

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOTH25 NRC 2C-5HZ (500'FNL & 1320'FEL, SEC.08)  
Field: WELD COUNTY (KERR MCGEE) Well: NRC 2C-5HZ  
Facility: SEC.08-T1N-R67W Wellbore: NRC 2C-5HZ PWB

Plot reference wellpath is NRC 2C-5HZ PWP (REV-A.0)

True vertical depths are referenced to XTREME 23 (16KB) (RWB)	Grid System NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 23 (16KB) (RWB)	North Reference: True north
XTREME 23 (16KB) (RWB) to Mean Sea Level: 5025 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOTH25 NRC 2C-5HZ (500'FNL & 1320'FEL, SEC.08)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: precision on 20/Jun/2014

## Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.08-T1N-R67W	3185100.027	1265676.420	40°10'40.100"N	104°54'36.530"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
SLOTH25 NRC 2C-5HZ (500'FNL & 1320'FEL, SEC.08)	3737.02	87.93	3185103.051	1265613.792
XTREME 23 (16KB) (RWB) to Mud line (At Slot: SLOTH25 NRC 2C-5HZ (500'FNL & 1320'FEL, SEC.08))				5025ft
Mean Sea Level to Mud line (At Slot: SLOTH25 NRC 2C-5HZ (500'FNL & 1320'FEL, SEC.08))				0ft
XTREME 23 (16KB) (RWB) to Mean Sea Level				5025ft

## Survey Program

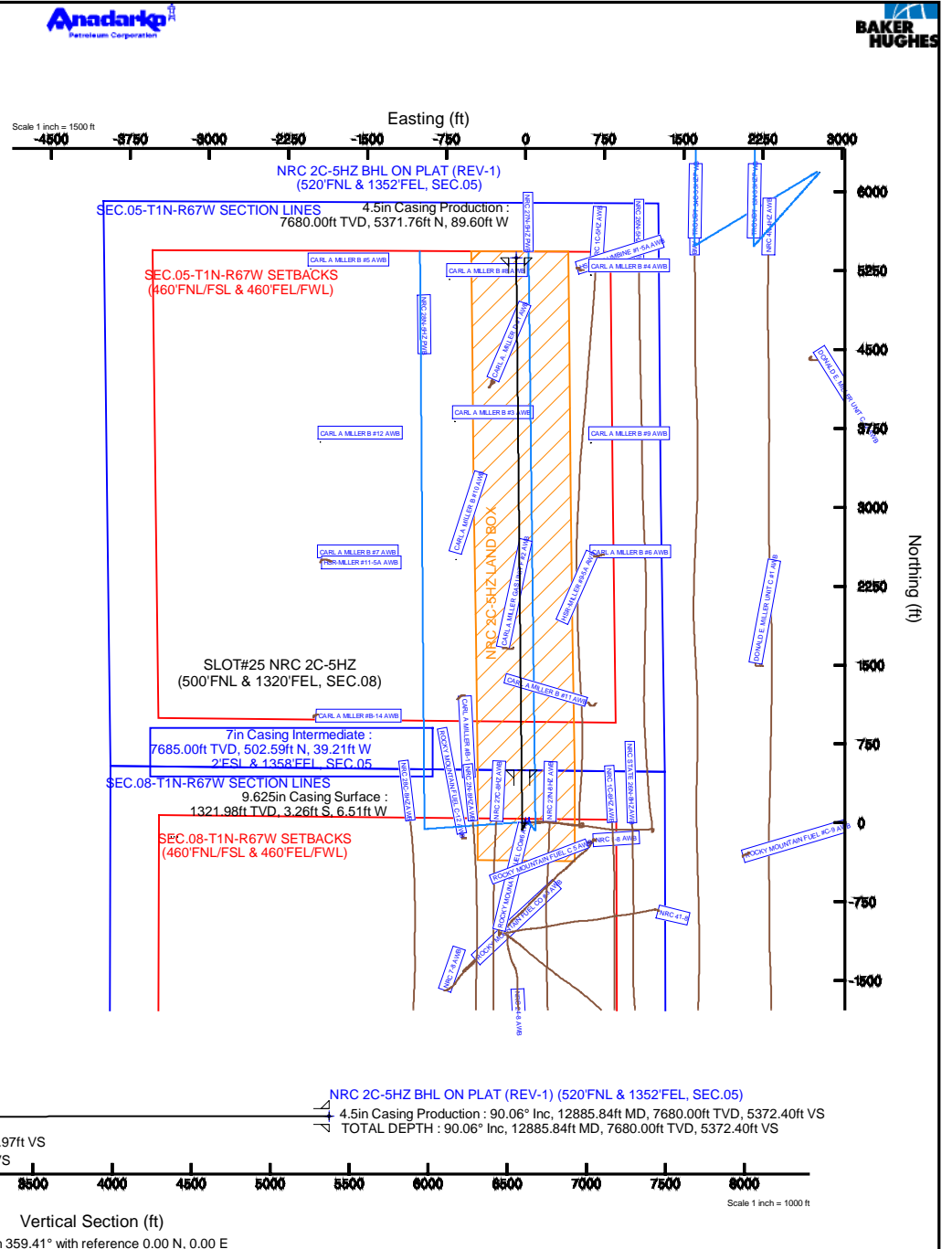
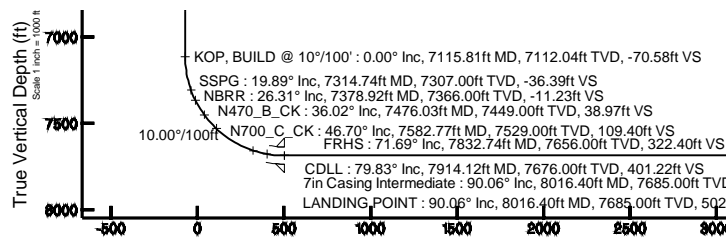
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
16.00	1229.00	Generic gyro - continuous	Generic gyro - continuous (Standard)		NRC 2C-5HZ AWB
1229.00	8016.40	NavTrak	NavTrak (MAGCORR.IFR)		NRC 2C-5HZ PWB
8016.40	12885.84	NavTrak	NavTrak (MAGCORR.IFR)		NRC 2C-5HZ PWB

## Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE-INTO GYRO SURVEYS	1229.00	0.330	224.270	1228.98	-2.88	-6.14	0.26	-2.82
BEGIN NUDGE	1450.03	0.330	224.270	1450.00	-3.79	-7.03	0.00	-3.72
END NUDGE	1834.92	8.000	201.000	1833.60	-29.63	-17.42	2.00	-29.45
BEGIN DROP	1952.47	8.000	201.000	1950.00	-44.90	-23.28	0.00	-44.66
END DROP	2352.47	0.000	359.407	2348.70	-70.93	-33.27	2.00	-70.58
KOP, BUILD @ 10°/100'	7115.81	0.000	359.407	7112.04	-70.93	-33.27	0.00	-70.58
LANDING POINT	8016.40	90.059	359.407	7685.00	502.58	-39.21	10.00	502.96
TOTAL DEPTH	12885.84	90.059	359.407	7680.00	5371.76	-89.60	0.00	5372.40

## Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.05-T1N-R67W SECTION LINES	0.00	-0.30	25.93	3185103.02	1265613.69	40°10'17.117"N	104°54'35.013"W	
SEC.05-T1N-R67W SETBACKS (460'FNL & 460'FEL/FWL)	0.00	-0.30	25.93	3185103.02	1265613.69	40°10'17.117"N	104°54'35.013"W	
SEC.08-T1N-R67W SECTION LINES	0.00	-0.30	25.93	3185103.02	1265613.69	40°10'17.117"N	104°54'35.013"W	
SEC.08-T1N-R67W SETBACKS (460'FNL & 460'FEL/FWL)	0.00	-0.30	25.93	3185103.02	1265613.69	40°10'17.117"N	104°54'35.013"W	
NRC 2C-5HZ BHL ON PLAT (REV-1) (520'FNL & 1352'FEL, SEC.05)	12885.84	7680.00	5371.76	-69.00	3185037.79	1274764.42	40°10'10.200"N	104°54'36.580"W
NRC 2C-5HZ LAND BOX	7680.00	0.00	0.00	3185035.09	1265613.79	40°10'17.120"N	104°54'35.380"W	



Vertical Section (ft)  
Azimuth 359.41° with reference 0.00 N, 0.00 E

# Planned Wellpath Report

NRC 2C-5HZ PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#25 NRC 2C-5HZ (500'FNL & 1320'FEL, SEC.08)
Area	COLORADO	Well	NRC 2C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 2C-5HZ PWB
Facility	SEC.08-T1N-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	Precain
Scale	0.999962	Report Generated	20/Jun/2014 at 09:22
Convergence at slot	n/a	Database/Source file	WellArchitectDB/NRC_2C-5HZ_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	3737.02	87.93	3165163.09	1269413.79	40°04'17.120"N	104°54'35.398"W
Facility Reference Pt			3165100.03	1265676.42	40°03'40.190"N	104°54'36.529"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	XTREME 23 (16'KB) (RKB) to Facility Vertical Datum	5025.00ft
Horizontal Reference Pt	Slot	XTREME 23 (16'KB) (RKB) to Mean Sea Level	5025.00ft
Vertical Reference Pt	XTREME 23 (16'KB) (RKB)	XTREME 23 (16'KB) (RKB) to Mud Line at Slot (SLOT#25 NRC 2C-5HZ (500'FNL & 1320'FEL, SEC.08))	5025.00ft
MD Reference Pt	XTREME 23 (16'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.41°

# Planned Wellpath Report

NRC 2C-5HZ PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#25 NRC 2C-5HZ (500'FNL & 1320'FEL, SEC.08)
Area	COLORADO	Well	NRC 2C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 2C-5HZ PWB
Facility	SEC.08-T1N-R67W		

## WELLPATH DATA (147 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	222.940	0.00	0.00	0.00	0.00	40°04'17.120"N	104°54'35.398"W	0.00	
16.00	0.000	222.940	16.00	0.00	0.00	0.00	40°04'17.120"N	104°54'35.398"W	0.00	
116.00	0.130	222.940	116.00	-0.08	-0.08	-0.08	40°04'17.119"N	104°54'35.399"W	0.13	
216.00	0.200	229.870	216.00	-0.28	-0.28	-0.29	40°04'17.117"N	104°54'35.402"W	0.07	
316.00	0.260	259.620	316.00	-0.43	-0.43	-0.64	40°04'17.116"N	104°54'35.406"W	0.13	
416.00	0.370	251.590	416.00	-0.56	-0.57	-1.17	40°04'17.114"N	104°54'35.413"W	0.12	
516.00	0.390	269.950	516.00	-0.66	-0.68	-1.82	40°04'17.113"N	104°54'35.421"W	0.12	
616.00	0.530	249.170	615.99	-0.81	-0.84	-2.59	40°04'17.112"N	104°54'35.431"W	0.22	
716.00	0.380	238.560	715.99	-1.14	-1.18	-3.31	40°04'17.108"N	104°54'35.441"W	0.17	
816.00	0.500	238.210	815.99	-1.54	-1.58	-3.96	40°04'17.104"N	104°54'35.449"W	0.12	
916.00	0.410	242.500	915.98	-1.93	-1.98	-4.65	40°04'17.100"N	104°54'35.458"W	0.10	
1016.00	0.320	243.510	1015.98	-2.21	-2.27	-5.22	40°04'17.098"N	104°54'35.465"W	0.09	
1116.00	0.270	237.260	1115.98	-2.46	-2.52	-5.67	40°04'17.095"N	104°54'35.471"W	0.06	
1216.00	0.330	230.230	1215.98	-2.77	-2.83	-6.09	40°04'17.092"N	104°54'35.476"W	0.07	
1229.00	0.330	224.270	1228.98	-2.82	-2.88	-6.14	40°04'17.092"N	104°54'35.477"W	0.26	TIE-INTO GYRO SURVEYS
1229.02†	0.330	224.270	1229.00	-2.82	-2.88	-6.14	40°04'17.092"N	104°54'35.477"W	0.00	Fox Hills Marker
1329.00†	0.330	224.270	1328.98	-3.23	-3.29	-6.54	40°04'17.087"N	104°54'35.482"W	0.00	
1429.00†	0.330	224.270	1428.97	-3.63	-3.71	-6.94	40°04'17.083"N	104°54'35.487"W	0.00	
1450.03	0.330	224.270	1450.00	-3.72	-3.79	-7.03	40°04'17.083"N	104°54'35.488"W	0.00	BEGIN NUDGE
1529.00†	1.885	204.155	1528.96	-5.06	-5.14	-7.72	40°04'17.069"N	104°54'35.497"W	2.00	
1629.00†	3.883	202.032	1628.83	-9.68	-9.78	-9.66	40°04'17.023"N	104°54'35.522"W	2.00	
1729.00†	5.882	201.351	1728.46	-17.56	-17.69	-12.80	40°04'16.945"N	104°54'35.563"W	2.00	
1829.00†	7.882	201.015	1827.73	-28.69	-28.87	-17.12	40°04'16.835"N	104°54'35.618"W	2.00	
1834.92	8.000	201.000	1833.60	-29.45	-29.63	-17.42	40°04'16.827"N	104°54'35.622"W	2.00	END NUDGE
1929.00†	8.000	201.000	1926.76	-41.62	-41.85	-22.11	40°04'16.706"N	104°54'35.682"W	0.00	
1952.47	8.000	201.000	1950.00	-44.66	-44.90	-23.28	40°04'16.676"N	104°54'35.697"W	0.00	BEGIN DROP
2029.00†	6.469	201.000	2025.92	-53.62	-53.90	-26.73	40°04'16.587"N	104°54'35.742"W	2.00	
2129.00†	4.469	201.000	2125.46	-62.48	-62.80	-30.15	40°04'16.499"N	104°54'35.786"W	2.00	
2229.00†	2.469	201.000	2225.27	-68.11	-68.45	-32.32	40°04'16.444"N	104°54'35.814"W	2.00	
2329.00†	0.469	201.000	2325.23	-70.49	-70.84	-33.24	40°04'16.420"N	104°54'35.826"W	2.00	
2352.47	0.000	359.407	2348.70	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	2.00	END DROP
2429.00†	0.000	359.407	2425.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
2529.00†	0.000	359.407	2525.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
2629.00†	0.000	359.407	2625.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
2729.00†	0.000	359.407	2725.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
2829.00†	0.000	359.407	2825.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
2929.00†	0.000	359.407	2925.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
3029.00†	0.000	359.407	3025.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
3129.00†	0.000	359.407	3125.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
3229.00†	0.000	359.407	3225.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
3329.00†	0.000	359.407	3325.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
3429.00†	0.000	359.407	3425.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
3529.00†	0.000	359.407	3525.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
3629.00†	0.000	359.407	3625.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
3729.00†	0.000	359.407	3725.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	

# Planned Wellpath Report

NRC 2C-5HZ PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#25 NRC 2C-5HZ (500'FNL & 1320'FEL, SEC.08)
Area	COLORADO	Well	NRC 2C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 2C-5HZ PWB
Facility	SEC.08-T1N-R67W		

## WELLPATH DATA (147 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3829.00†	0.000	359.407	3825.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
3929.00†	0.000	359.407	3925.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
4029.00†	0.000	359.407	4025.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
4129.00†	0.000	359.407	4125.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
4216.77†	0.000	359.407	4213.00	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	Parkman
4229.00†	0.000	359.407	4225.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
4329.00†	0.000	359.407	4325.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
4429.00†	0.000	359.407	4425.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
4529.00†	0.000	359.407	4525.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
4551.77†	0.000	359.407	4548.00	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	Sussex
4629.00†	0.000	359.407	4625.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
4729.00†	0.000	359.407	4725.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
4829.00†	0.000	359.407	4825.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
4929.00†	0.000	359.407	4925.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
5029.00†	0.000	359.407	5025.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
5129.00†	0.000	359.407	5125.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
5229.00†	0.000	359.407	5225.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
5329.00†	0.000	359.407	5325.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
5429.00†	0.000	359.407	5425.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
5529.00†	0.000	359.407	5525.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
5629.00†	0.000	359.407	5625.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
5729.00†	0.000	359.407	5725.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
5829.00†	0.000	359.407	5825.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
5929.00†	0.000	359.407	5925.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
6029.00†	0.000	359.407	6025.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
6129.00†	0.000	359.407	6125.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
6229.00†	0.000	359.407	6225.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
6329.00†	0.000	359.407	6325.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
6429.00†	0.000	359.407	6425.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
6529.00†	0.000	359.407	6525.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
6629.00†	0.000	359.407	6625.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
6729.00†	0.000	359.407	6725.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
6829.00†	0.000	359.407	6825.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
6929.00†	0.000	359.407	6925.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
7029.00†	0.000	359.407	7025.23	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	
7115.81	0.000	359.407	7112.04	-70.58	-70.93	-33.27	40°04'16.419"N	104°54'35.826"W	0.00	KOP, BUILD @ 10°/100'
7129.00†	1.319	359.407	7125.23	-70.43	-70.78	-33.27	40°04'16.421"N	104°54'35.826"W	10.00	
7229.00†	11.319	359.407	7224.50	-59.44	-59.79	-33.39	40°04'16.529"N	104°54'35.827"W	10.00	
7314.74†	19.893	359.407	7307.00	-36.39	-36.74	-33.62	40°04'16.757"N	104°54'35.831"W	10.00	SSPG
7329.00†	21.319	359.407	7320.35	-31.38	-31.73	-33.68	40°04'16.806"N	104°54'35.831"W	10.00	
7378.92†	26.311	359.407	7366.00	-11.23	-11.58	-33.89	40°04'17.006"N	104°54'35.834"W	10.00	NBRR
7429.00†	31.319	359.407	7409.87	12.91	12.55	-34.13	40°04'17.244"N	104°54'35.837"W	10.00	
7476.03†	36.023	359.407	7449.00	38.97	38.62	-34.40	40°04'17.502"N	104°54'35.841"W	10.00	N470_B_CK
7529.00†	41.319	359.407	7490.34	72.06	71.70	-34.75	40°04'17.829"N	104°54'35.845"W	10.00	
7582.77†	46.696	359.407	7529.00	109.40	109.05	-35.13	40°04'18.198"N	104°54'35.850"W	10.00	N700_C_CK

# Planned Wellpath Report

NRC 2C-5HZ PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#25 NRC 2C-5HZ (500'FNL & 1320'FEL, SEC.08)
Area	COLORADO	Well	NRC 2C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 2C-5HZ PWB
Facility	SEC.08-T1N-R67W		

## WELLPATH DATA (147 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7629.00†	51.319	359.407	7559.31	144.29	143.93	-35.49	40°04'18.542"N	104°54'35.855"W	10.00	
7729.00†	61.319	359.407	7614.70	227.39	227.03	-36.35	40°04'19.364"N	104°54'35.866"W	10.00	
7829.00†	71.319	359.407	7654.81	318.86	318.49	-37.30	40°04'20.267"N	104°54'35.878"W	10.00	
7832.74†	71.693	359.407	7656.00	322.40	322.03	-37.34	40°04'20.302"N	104°54'35.878"W	10.00	FRHS
7914.12†	79.832	359.407	7676.00	401.22	400.85	-38.15	40°04'21.081"N	104°54'35.889"W	10.00	CDLL
7929.00†	81.319	359.407	7678.44	415.90	415.52	-38.31	40°04'21.226"N	104°54'35.891"W	10.00	
8016.40	90.059	359.407	7685.00	502.96	502.58	-39.21	40°04'22.087"N	104°54'35.902"W	10.00	LANDING POINT
8029.00†	90.059	359.407	7684.99	515.57	515.19	-39.34	40°04'22.211"N	104°54'35.904"W	0.00	
8129.00†	90.059	359.407	7684.88	615.57	615.18	-40.37	40°04'23.199"N	104°54'35.917"W	0.00	
8229.00†	90.059	359.407	7684.78	715.57	715.18	-41.41	40°04'24.188"N	104°54'35.931"W	0.00	
8329.00†	90.059	359.407	7684.68	815.57	815.17	-42.44	40°04'25.176"N	104°54'35.944"W	0.00	
8429.00†	90.059	359.407	7684.58	915.57	915.16	-43.48	40°04'26.164"N	104°54'35.957"W	0.00	
8529.00†	90.059	359.407	7684.47	1015.57	1015.16	-44.51	40°04'27.152"N	104°54'35.971"W	0.00	
8629.00†	90.059	359.407	7684.37	1115.57	1115.15	-45.55	40°04'28.140"N	104°54'35.984"W	0.00	
8729.00†	90.059	359.407	7684.27	1215.57	1215.15	-46.58	40°04'29.128"N	104°54'35.997"W	0.00	
8829.00†	90.059	359.407	7684.16	1315.57	1315.14	-47.62	40°04'30.117"N	104°54'36.011"W	0.00	
8929.00†	90.059	359.407	7684.06	1415.57	1415.14	-48.65	40°04'31.105"N	104°54'36.024"W	0.00	
9029.00†	90.059	359.407	7683.96	1515.57	1515.13	-49.69	40°04'32.093"N	104°54'36.037"W	0.00	
9129.00†	90.059	359.407	7683.86	1615.57	1615.13	-50.72	40°04'33.081"N	104°54'36.050"W	0.00	
9229.00†	90.059	359.407	7683.75	1715.57	1715.12	-51.76	40°04'34.069"N	104°54'36.064"W	0.00	
9329.00†	90.059	359.407	7683.65	1815.57	1815.12	-52.79	40°04'35.057"N	104°54'36.077"W	0.00	
9429.00†	90.059	359.407	7683.55	1915.57	1915.11	-53.83	40°04'36.046"N	104°54'36.090"W	0.00	
9529.00†	90.059	359.407	7683.45	2015.57	2015.11	-54.86	40°04'37.034"N	104°54'36.104"W	0.00	
9629.00†	90.059	359.407	7683.34	2115.57	2115.10	-55.90	40°04'38.022"N	104°54'36.117"W	0.00	
9729.00†	90.059	359.407	7683.24	2215.57	2215.09	-56.93	40°04'39.010"N	104°54'36.130"W	0.00	
9829.00†	90.059	359.407	7683.14	2315.57	2315.09	-57.97	40°04'39.998"N	104°54'36.144"W	0.00	
9929.00†	90.059	359.407	7683.04	2415.57	2415.08	-59.00	40°04'40.986"N	104°54'36.157"W	0.00	
10029.00†	90.059	359.407	7682.93	2515.57	2515.08	-60.04	40°04'41.974"N	104°54'36.170"W	0.00	
10129.00†	90.059	359.407	7682.83	2615.56	2615.07	-61.07	40°04'42.963"N	104°54'36.184"W	0.00	
10229.00†	90.059	359.407	7682.73	2715.56	2715.07	-62.11	40°04'43.951"N	104°54'36.197"W	0.00	
10329.00†	90.059	359.407	7682.62	2815.56	2815.06	-63.14	40°04'44.939"N	104°54'36.210"W	0.00	
10429.00†	90.059	359.407	7682.52	2915.56	2915.06	-64.18	40°04'45.927"N	104°54'36.224"W	0.00	
10529.00†	90.059	359.407	7682.42	3015.56	3015.05	-65.21	40°04'46.915"N	104°54'36.237"W	0.00	
10629.00†	90.059	359.407	7682.32	3115.56	3115.05	-66.25	40°04'47.903"N	104°54'36.250"W	0.00	
10729.00†	90.059	359.407	7682.21	3215.56	3215.04	-67.28	40°04'48.892"N	104°54'36.264"W	0.00	
10829.00†	90.059	359.407	7682.11	3315.56	3315.04	-68.31	40°04'49.880"N	104°54'36.277"W	0.00	
10929.00†	90.059	359.407	7682.01	3415.56	3415.03	-69.35	40°04'50.868"N	104°54'36.290"W	0.00	
11029.00†	90.059	359.407	7681.91	3515.56	3515.02	-70.38	40°04'51.856"N	104°54'36.303"W	0.00	
11129.00†	90.059	359.407	7681.80	3615.56	3615.02	-71.42	40°04'52.844"N	104°54'36.317"W	0.00	
11229.00†	90.059	359.407	7681.70	3715.56	3715.01	-72.45	40°04'53.832"N	104°54'36.330"W	0.00	
11329.00†	90.059	359.407	7681.60	3815.56	3815.01	-73.49	40°04'54.821"N	104°54'36.343"W	0.00	
11429.00†	90.059	359.407	7681.50	3915.56	3915.00	-74.52	40°04'55.809"N	104°54'36.357"W	0.00	
11529.00†	90.059	359.407	7681.39	4015.56	4015.00	-75.56	40°04'56.797"N	104°54'36.370"W	0.00	
11629.00†	90.059	359.407	7681.29	4115.56	4114.99	-76.59	40°04'57.785"N	104°54'36.383"W	0.00	
11729.00†	90.059	359.407	7681.19	4215.56	4214.99	-77.63	40°04'58.773"N	104°54'36.397"W	0.00	

# Planned Wellpath Report

NRC 2C-5HZ PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION									
Operator	KERR-MCGEE OIL & GAS ONSHORE LP					Slot	SLOT#25 NRC 2C-5HZ (500'FNL & 1320'FEL, SEC.08)		
Area	COLORADO					Well	NRC 2C-5HZ		
Field	WELD COUNTY (KERR MCGEE)					Wellbore	NRC 2C-5HZ PWB		
Facility	SEC.08-T1N-R67W								

WELLPATH DATA (147 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11829.00†	90.059	359.407	7681.08	4315.56	4314.98	-78.66	40°04'59.761"N	104°54'36.410"W	0.00	
11929.00†	90.059	359.407	7680.98	4415.56	4414.98	-79.70	40°05'00.750"N	104°54'36.423"W	0.00	
12029.00†	90.059	359.407	7680.88	4515.56	4514.97	-80.73	40°05'01.738"N	104°54'36.437"W	0.00	
12129.00†	90.059	359.407	7680.78	4615.56	4614.96	-81.77	40°05'02.726"N	104°54'36.450"W	0.00	
12229.00†	90.059	359.407	7680.67	4715.56	4714.96	-82.80	40°05'03.714"N	104°54'36.463"W	0.00	
12329.00†	90.059	359.407	7680.57	4815.56	4814.95	-83.84	40°05'04.702"N	104°54'36.477"W	0.00	
12429.00†	90.059	359.407	7680.47	4915.56	4914.95	-84.87	40°05'05.690"N	104°54'36.490"W	0.00	
12529.00†	90.059	359.407	7680.37	5015.56	5014.94	-85.91	40°05'06.679"N	104°54'36.503"W	0.00	
12629.00†	90.059	359.407	7680.26	5115.56	5114.94	-86.94	40°05'07.667"N	104°54'36.517"W	0.00	
12729.00†	90.059	359.407	7680.16	5215.56	5214.93	-87.98	40°05'08.655"N	104°54'36.530"W	0.00	
12829.00†	90.059	359.407	7680.06	5315.56	5314.93	-89.01	40°05'09.643"N	104°54'36.543"W	0.00	
12885.84	90.059	359.407	7680.00 <sup>1</sup>	5372.40	5371.76	-89.60	40°05'10.205"N	104°54'36.551"W	0.00	TOTAL DEPTH

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.05-T1N-R67W SECTION LINES		0.00	-0.30	29.93	3165193.02	1269413.69	40°04'17.117"N	104°54'35.013"W	polygon
SEC.05-T1N-R67W SETBACKS (460'FNL/FSL & 460'FEL/FWL)		0.00	-0.30	29.93	3165193.02	1269413.69	40°04'17.117"N	104°54'35.013"W	polygon
SEC.08-T1N-R67W SECTION LINES		0.00	-0.30	29.93	3165193.02	1269413.69	40°04'17.117"N	104°54'35.013"W	polygon
SEC.08-T1N-R67W SETBACKS (460'FNL/FSL & 460'FEL/FWL)		0.00	-0.30	29.93	3165193.02	1269413.69	40°04'17.117"N	104°54'35.013"W	polygon
1) NRC 2C-5HZ BHL ON PLAT (REV-1) (520'FNL & 1352'FEL, SEC.05)	12885.84	7680.00	5371.76	-89.60	3165037.75	1274784.62	40°05'10.205"N	104°54'36.551"W	point
NRC 2C-5HZ LAND BOX		7680.00	0.00	0.00	3165163.09	1269413.79	40°04'17.120"N	104°54'35.398"W	polygon

SURVEY PROGRAM - Ref Wellbore: NRC 2C-5HZ PWB Ref Wellpath: NRC 2C-5HZ PWP (REV-A.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	1229.00	Generic gyro - continuous (Standard)		NRC 2C-5HZ PWB
1229.00	12885.84	NaviTrak (MAGCORR,IFR)		NRC 2C-5HZ PWB

# Planned Wellpath Report

NRC 2C-5HZ PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#25 NRC 2C-5HZ (500'FNL & 1320'FEL, SEC.08)
Area	COLORADO	Well	NRC 2C-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	NRC 2C-5HZ PWB
Facility	SEC.08-T1N-R67W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1229.02	0.330	224.270	1229.00	Fox Hills Marker
4216.77	0.000	359.407	4213.00	Parkman
4551.77	0.000	359.407	4548.00	Sussex
7314.74	19.893	359.407	7307.00	SSPG
7378.92	26.311	359.407	7366.00	NBRR
7476.03	36.023	359.407	7449.00	N470_B_CK
7582.77	46.696	359.407	7529.00	N700_C_CK
7832.74	71.693	359.407	7656.00	FRHS
7914.12	79.832	359.407	7676.00	CDLL

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1229.00	0.330	224.270	1228.98	TIE-INTO GYRO SURVEYS
1450.03	0.330	224.270	1450.00	BEGIN NUDGE
1834.92	8.000	201.000	1833.60	END NUDGE
1952.47	8.000	201.000	1950.00	BEGIN DROP
2352.47	0.000	359.407	2348.70	END DROP
7115.81	0.000	359.407	7112.04	KOP, BUILD @ 10°/100'
8016.40	90.059	359.407	7685.00	LANDING POINT
12885.84	90.059	359.407	7680.00	TOTAL DEPTH