46.932"W	0.00	
16117.00†	89.815	180.509	7433.96	8447.49	-8444.94	-324.37	40°06'22.750"N	104°52'46.943"W	0.00	
16217.00†	89.815	180.509	7434.28	8547.49	-8544.93	-325.26	40°06'21.762"N	104°52'46.955"W	0.00	
16317.00†	89.815	180.509	7434.61	8647.49	-8644.93	-326.15	40°06'20.774"N	104°52'46.966"W	0.00	
16417.00†	89.815	180.509	7434.93	8747.48	-8744.92	-327.03	40°06'19.786"N	104°52'46.978"W	0.00	
16517.00†	89.815	180.509	7435.25	8847.48	-8844.92	-327.92	40°06'18.797"N	104°52'46.989"W	0.00	
16617.00†	89.815	180.509	7435.57	8947.48	-8944.92	-328.81	40°06'17.809"N	104°52'47.001"W	0.00	
16717.00†	89.815	180.509	7435.90	9047.48	-9044.91	-329.70	40°06'16.821"N	104°52'47.012"W	0.00	



Planned Wellpath Report

DEEPE 14N-27HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 14N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 14N-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (190 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16817.00†	89.815	180.509	7436.22	9147.48	-9144.91	-330.59	40°06'15.833"N	104°52'47.023"W	0.00	
16917.00†	89.815	180.509	7436.54	9247.48	-9244.90	-331.48	40°06'14.845"N	104°52'47.035"W	0.00	
17017.00†	89.815	180.509	7436.87	9347.48	-9344.90	-332.37	40°06'13.857"N	104°52'47.046"W	0.00	
17117.00†	89.815	180.509	7437.19	9447.48	-9444.89	-333.25	40°06'12.868"N	104°52'47.058"W	0.00	
17217.00†	89.815	180.509	7437.51	9547.48	-9544.89	-334.14	40°06'11.880"N	104°52'47.069"W	0.00	
17317.00†	89.815	180.509	7437.84	9647.48	-9644.88	-335.03	40°06'10.892"N	104°52'47.081"W	0.00	
17417.00†	89.815	180.509	7438.16	9747.48	-9744.88	-335.92	40°06'09.904"N	104°52'47.092"W	0.00	
17517.00†	89.815	180.509	7438.48	9847.48	-9844.88	-336.81	40°06'08.916"N	104°52'47.103"W	0.00	
17617.00†	89.815	180.509	7438.81	9947.48	-9944.87	-337.70	40°06'07.928"N	104°52'47.115"W	0.00	
17676.79	89.815	180.509	7439.00 ¹	10007.26	-10004.65	-338.23	40°06'07.337"N	104°52'47.122"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: DEEPE 14N-27HZ PWB Ref Wellpath: DEEPE 14N-27HZ (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	500.00	483.00	17.00	500.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	500.00	483.00	17.00	500.00	0.00	0.00	0.00	0.00
8.75in Open Hole	500.00	7775.79	7275.79	500.00	7407.00	0.00	0.00	-104.10	-250.25
7in Casing Intermediate	17.00	7775.79	7758.79	17.00	7407.00	0.00	0.00	-104.10	-250.25
6.125in Open Hole	7775.79	17676.79	9901.00	7407.00	NA	-104.10	-250.25	NA	NA
4.5in Casing Production	17.00	17676.79	17659.79	17.00	7439.00	0.00	0.00	-10004.65	-338.23



Planned Wellpath Report

DEEPE 14N-27HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 14N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 14N-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
DEEPE 2 PAD SECTION 22 LINES		0.00	0.00	0.00	3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"W	polygon
DEEPE 2 PAD SECTION 27 LINES		0.00	0.00	0.00	3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"W	polygon
1) DEEPE 14N-27HZ BHL ON PLAT REV-1 (1'FSL & 1860'FWL, SEC.27)	17676.79	7439.00	-10004.65	-338.23	3173502.18	1280623.60	40°06'07.337"N	104°52'47.122"W	point
DEEPE 2 PAD SEC. 22 HARDLINES (460' SETBACKS)		8000.00	0.00	0.00	3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"W	polygon
DEEPE 2 PAD SEC. 27 HARDLINES (460' SETBACKS)		8000.00	0.00	0.00	3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"W	polygon

SURVEY PROGRAM - Ref Wellbore: DEEPE 14N-27HZ PWB Ref Wellpath: DEEPE 14N-27HZ (PERMIT REV-1) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	7775.79	NaviTrak (Standard)		DEEPE 14N-27HZ PWB
7775.79	17676.79	OnTrak (Standard)		DEEPE 14N-27HZ PWB



Planned Wellpath Report

DEEPE 14N-27HZ (PERMIT REV-1) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 DEEPE 14N-27HZ (531'FNL & 2110'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 14N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 14N-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
4562.60	0.000	180.509	4519.00	SUSSEX
5111.60	0.000	180.509	5068.00	SHANNON
7360.89	48.324	180.509	7262.00	SHARON SPRINGS
7485.25	60.760	180.509	7334.00	NIOBRARA
7591.40	71.376	180.509	7377.00	NIOBRARA B