

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22)
 Field: WELD COUNTY (KERR MCGEE) Well: DEEPE 36C-27HZ
 Facility: SEC.22-T2N-R67W Wellbore: DEEPE 36C-27HZ PWB

Plot reference wellpath is DEEPE 36C-27HZ (PERMIT REV-1) PWP

True vertical depths are referenced to Rig on SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to Rig on SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22) (RKB)	North Reference: True north
Rig on SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22) to Mean Sea Level: 5024 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wisje02 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#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22)	-0.40	29.91	3173800.181	1290629.755	40°07'46.200"N	104°52'42.384"W
Rig on SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22) (RKB) to Mudline (At Slot: SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22))	5024 ft					
Mean Sea Level to Mud line (At Slot: SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22))	0 ft					
Rig on SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22) (RKB) to Mean Sea Level	5024 ft					

Survey Program

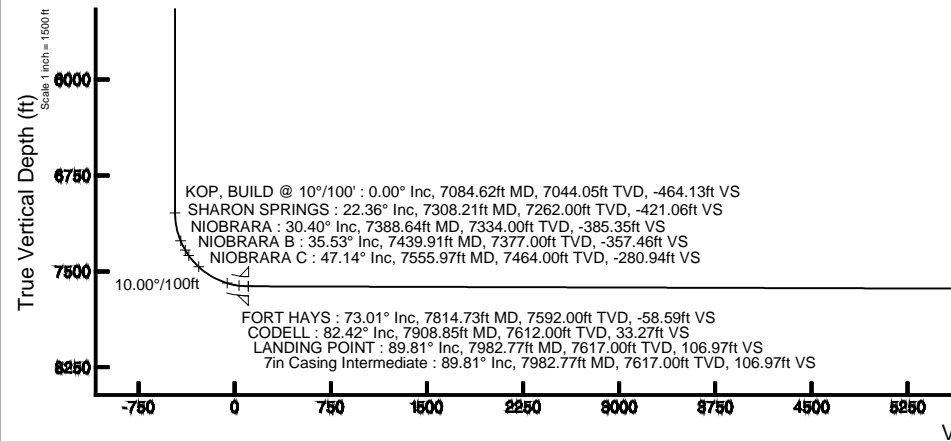
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	7982.77	NaviTrak	NaviTrak (Standard)		DEEPE 36C-27HZ PWB
7982.77	17878.66	OnTrak	OnTrak (Standard)		DEEPE 36C-27HZ PWB

Well Profile Data

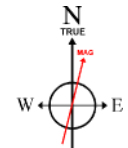
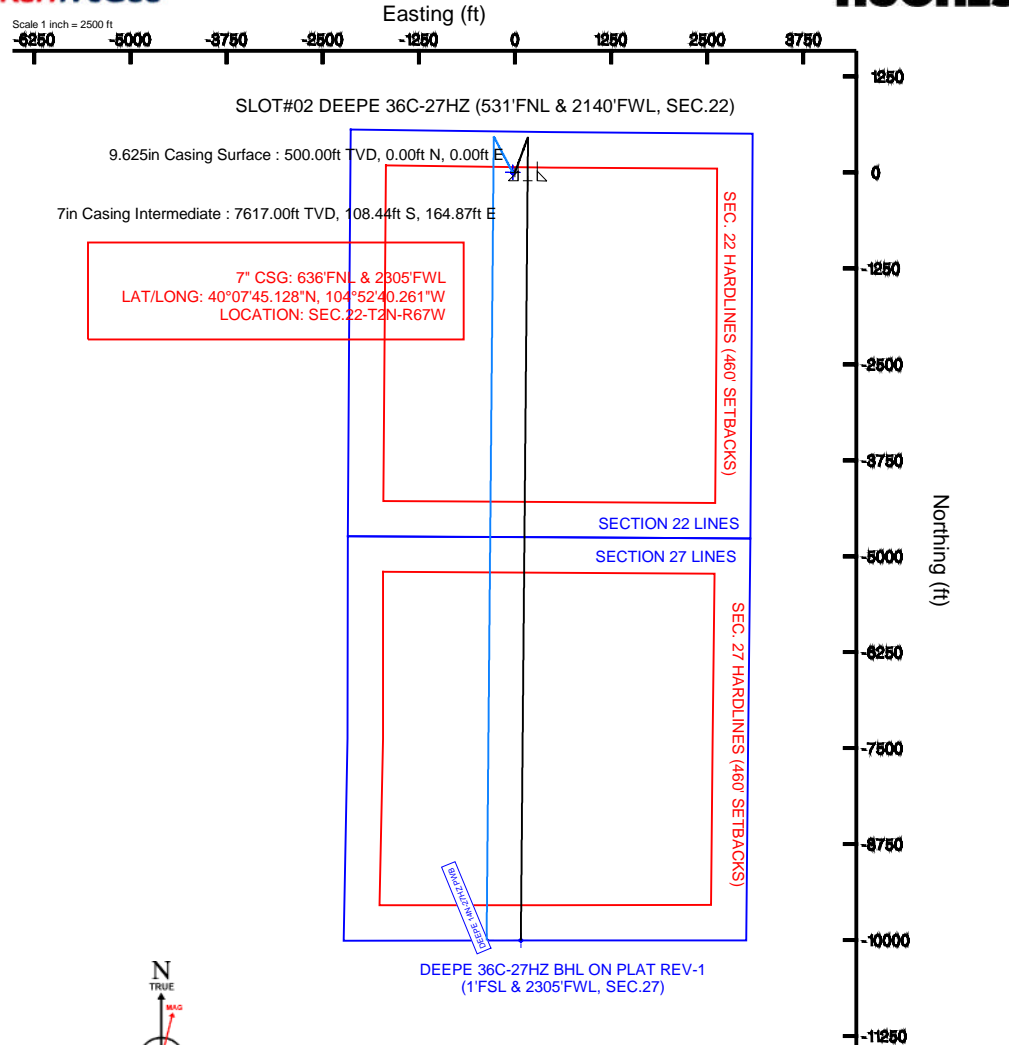
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE-ON	17.00	0.000	20.170	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1000.00	0.000	20.170	1000.00	0.00	0.00	0.00	0.00
END NUDGE	1500.00	10.000	20.170	1497.47	40.85	15.01	2.00	-40.99
BEGIN DROP	3837.04	10.000	20.170	3799.00	421.79	154.94	0.00	-423.15
END DROP	4337.04	0.000	180.509	4296.47	462.64	169.94	2.00	-464.13
KOP, BUILD @ 10°/100'	7084.62	0.000	180.509	7044.05	462.64	169.94	0.00	-464.13
LANDING POINT	7982.77	89.815	180.509	7617.00	-108.44	164.87	10.00	106.97
TOTAL DEPTH	17878.66	89.815	180.509	7649.00	-10003.89	76.93	0.00	10002.81

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	0.40	-29.91	3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"W
DEEPE 2 PAD SECTION 27 LINES		0.00	0.40	-29.91	3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"W
DEEPE 36C-27HZ BHL ON PLAT REV-1 (1'FSL & 2305'FWL, SEC.27)	17878.66	7649.00	-10003.89	76.93	3173947.22	1280627.08	40°06'07.340"N	104°52'41.394"W
DEEPE 2 PAD SEC. 22 HARDLINES (460' SETBACKS)	8000.00	0.40	-29.91	3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"W	
DEEPE 2 PAD SEC. 27 HARDLINES (460' SETBACKS)	8000.00	0.40	-29.91	3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"W	



Scale 1 inch = 2500 ft



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

TOTAL DEPTH : 89.81° Inc, 17878.66ft MD,
 7649.00ft TVD, 10002.81ft VS

DEEPE 36C-27HZ BHL ON PLAT REV-1
 (1'FSL & 2305'FWL, SEC.27)

Azimuth 180.51° with reference 0.00 N, 0.00 E

Scale 1 inch = 1500 ft





Planned Wellpath Report

DEEPE 36C-27HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 36C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 36C-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 13:16:10
Convergence at slot	n/a	Database/Source file	WellArchitectDB/DEEPE_36C-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	-0.40	29.91	3173800.18	1290629.76	40°07'46.200"N	104°52'42.384"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#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22) (RKB) to Facility Vertical Datum	5024.00ft
Horizontal Reference Pt	Slot	Rig on SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22) (RKB) to Mean Sea Level	5024.00ft
Vertical Reference Pt	Rig on SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22) (RKB)	Rig on SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22) (RKB) to Mud Line at Slot (SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22))	5024.00ft
MD Reference Pt	Rig on SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'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

DEEPE 36C-27HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 36C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 36C-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (195 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	20.170	0.00	0.00	0.00	0.00	40°07'46.200"N	104°52'42.384"W	0.00	
17.00	0.000	20.170	17.00	0.00	0.00	0.00	40°07'46.200"N	104°52'42.384"W	0.00	TIE-ON
117.00†	0.000	20.170	117.00	0.00	0.00	0.00	40°07'46.200"N	104°52'42.384"W	0.00	
217.00†	0.000	20.170	217.00	0.00	0.00	0.00	40°07'46.200"N	104°52'42.384"W	0.00	
317.00†	0.000	20.170	317.00	0.00	0.00	0.00	40°07'46.200"N	104°52'42.384"W	0.00	
417.00†	0.000	20.170	417.00	0.00	0.00	0.00	40°07'46.200"N	104°52'42.384"W	0.00	
517.00†	0.000	20.170	517.00	0.00	0.00	0.00	40°07'46.200"N	104°52'42.384"W	0.00	
617.00†	0.000	20.170	617.00	0.00	0.00	0.00	40°07'46.200"N	104°52'42.384"W	0.00	
717.00†	0.000	20.170	717.00	0.00	0.00	0.00	40°07'46.200"N	104°52'42.384"W	0.00	
817.00†	0.000	20.170	817.00	0.00	0.00	0.00	40°07'46.200"N	104°52'42.384"W	0.00	
917.00†	0.000	20.170	917.00	0.00	0.00	0.00	40°07'46.200"N	104°52'42.384"W	0.00	
1000.00	0.000	20.170	1000.00	0.00	0.00	0.00	40°07'46.200"N	104°52'42.384"W	0.00	BEGIN NUDGE
1017.00†	0.340	20.170	1017.00	-0.05	0.05	0.02	40°07'46.200"N	104°52'42.384"W	2.00	
1117.00†	2.340	20.170	1116.97	-2.25	2.24	0.82	40°07'46.222"N	104°52'42.373"W	2.00	
1217.00†	4.340	20.170	1216.79	-7.74	7.71	2.83	40°07'46.276"N	104°52'42.348"W	2.00	
1317.00†	6.340	20.170	1316.35	-16.50	16.45	6.04	40°07'46.363"N	104°52'42.306"W	2.00	
1417.00†	8.340	20.170	1415.53	-28.53	28.44	10.45	40°07'46.481"N	104°52'42.250"W	2.00	
1500.00	10.000	20.170	1497.47	-40.99	40.85	15.01	40°07'46.604"N	104°52'42.191"W	2.00	END NUDGE
1517.00†	10.000	20.170	1514.21	-43.77	43.62	16.02	40°07'46.631"N	104°52'42.178"W	0.00	
1617.00†	10.000	20.170	1612.69	-60.12	59.92	22.01	40°07'46.792"N	104°52'42.101"W	0.00	
1717.00†	10.000	20.170	1711.17	-76.47	76.22	28.00	40°07'46.953"N	104°52'42.024"W	0.00	
1817.00†	10.000	20.170	1809.65	-92.82	92.52	33.99	40°07'47.114"N	104°52'41.946"W	0.00	
1917.00†	10.000	20.170	1908.13	-109.17	108.82	39.97	40°07'47.275"N	104°52'41.869"W	0.00	
2017.00†	10.000	20.170	2006.61	-125.53	125.12	45.96	40°07'47.436"N	104°52'41.792"W	0.00	
2117.00†	10.000	20.170	2105.09	-141.88	141.42	51.95	40°07'47.598"N	104°52'41.715"W	0.00	
2217.00†	10.000	20.170	2203.57	-158.23	157.72	57.94	40°07'47.759"N	104°52'41.638"W	0.00	
2317.00†	10.000	20.170	2302.05	-174.58	174.02	63.92	40°07'47.920"N	104°52'41.561"W	0.00	
2417.00†	10.000	20.170	2400.53	-190.94	190.32	69.91	40°07'48.081"N	104°52'41.484"W	0.00	
2517.00†	10.000	20.170	2499.01	-207.29	206.62	75.90	40°07'48.242"N	104°52'41.407"W	0.00	
2617.00†	10.000	20.170	2597.50	-223.64	222.92	81.89	40°07'48.403"N	104°52'41.330"W	0.00	
2717.00†	10.000	20.170	2695.98	-239.99	239.22	87.87	40°07'48.564"N	104°52'41.253"W	0.00	
2817.00†	10.000	20.170	2794.46	-256.35	255.52	93.86	40°07'48.725"N	104°52'41.176"W	0.00	
2917.00†	10.000	20.170	2892.94	-272.70	271.82	99.85	40°07'48.886"N	104°52'41.099"W	0.00	
3017.00†	10.000	20.170	2991.42	-289.05	288.12	105.84	40°07'49.047"N	104°52'41.021"W	0.00	
3117.00†	10.000	20.170	3089.90	-305.40	304.42	111.82	40°07'49.208"N	104°52'40.944"W	0.00	
3217.00†	10.000	20.170	3188.38	-321.76	320.72	117.81	40°07'49.369"N	104°52'40.867"W	0.00	
3317.00†	10.000	20.170	3286.86	-338.11	337.02	123.80	40°07'49.530"N	104°52'40.790"W	0.00	
3417.00†	10.000	20.170	3385.34	-354.46	353.32	129.79	40°07'49.692"N	104°52'40.713"W	0.00	
3517.00†	10.000	20.170	3483.82	-370.81	369.62	135.77	40°07'49.853"N	104°52'40.636"W	0.00	
3617.00†	10.000	20.170	3582.30	-387.17	385.92	141.76	40°07'50.014"N	104°52'40.559"W	0.00	
3717.00†	10.000	20.170	3680.78	-403.52	402.22	147.75	40°07'50.175"N	104°52'40.482"W	0.00	
3817.00†	10.000	20.170	3779.26	-419.87	418.52	153.74	40°07'50.336"N	104°52'40.405"W	0.00	
3837.04	10.000	20.170	3799.00	-423.15	421.79	154.94	40°07'50.368"N	104°52'40.389"W	0.00	BEGIN DROP
3917.00†	8.401	20.170	3877.93	-435.19	433.79	159.35	40°07'50.487"N	104°52'40.333"W	2.00	
4017.00†	6.401	20.170	3977.09	-447.32	445.88	163.79	40°07'50.606"N	104°52'40.275"W	2.00	



Planned Wellpath Report

DEEPE 36C-27HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 36C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 36C-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (195 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4117.00†	4.401	20.170	4076.64	-456.18	454.71	167.03	40°07'50.694"N	104°52'40.234"W	2.00	
4217.00†	2.401	20.170	4176.46	-461.77	460.28	169.08	40°07'50.749"N	104°52'40.207"W	2.00	
4317.00†	0.401	20.170	4276.43	-464.07	462.58	169.92	40°07'50.771"N	104°52'40.196"W	2.00	
4337.04	0.000	180.509	4296.47	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	2.00	END DROP
4417.00†	0.000	180.509	4376.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
4517.00†	0.000	180.509	4476.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
4559.57†	0.000	180.509	4519.00	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	SUSSEX
4617.00†	0.000	180.509	4576.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
4717.00†	0.000	180.509	4676.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
4817.00†	0.000	180.509	4776.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
4917.00†	0.000	180.509	4876.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
5017.00†	0.000	180.509	4976.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
5108.57†	0.000	180.509	5068.00	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	SHANNON
5117.00†	0.000	180.509	5076.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
5217.00†	0.000	180.509	5176.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
5317.00†	0.000	180.509	5276.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
5417.00†	0.000	180.509	5376.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
5517.00†	0.000	180.509	5476.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
5617.00†	0.000	180.509	5576.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
5717.00†	0.000	180.509	5676.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
5817.00†	0.000	180.509	5776.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
5917.00†	0.000	180.509	5876.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
6017.00†	0.000	180.509	5976.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
6117.00†	0.000	180.509	6076.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
6217.00†	0.000	180.509	6176.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
6317.00†	0.000	180.509	6276.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
6417.00†	0.000	180.509	6376.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
6517.00†	0.000	180.509	6476.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
6617.00†	0.000	180.509	6576.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
6717.00†	0.000	180.509	6676.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
6817.00†	0.000	180.509	6776.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
6917.00†	0.000	180.509	6876.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
7017.00†	0.000	180.509	6976.43	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	
7084.62	0.000	180.509	7044.05	-464.13	462.64	169.94	40°07'50.772"N	104°52'40.196"W	0.00	KOP, BUILD @ 10°/100'
7117.00†	3.238	180.509	7076.41	-463.22	461.73	169.94	40°07'50.763"N	104°52'40.196"W	10.00	
7217.00†	13.238	180.509	7175.25	-448.91	447.42	169.81	40°07'50.621"N	104°52'40.198"W	10.00	
7308.21†	22.359	180.509	7262.00	-421.06	419.57	169.56	40°07'50.346"N	104°52'40.201"W	10.00	SHARON SPRINGS
7317.00†	23.238	180.509	7270.11	-417.65	416.16	169.53	40°07'50.313"N	104°52'40.201"W	10.00	
7388.64†	30.402	180.509	7334.00	-385.35	383.86	169.24	40°07'49.993"N	104°52'40.205"W	10.00	NIOBRARA
7417.00†	33.238	180.509	7358.09	-370.40	368.91	169.11	40°07'49.846"N	104°52'40.207"W	10.00	
7439.91†	35.529	180.509	7377.00	-357.46	355.97	169.00	40°07'49.718"N	104°52'40.208"W	10.00	NIOBRARA B
7517.00†	43.238	180.509	7436.54	-308.58	307.10	168.56	40°07'49.235"N	104°52'40.214"W	10.00	
7555.97†	47.135	180.509	7464.00	-280.94	279.46	168.32	40°07'48.962"N	104°52'40.217"W	10.00	NIOBRARA C
7617.00†	53.238	180.509	7503.06	-234.09	232.60	167.90	40°07'48.499"N	104°52'40.222"W	10.00	
7717.00†	63.238	180.509	7555.63	-149.17	147.69	167.15	40°07'47.659"N	104°52'40.232"W	10.00	



Planned Wellpath Report

DEEPE 36C-27HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 36C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 36C-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (195 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7814.73†	73.011	180.509	7592.00	-58.59	57.11	166.34	40°07'46.764"N	104°52'40.243"W	10.00	FORT HAYS
7817.00†	73.238	180.509	7592.66	-56.41	54.94	166.32	40°07'46.743"N	104°52'40.243"W	10.00	
7908.85†	82.423	180.509	7612.00	33.27	-34.74	165.52	40°07'45.857"N	104°52'40.253"W	10.00	CODELL
7917.00†	83.238	180.509	7613.02	41.36	-42.83	165.45	40°07'45.777"N	104°52'40.254"W	10.00	
7982.77	89.815	180.509	7617.00	106.97	-108.44	164.87	40°07'45.128"N	104°52'40.261"W	10.00	LANDING POINT
8017.00†	89.815	180.509	7617.11	141.20	-142.67	164.56	40°07'44.790"N	104°52'40.265"W	0.00	
8117.00†	89.815	180.509	7617.43	241.20	-242.67	163.68	40°07'43.802"N	104°52'40.277"W	0.00	
8217.00†	89.815	180.509	7617.76	341.20	-342.66	162.79	40°07'42.814"N	104°52'40.288"W	0.00	
8317.00†	89.815	180.509	7618.08	441.20	-442.66	161.90	40°07'41.826"N	104°52'40.300"W	0.00	
8417.00†	89.815	180.509	7618.40	541.20	-542.65	161.01	40°07'40.837"N	104°52'40.311"W	0.00	
8517.00†	89.815	180.509	7618.73	641.20	-642.65	160.12	40°07'39.849"N	104°52'40.323"W	0.00	
8617.00†	89.815	180.509	7619.05	741.20	-742.65	159.23	40°07'38.861"N	104°52'40.334"W	0.00	
8717.00†	89.815	180.509	7619.37	841.20	-842.64	158.34	40°07'37.873"N	104°52'40.346"W	0.00	
8817.00†	89.815	180.509	7619.70	941.20	-942.64	157.46	40°07'36.885"N	104°52'40.357"W	0.00	
8917.00†	89.815	180.509	7620.02	1041.20	-1042.63	156.57	40°07'35.897"N	104°52'40.368"W	0.00	
9017.00†	89.815	180.509	7620.34	1141.20	-1142.63	155.68	40°07'34.908"N	104°52'40.380"W	0.00	
9117.00†	89.815	180.509	7620.67	1241.20	-1242.62	154.79	40°07'33.920"N	104°52'40.391"W	0.00	
9217.00†	89.815	180.509	7620.99	1341.20	-1342.62	153.90	40°07'32.932"N	104°52'40.403"W	0.00	
9317.00†	89.815	180.509	7621.31	1441.20	-1442.61	153.01	40°07'31.944"N	104°52'40.414"W	0.00	
9417.00†	89.815	180.509	7621.64	1541.20	-1542.61	152.12	40°07'30.956"N	104°52'40.426"W	0.00	
9517.00†	89.815	180.509	7621.96	1641.20	-1642.61	151.24	40°07'29.968"N	104°52'40.437"W	0.00	
9617.00†	89.815	180.509	7622.28	1741.20	-1742.60	150.35	40°07'28.979"N	104°52'40.449"W	0.00	
9717.00†	89.815	180.509	7622.61	1841.20	-1842.60	149.46	40°07'27.991"N	104°52'40.460"W	0.00	
9817.00†	89.815	180.509	7622.93	1941.20	-1942.59	148.57	40°07'27.003"N	104°52'40.471"W	0.00	
9917.00†	89.815	180.509	7623.25	2041.19	-2042.59	147.68	40°07'26.015"N	104°52'40.483"W	0.00	
10017.00†	89.815	180.509	7623.58	2141.19	-2142.58	146.79	40°07'25.027"N	104°52'40.494"W	0.00	
10117.00†	89.815	180.509	7623.90	2241.19	-2242.58	145.90	40°07'24.039"N	104°52'40.506"W	0.00	
10217.00†	89.815	180.509	7624.22	2341.19	-2342.57	145.01	40°07'23.050"N	104°52'40.517"W	0.00	
10317.00†	89.815	180.509	7624.55	2441.19	-2442.57	144.13	40°07'22.062"N	104°52'40.529"W	0.00	
10417.00†	89.815	180.509	7624.87	2541.19	-2542.56	143.24	40°07'21.074"N	104°52'40.540"W	0.00	
10517.00†	89.815	180.509	7625.20	2641.19	-2642.56	142.35	40°07'20.086"N	104°52'40.552"W	0.00	
10617.00†	89.815	180.509	7625.52	2741.19	-2742.56	141.46	40°07'19.098"N	104°52'40.563"W	0.00	
10717.00†	89.815	180.509	7625.84	2841.19	-2842.55	140.57	40°07'18.110"N	104°52'40.574"W	0.00	
10817.00†	89.815	180.509	7626.17	2941.19	-2942.55	139.68	40°07'17.121"N	104°52'40.586"W	0.00	
10917.00†	89.815	180.509	7626.49	3041.19	-3042.54	138.79	40°07'16.133"N	104°52'40.597"W	0.00	
11017.00†	89.815	180.509	7626.81	3141.19	-3142.54	137.91	40°07'15.145"N	104°52'40.609"W	0.00	
11117.00†	89.815	180.509	7627.14	3241.19	-3242.53	137.02	40°07'14.157"N	104°52'40.620"W	0.00	
11217.00†	89.815	180.509	7627.46	3341.19	-3342.53	136.13	40°07'13.169"N	104°52'40.632"W	0.00	
11317.00†	89.815	180.509	7627.78	3441.19	-3442.52	135.24	40°07'12.181"N	104°52'40.643"W	0.00	
11417.00†	89.815	180.509	7628.11	3541.19	-3542.52	134.35	40°07'11.192"N	104°52'40.655"W	0.00	
11517.00†	89.815	180.509	7628.43	3641.19	-3642.52	133.46	40°07'10.204"N	104°52'40.666"W	0.00	
11617.00†	89.815	180.509	7628.75	3741.19	-3742.51	132.57	40°07'09.216"N	104°52'40.678"W	0.00	
11717.00†	89.815	180.509	7629.08	3841.19	-3842.51	131.69	40°07'08.228"N	104°52'40.689"W	0.00	
11817.00†	89.815	180.509	7629.40	3941.18	-3942.50	130.80	40°07'07.240"N	104°52'40.700"W	0.00	
11917.00†	89.815	180.509	7629.72	4041.18	-4042.50	129.91	40°07'06.252"N	104°52'40.712"W	0.00	



Planned Wellpath Report

DEEPE 36C-27HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 36C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 36C-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (195 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12017.00†	89.815	180.509	7630.05	4141.18	-4142.49	129.02	40°07'05.263"N	104°52'40.723"W	0.00	
12117.00†	89.815	180.509	7630.37	4241.18	-4242.49	128.13	40°07'04.275"N	104°52'40.735"W	0.00	
12217.00†	89.815	180.509	7630.69	4341.18	-4342.48	127.24	40°07'03.287"N	104°52'40.746"W	0.00	
12317.00†	89.815	180.509	7631.02	4441.18	-4442.48	126.35	40°07'02.299"N	104°52'40.758"W	0.00	
12417.00†	89.815	180.509	7631.34	4541.18	-4542.48	125.46	40°07'01.311"N	104°52'40.769"W	0.00	
12517.00†	89.815	180.509	7631.66	4641.18	-4642.47	124.58	40°07'00.323"N	104°52'40.781"W	0.00	
12617.00†	89.815	180.509	7631.99	4741.18	-4742.47	123.69	40°06'59.334"N	104°52'40.792"W	0.00	
12717.00†	89.815	180.509	7632.31	4841.18	-4842.46	122.80	40°06'58.346"N	104°52'40.803"W	0.00	
12817.00†	89.815	180.509	7632.63	4941.18	-4942.46	121.91	40°06'57.358"N	104°52'40.815"W	0.00	
12917.00†	89.815	180.509	7632.96	5041.18	-5042.45	121.02	40°06'56.370"N	104°52'40.826"W	0.00	
13017.00†	89.815	180.509	7633.28	5141.18	-5142.45	120.13	40°06'55.382"N	104°52'40.838"W	0.00	
13117.00†	89.815	180.509	7633.60	5241.18	-5242.44	119.24	40°06'54.394"N	104°52'40.849"W	0.00	
13217.00†	89.815	180.509	7633.93	5341.18	-5342.44	118.36	40°06'53.405"N	104°52'40.861"W	0.00	
13317.00†	89.815	180.509	7634.25	5441.18	-5442.44	117.47	40°06'52.417"N	104°52'40.872"W	0.00	
13417.00†	89.815	180.509	7634.57	5541.18	-5542.43	116.58	40°06'51.429"N	104°52'40.884"W	0.00	
13517.00†	89.815	180.509	7634.90	5641.18	-5642.43	115.69	40°06'50.441"N	104°52'40.895"W	0.00	
13617.00†	89.815	180.509	7635.22	5741.18	-5742.42	114.80	40°06'49.453"N	104°52'40.906"W	0.00	
13717.00†	89.815	180.509	7635.54	5841.17	-5842.42	113.91	40°06'48.465"N	104°52'40.918"W	0.00	
13817.00†	89.815	180.509	7635.87	5941.17	-5942.41	113.02	40°06'47.476"N	104°52'40.929"W	0.00	
13917.00†	89.815	180.509	7636.19	6041.17	-6042.41	112.14	40°06'46.488"N	104°52'40.941"W	0.00	
14017.00†	89.815	180.509	7636.51	6141.17	-6142.40	111.25	40°06'45.500"N	104°52'40.952"W	0.00	
14117.00†	89.815	180.509	7636.84	6241.17	-6242.40	110.36	40°06'44.512"N	104°52'40.964"W	0.00	
14217.00†	89.815	180.509	7637.16	6341.17	-6342.39	109.47	40°06'43.524"N	104°52'40.975"W	0.00	
14317.00†	89.815	180.509	7637.48	6441.17	-6442.39	108.58	40°06'42.536"N	104°52'40.986"W	0.00	
14417.00†	89.815	180.509	7637.81	6541.17	-6542.39	107.69	40°06'41.547"N	104°52'40.998"W	0.00	
14517.00†	89.815	180.509	7638.13	6641.17	-6642.38	106.80	40°06'40.559"N	104°52'41.009"W	0.00	
14617.00†	89.815	180.509	7638.45	6741.17	-6742.38	105.91	40°06'39.571"N	104°52'41.021"W	0.00	
14717.00†	89.815	180.509	7638.78	6841.17	-6842.37	105.03	40°06'38.583"N	104°52'41.032"W	0.00	
14817.00†	89.815	180.509	7639.10	6941.17	-6942.37	104.14	40°06'37.595"N	104°52'41.044"W	0.00	
14917.00†	89.815	180.509	7639.42	7041.17	-7042.36	103.25	40°06'36.607"N	104°52'41.055"W	0.00	
15017.00†	89.815	180.509	7639.75	7141.17	-7142.36	102.36	40°06'35.618"N	104°52'41.067"W	0.00	
15117.00†	89.815	180.509	7640.07	7241.17	-7242.35	101.47	40°06'34.630"N	104°52'41.078"W	0.00	
15217.00†	89.815	180.509	7640.39	7341.17	-7342.35	100.58	40°06'33.642"N	104°52'41.089"W	0.00	
15317.00†	89.815	180.509	7640.72	7441.17	-7442.35	99.69	40°06'32.654"N	104°52'41.101"W	0.00	
15417.00†	89.815	180.509	7641.04	7541.17	-7542.34	98.81	40°06'31.666"N	104°52'41.112"W	0.00	
15517.00†	89.815	180.509	7641.36	7641.17	-7642.34	97.92	40°06'30.678"N	104°52'41.124"W	0.00	
15617.00†	89.815	180.509	7641.69	7741.16	-7742.33	97.03	40°06'29.689"N	104°52'41.135"W	0.00	
15717.00†	89.815	180.509	7642.01	7841.16	-7842.33	96.14	40°06'28.701"N	104°52'41.147"W	0.00	
15817.00†	89.815	180.509	7642.33	7941.16	-7942.32	95.25	40°06'27.713"N	104°52'41.158"W	0.00	
15917.00†	89.815	180.509	7642.66	8041.16	-8042.32	94.36	40°06'26.725"N	104°52'41.170"W	0.00	
16017.00†	89.815	180.509	7642.98	8141.16	-8142.31	93.47	40°06'25.737"N	104°52'41.181"W	0.00	
16117.00†	89.815	180.509	7643.30	8241.16	-8242.31	92.59	40°06'24.749"N	104°52'41.192"W	0.00	
16217.00†	89.815	180.509	7643.63	8341.16	-8342.31	91.70	40°06'23.760"N	104°52'41.204"W	0.00	
16317.00†	89.815	180.509	7643.95	8441.16	-8442.30	90.81	40°06'22.772"N	104°52'41.215"W	0.00	
16417.00†	89.815	180.509	7644.27	8541.16	-8542.30	89.92	40°06'21.784"N	104°52'41.227"W	0.00	



Planned Wellpath Report

DEEPE 36C-27HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 36C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 36C-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH DATA (195 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16517.00†	89.815	180.509	7644.60	8641.16	-8642.29	89.03	40°06'20.796"N	104°52'41.238"W	0.00	
16617.00†	89.815	180.509	7644.92	8741.16	-8742.29	88.14	40°06'19.808"N	104°52'41.250"W	0.00	
16717.00†	89.815	180.509	7645.24	8841.16	-8842.28	87.25	40°06'18.820"N	104°52'41.261"W	0.00	
16817.00†	89.815	180.509	7645.57	8941.16	-8942.28	86.36	40°06'17.831"N	104°52'41.273"W	0.00	
16917.00†	89.815	180.509	7645.89	9041.16	-9042.27	85.48	40°06'16.843"N	104°52'41.284"W	0.00	
17017.00†	89.815	180.509	7646.21	9141.16	-9142.27	84.59	40°06'15.855"N	104°52'41.295"W	0.00	
17117.00†	89.815	180.509	7646.54	9241.16	-9242.27	83.70	40°06'14.867"N	104°52'41.307"W	0.00	
17217.00†	89.815	180.509	7646.86	9341.16	-9342.26	82.81	40°06'13.879"N	104°52'41.318"W	0.00	
17317.00†	89.815	180.509	7647.18	9441.16	-9442.26	81.92	40°06'12.891"N	104°52'41.330"W	0.00	
17417.00†	89.815	180.509	7647.51	9541.16	-9542.25	81.03	40°06'11.902"N	104°52'41.341"W	0.00	
17517.00†	89.815	180.509	7647.83	9641.15	-9642.25	80.14	40°06'10.914"N	104°52'41.353"W	0.00	
17617.00†	89.815	180.509	7648.15	9741.15	-9742.24	79.26	40°06'09.926"N	104°52'41.364"W	0.00	
17717.00†	89.815	180.509	7648.48	9841.15	-9842.24	78.37	40°06'08.938"N	104°52'41.376"W	0.00	
17817.00†	89.815	180.509	7648.80	9941.15	-9942.23	77.48	40°06'07.950"N	104°52'41.387"W	0.00	
17878.66	89.815	180.509	7649.00 ¹	10002.81	-10003.89	76.93	40°06'07.340"N	104°52'41.394"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: DEEPE 36C-27HZ PWB Ref Wellpath: DEEPE 36C-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	7982.77	7482.77	500.00	7617.00	0.00	0.00	-108.44	164.87
7in Casing Intermediate	17.00	7982.77	7965.77	17.00	7617.00	0.00	0.00	-108.44	164.87
6.125in Open Hole	7982.77	17878.66	9895.89	7617.00	NA	-108.44	164.87	NA	NA
4.5in Casing Production	17.00	17878.66	17861.66	17.00	7649.00	0.00	0.00	-10003.89	76.93



Planned Wellpath Report

DEEPE 36C-27HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 36C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 36C-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	0.40	-29.91	3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"W	polygon
DEEPE 2 PAD SECTION 27 LINES		0.00	0.40	-29.91	3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"W	polygon
1) DEEPE 36C-27HZ BHL ON PLAT REV-1 (1'FSL & 2305'FWL, SEC.27)	17878.66	7649.00	-10003.89	76.93	3173947.22	1280627.08	40°06'07.340"N	104°52'41.394"W	point
DEEPE 2 PAD SEC. 22 HARDLINES (460' SETBACKS)		8000.00	0.40	-29.91	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	0.40	-29.91	3173770.27	1290629.95	40°07'46.204"N	104°52'42.769"W	polygon

SURVEY PROGRAM - Ref Wellbore: DEEPE 36C-27HZ PWB Ref Wellpath: DEEPE 36C-27HZ (PERMIT REV-1) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	7982.77	NaviTrak (Standard)		DEEPE 36C-27HZ PWB
7982.77	17878.66	OnTrak (Standard)		DEEPE 36C-27HZ PWB



Planned Wellpath Report

DEEPE 36C-27HZ (PERMIT REV-1) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#02 DEEPE 36C-27HZ (531'FNL & 2140'FWL, SEC.22)
Area	COLORADO	Well	DEEPE 36C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DEEPE 36C-27HZ PWB
Facility	SEC.22-T2N-R67W		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
4559.57	0.000	180.509	4519.00	SUSSEX	
5108.57	0.000	180.509	5068.00	SHANNON	
7308.21	22.359	180.509	7262.00	SHARON SPRINGS	
7388.64	30.402	180.509	7334.00	NIOBRARA	
7439.91	35.529	180.509	7377.00	NIOBRARA B	
7555.97	47.135	180.509	7464.00	NIOBRARA C	
7814.73	73.011	180.509	7592.00	FORT HAYS	
7908.85	82.423	180.509	7612.00	CODELL	