

Location:	COLORADO	Slot:	SLOT#01 BOYD 28C-32HZ (347' FSL & 2356' FEL, SEC.05)
Field:	WELD COUNTY (KERR MCGEE)	Well:	BOYD 28C-32HZ
Facility:	SEC.05-T1N-R65W	Wellbore:	BOYD 28C-32HZ PWB

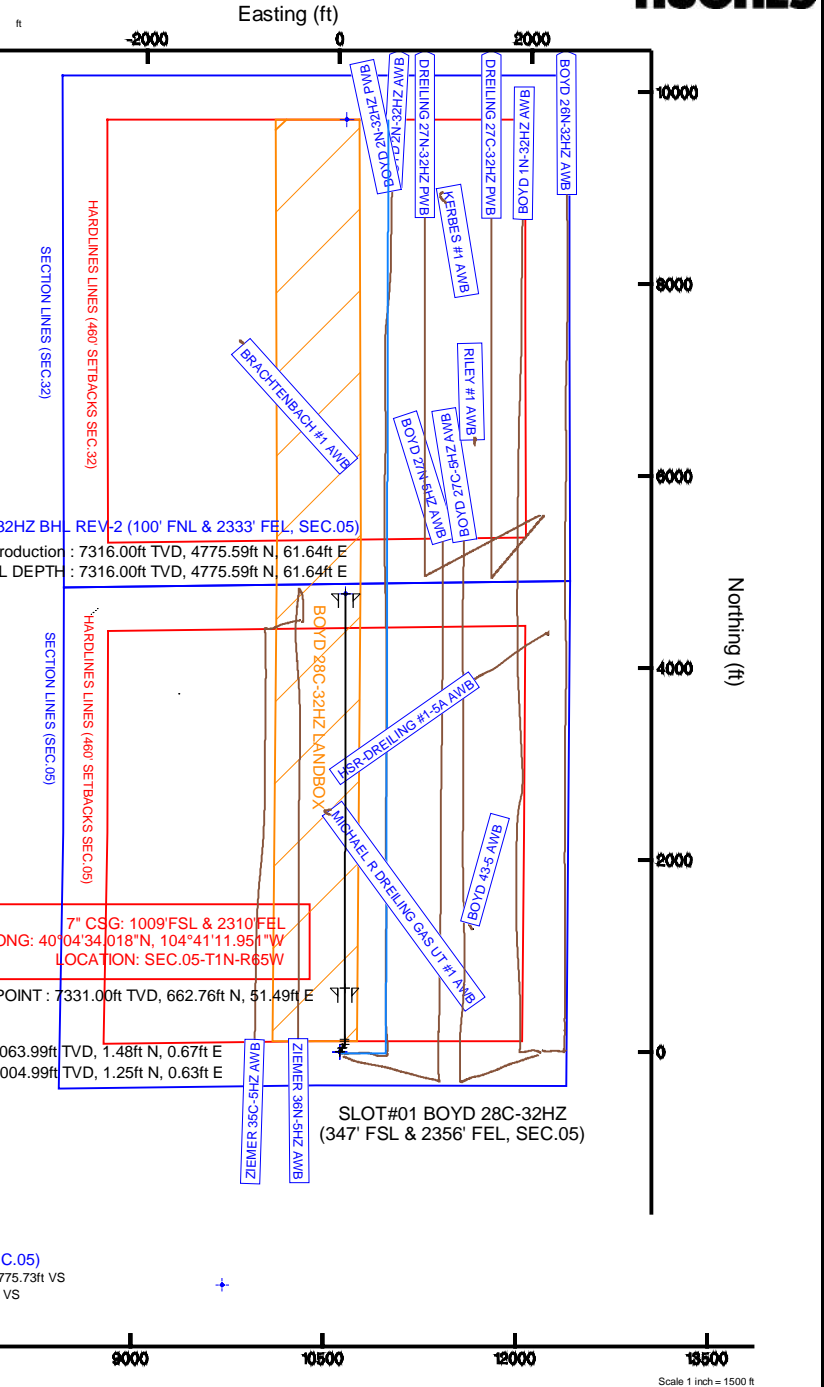
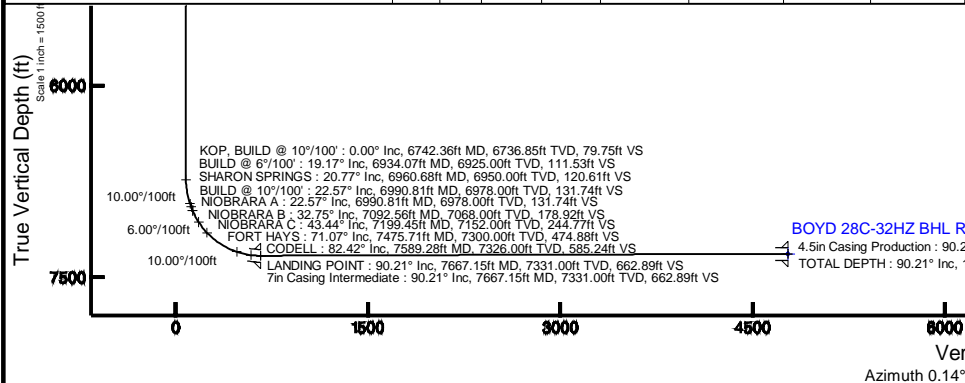
Plot reference wellpath is BOYD 28C-32HZ (REV-B.0) PWP	
True vertical depths are referenced to H&P 307 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to H&P 307 (RKB)	North Reference: True north
H&P 307 (RKB) to Mean Sea Level: 4975 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#01 BOYD 28C-32HZ (347 FSL & 2356 FEL SEC.05): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robale01 on 04/Feb/2014

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.05-TIN-R65W			327276.210	1273237.510	40°0450.053"N	104°41'15.984"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#01 BOYD 28C-32HZ (347 FSL & 2356 FEL SEC.05)	-2285.34	262.05	3272569.174	1270954.756	40°0427.469"N	104°41'12.613"W
H&P 307 (RKB) to Mud line (At Slot: SLOT#01 BOYD 28C-32HZ (347 FSL & 2356 FEL SEC.05))					4975A	
Mean Sea Level to Mud line (At Slot: SLOT#01 BOYD 28C-32HZ (347 FSL & 2356 FEL SEC.05))					0R	
H&P 307 (RKB) to Mean Sea Level					4975A	

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
25.00	1005.00	Generic gyro - continuous	Generic gyro - continuous (Standard)		BOYD 28C-32HZ AWB
1005.00	7667.15	NavitTrak	NavitTrak (MAGCORR, IFR)		BOYD 28C-32HZ PWB
7667.15	11780.02	NavitTrak	NavitTrak (MAGCORR, IFR)		BOYD 28C-32HZ PWB

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE-ON	1005.00	0.220	10.440	1004.99	1.25	0.63	0.26	1.26
BEGIN NUDGE	1164.01	0.220	10.440	1164.00	1.85	0.74	0.00	1.86
END NUDGE	1653.84	10.000	32.600	1651.30	38.70	23.88	2.00	38.76
BEGING DROP	1682.98	10.000	32.600	1680.00	42.96	26.61	0.00	43.03
END DROP	2182.98	0.000	0.142	2177.47	79.63	50.05	2.00	79.75
KOP, BUILD @ 10°/100'	6742.36	0.000	0.142	6736.85	79.63	50.05	0.00	79.75
BUILD @ 6°/100'	6934.07	19.171	0.142	6925.00	111.40	50.13	10.00	111.53
BUILD @ 10°/100'	6990.81	22.575	0.142	6978.00	131.61	50.18	6.00	131.74
LANDING POINT	7667.15	90.209	0.141	7331.00	662.76	51.49	10.00	662.89
TOTAL DEPTH	11780.02	90.209	0.141	7316.00	4775.59	61.64	0.00	4775.73

Name	MD (ft)	T/D (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
BOYD PAD HARDLINES LINES (460' SETBACKS SEC.05)		7019.00	0.00	0.00	3227559.17	1270954.76	40°04'27.469"N	104°41'12.613"W
BOYD PAD HARDLINES LINES (460' SETBACKS SEC.32)		7019.00	0.00	0.00	3227559.17	1270954.76	40°04'27.469"N	104°41'12.613"W
BOYD PAD SECTION LINES (SEC.05)		7019.00	0.00	0.00	3227559.17	1270954.76	40°04'27.469"N	104°41'12.613"W
BOYD PAD SECTION LINES (SEC.32)		7019.00	0.00	0.00	3227559.17	1270954.76	40°04'27.469"N	104°41'12.613"W
BOYD 28C-32HZ BHL ON PLAT REV 1 (460' FNL & 231' FEL SEC. 32)		7316.00	9717.19	73.82	3227543.89	1280671.82	40°06'03.496"N	104°41'11.663"W
BOYD 28C-32HZ BHL REV 2 (109' FNL & 2333' FEL SEC.05)	11780.02	7316.00	4775.59	61.64	3227577.02	1275730.52	40°05'14.662"N	104°41'11.820"W
BOYD 28C-32HZ LANDBOX		7316.00	0.00	0.00	3227559.17	1270954.76	40°04'27.469"N	104°41'12.613"W

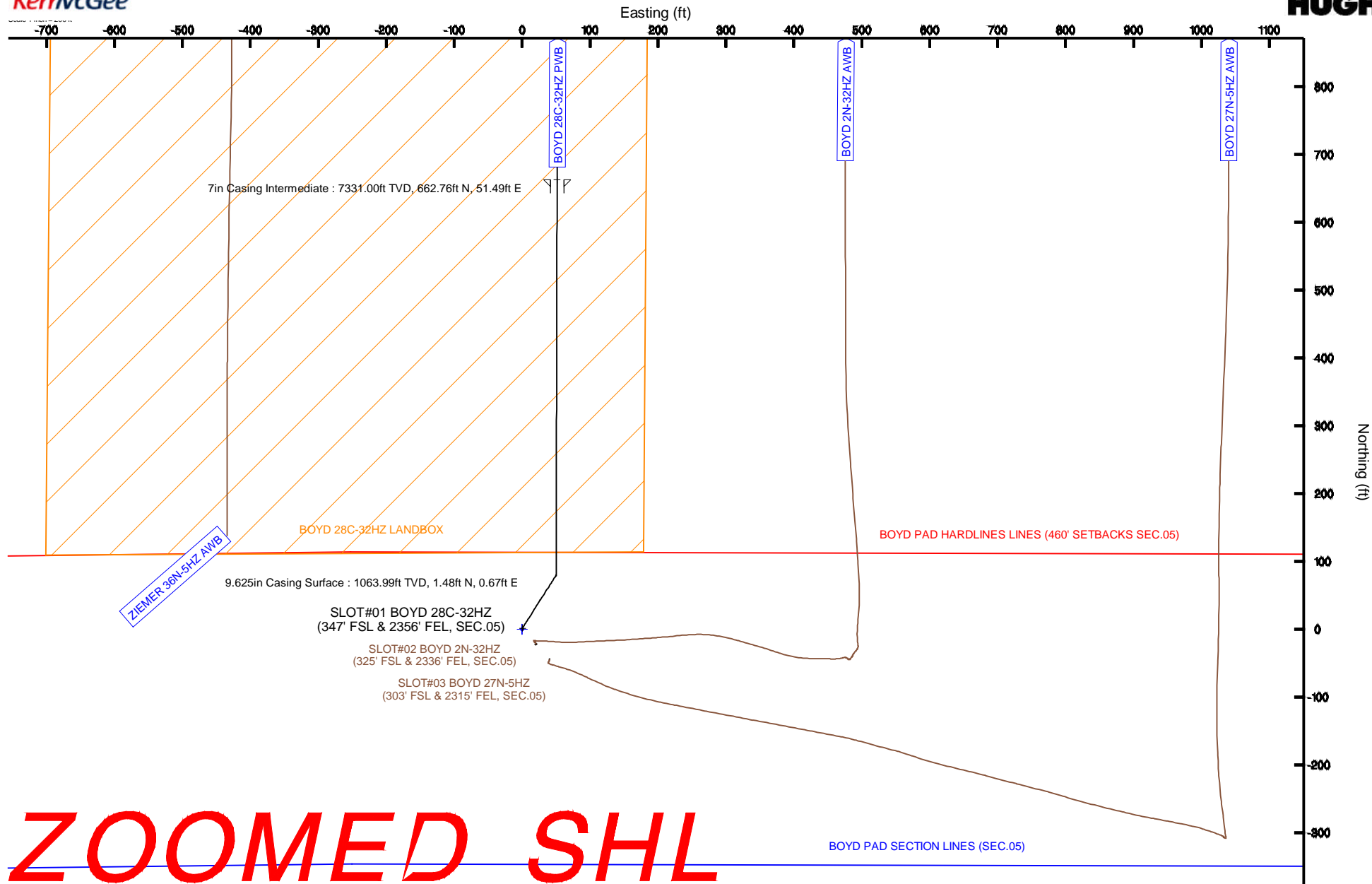


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#01 BOYD 28C-32HZ (347' FSL & 2356' FEL, SEC.05)
Field: WELD COUNTY (KERR MCGEE) Well: BOYD 28C-32HZ
Facility: SEC.05-T1N-R65W Wellbore: BOYD 28C-32HZ PWB

Plot reference wellpath is BOYD 28C-32HZ (REV-B.0) PWP

True vertical depths are referenced to H&P 307 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to H&P 307 (RKB)	North Reference: True north
H&P 307 (RKB) to Mean Sea Level: 4975 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#01 BOYD 28C-32HZ (347' FSL & 2356' FEL, SEC.05)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robale01 on 04/Feb/2014



Planned Wellpath Report

BOYD 28C-32HZ (REV-B.0) PWP

Page 1 of 6

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BOYD 28C-32HZ (347' FSL & 2356' FEL, SEC.05)
Area	COLORADO	Well	BOYD 28C-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BOYD 28C-32HZ PWB
Facility	SEC.05-T1N-R65W		

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	0.999962	Report Generated	04/Feb/2014 at 15:58
Convergence at slot	n/a	Database/Source file	WellArchitectDB/BOYD_28C-32HZ_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-2285.34	262.05	3227559.17	1270954.76	40°04'27.469"N	104°41'12.613"W
Facility Reference Pt			3227276.21	1273237.51	40°04'50.053"N	104°41'15.984"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	H&P 307 (RKB) to Facility Vertical Datum	4975.00ft
Horizontal Reference Pt	Slot	H&P 307 (RKB) to Mean Sea Level	4975.00ft
Vertical Reference Pt	H&P 307 (RKB)	H&P 307 (RKB) to Mud Line at Slot (SLOT#01 BOYD 28C-32HZ (347' FSL & 2356' FEL, SEC.05))	4975.00ft
MD Reference Pt	H&P 307 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.14°

Planned Wellpath Report

BOYD 28C-32HZ (REV-B.0) PWP

Page 2 of 6

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BOYD 28C-32HZ (347' FSL & 2356' FEL, SEC.05)
Area	COLORADO	Well	BOYD 28C-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BOYD 28C-32HZ PWB
Facility	SEC.05-T1N-R65W		

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	79.770	0.00	0.00	0.00	0.00	40°04'27.469"N	104°41'12.613"W	0.00	
25.00	0.000	79.770	25.00	0.00	0.00	0.00	40°04'27.469"N	104°41'12.613"W	0.00	
125.00	0.170	79.770	125.00	0.03	0.03	0.15	40°04'27.469"N	104°41'12.611"W	0.17	
225.00	0.320	68.060	225.00	0.16	0.16	0.55	40°04'27.471"N	104°41'12.606"W	0.16	
325.00	0.160	94.320	325.00	0.25	0.25	0.95	40°04'27.471"N	104°41'12.601"W	0.19	
425.00	0.180	76.540	425.00	0.28	0.28	1.24	40°04'27.472"N	104°41'12.597"W	0.06	
525.00	0.040	70.410	525.00	0.33	0.33	1.43	40°04'27.472"N	104°41'12.595"W	0.14	
625.00	0.100	300.050	625.00	0.38	0.38	1.38	40°04'27.473"N	104°41'12.595"W	0.13	
725.00	0.170	257.530	725.00	0.40	0.39	1.16	40°04'27.473"N	104°41'12.598"W	0.12	
825.00	0.210	332.500	825.00	0.53	0.52	0.93	40°04'27.474"N	104°41'12.601"W	0.23	
925.00	0.310	329.120	925.00	0.92	0.92	0.71	40°04'27.478"N	104°41'12.604"W	0.10	
1005.00	0.220	10.440	1004.99	1.26	1.25	0.63	40°04'27.481"N	104°41'12.605"W	0.26	TIE-ON
1105.00†	0.220	10.440	1104.99	1.63	1.63	0.70	40°04'27.485"N	104°41'12.604"W	0.00	
1164.01	0.220	10.440	1164.00	1.86	1.85	0.74	40°04'27.487"N	104°41'12.604"W	0.00	BEGIN NUDGE
1205.00†	1.026	28.348	1204.99	2.26	2.26	0.93	40°04'27.491"N	104°41'12.601"W	2.00	
1305.00†	3.024	31.477	1304.92	5.30	5.29	2.73	40°04'27.521"N	104°41'12.578"W	2.00	
1405.00†	5.024	32.117	1404.67	11.27	11.25	6.44	40°04'27.580"N	104°41'12.530"W	2.00	
1505.00†	7.023	32.393	1504.11	20.15	20.12	12.04	40°04'27.668"N	104°41'12.458"W	2.00	
1605.00†	9.023	32.547	1603.13	31.95	31.90	19.53	40°04'27.784"N	104°41'12.362"W	2.00	
1653.84	10.000	32.600	1651.30	38.76	38.70	23.88	40°04'27.851"N	104°41'12.306"W	2.00	END NUDGE
1682.98	10.000	32.600	1680.00	43.03	42.96	26.61	40°04'27.894"N	104°41'12.271"W	0.00	BEGIN DROP
1705.00†	9.560	32.600	1701.70	46.18	46.11	28.62	40°04'27.925"N	104°41'12.245"W	2.00	
1805.00†	7.560	32.600	1800.58	58.74	58.65	36.64	40°04'28.049"N	104°41'12.142"W	2.00	
1905.00†	5.560	32.600	1899.92	68.38	68.27	42.79	40°04'28.144"N	104°41'12.063"W	2.00	
2005.00†	3.560	32.600	1999.60	75.09	74.97	47.08	40°04'28.210"N	104°41'12.007"W	2.00	
2105.00†	1.560	32.600	2099.49	78.86	78.73	49.48	40°04'28.247"N	104°41'11.976"W	2.00	
2182.98	0.000	0.142	2177.47	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	2.00	END DROP
2205.00†	0.000	0.142	2199.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
2305.00†	0.000	0.142	2299.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
2405.00†	0.000	0.142	2399.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
2505.00†	0.000	0.142	2499.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
2605.00†	0.000	0.142	2599.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
2705.00†	0.000	0.142	2699.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
2805.00†	0.000	0.142	2799.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
2905.00†	0.000	0.142	2899.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
3005.00†	0.000	0.142	2999.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
3105.00†	0.000	0.142	3099.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
3205.00†	0.000	0.142	3199.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
3305.00†	0.000	0.142	3299.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
3405.00†	0.000	0.142	3399.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
3505.00†	0.000	0.142	3499.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
3605.00†	0.000	0.142	3599.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
3705.00†	0.000	0.142	3699.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
3805.00†	0.000	0.142	3799.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
3905.00†	0.000	0.142	3899.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	

Planned Wellpath Report

BOYD 28C-32HZ (REV-B.0) PWP

Page 3 of 6

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BOYD 28C-32HZ (347' FSL & 2356' FEL, SEC.05)
Area	COLORADO	Well	BOYD 28C-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BOYD 28C-32HZ PWB
Facility	SEC.05-T1N-R65W		

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
4005.00†	0.000	0.142	3999.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
4105.00†	0.000	0.142	4099.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
4205.00†	0.000	0.142	4199.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
4305.00†	0.000	0.142	4299.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
4405.00†	0.000	0.142	4399.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
4433.52†	0.000	0.142	4428.00	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	SUSSEX
4505.00†	0.000	0.142	4499.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
4605.00†	0.000	0.142	4599.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
4705.00†	0.000	0.142	4699.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
4805.00†	0.000	0.142	4799.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
4905.00†	0.000	0.142	4899.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
5005.00†	0.000	0.142	4999.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
5105.00†	0.000	0.142	5099.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
5205.00†	0.000	0.142	5199.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
5305.00†	0.000	0.142	5299.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
5405.00†	0.000	0.142	5399.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
5505.00†	0.000	0.142	5499.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
5605.00†	0.000	0.142	5599.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
5705.00†	0.000	0.142	5699.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
5805.00†	0.000	0.142	5799.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
5905.00†	0.000	0.142	5899.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
6005.00†	0.000	0.142	5999.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
6105.00†	0.000	0.142	6099.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
6205.00†	0.000	0.142	6199.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
6305.00†	0.000	0.142	6299.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
6405.00†	0.000	0.142	6399.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
6505.00†	0.000	0.142	6499.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
6605.00†	0.000	0.142	6599.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
6705.00†	0.000	0.142	6699.48	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	
6742.36	0.000	0.142	6736.85	79.75	79.63	50.05	40°04'28.256"N	104°41'11.969"W	0.00	KOP, BUILD @ 10°/100'
6805.00†	6.264	0.142	6799.36	83.17	83.05	50.06	40°04'28.290"N	104°41'11.969"W	10.00	
6905.00†	16.264	0.142	6897.31	102.68	102.56	50.11	40°04'28.482"N	104°41'11.968"W	10.00	
6934.07	19.171	0.142	6925.00	111.53	111.40	50.13	40°04'28.570"N	104°41'11.968"W	10.00	BUILD @ 6°/100'
6960.68†	20.767	0.142	6950.00	120.61	120.49	50.16	40°04'28.660"N	104°41'11.968"W	6.00	SHARON SPRINGS
6990.81	22.575	0.142	6978.00	131.74	131.61	50.18	40°04'28.770"N	104°41'11.967"W	6.00	BUILD @ 10°/100'; NIOBRARA A
7005.00†	23.994	0.142	6991.04	137.35	137.22	50.20	40°04'28.825"N	104°41'11.967"W	10.00	
7092.56†	32.750	0.142	7068.00	178.92	178.79	50.30	40°04'29.236"N	104°41'11.966"W	10.00	NIOBRARA B
7105.00†	33.994	0.142	7078.39	185.76	185.63	50.32	40°04'29.303"N	104°41'11.966"W	10.00	
7199.45†	43.439	0.142	7152.00	244.77	244.64	50.46	40°04'29.887"N	104°41'11.964"W	10.00	NIOBRARA C
7205.00†	43.994	0.142	7156.01	248.61	248.48	50.47	40°04'29.925"N	104°41'11.964"W	10.00	
7305.00†	53.994	0.142	7221.55	323.97	323.85	50.66	40°04'30.669"N	104°41'11.961"W	10.00	
7405.00†	63.994	0.141	7272.99	409.58	409.45	50.87	40°04'31.515"N	104°41'11.959"W	10.00	
7475.71†	71.065	0.141	7300.00	474.88	474.75	51.03	40°04'32.161"N	104°41'11.957"W	10.00	FORT HAYS
7505.00†	73.994	0.141	7308.79	502.81	502.69	51.10	40°04'32.437"N	104°41'11.956"W	10.00	
7589.28†	82.422	0.141	7326.00	585.24	585.11	51.30	40°04'33.251"N	104°41'11.953"W	10.00	CODELL

Planned Wellpath Report

BOYD 28C-32HZ (REV-B.0) PWP

Page 4 of 6

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BOYD 28C-32HZ (347' FSL & 2356' FEL, SEC.05)
Area	COLORADO	Well	BOYD 28C-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BOYD 28C-32HZ PWB
Facility	SEC.05-T1N-R65W		

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
7605.00†	83.994	0.141	7327.86	600.85	600.72	51.34	40°04'33.405"N	104°41'11.953"W	10.00	
7667.15	90.209	0.141	7331.00	662.89	662.76	51.49	40°04'34.018"N	104°41'11.951"W	10.00	LANDING POINT
7705.00†	90.209	0.141	7330.86	700.74	700.61	51.59	40°04'34.393"N	104°41'11.949"W	0.00	
7805.00†	90.209	0.141	7330.50	800.74	800.61	51.83	40°04'35.381"N	104°41'11.946"W	0.00	
7905.00†	90.209	0.141	7330.13	900.74	900.61	52.08	40°04'36.369"N	104°41'11.943"W	0.00	
8005.00†	90.209	0.141	7329.77	1000.74	1000.61	52.33	40°04'37.357"N	104°41'11.940"W	0.00	
8105.00†	90.209	0.141	7329.40	1100.74	1100.61	52.57	40°04'38.345"N	104°41'11.937"W	0.00	
8205.00†	90.209	0.141	7329.04	1200.74	1200.61	52.82	40°04'39.334"N	104°41'11.933"W	0.00	
8305.00†	90.209	0.141	7328.67	1300.73	1300.60	53.07	40°04'40.322"N	104°41'11.930"W	0.00	
8405.00†	90.209	0.141	7328.31	1400.73	1400.60	53.31	40°04'41.310"N	104°41'11.927"W	0.00	
8505.00†	90.209	0.141	7327.94	1500.73	1500.60	53.56	40°04'42.298"N	104°41'11.924"W	0.00	
8605.00†	90.209	0.141	7327.58	1600.73	1600.60	53.81	40°04'43.286"N	104°41'11.921"W	0.00	
8705.00†	90.209	0.141	7327.21	1700.73	1700.60	54.05	40°04'44.275"N	104°41'11.918"W	0.00	
8805.00†	90.209	0.141	7326.85	1800.73	1800.60	54.30	40°04'45.263"N	104°41'11.914"W	0.00	
8905.00†	90.209	0.141	7326.49	1900.73	1900.60	54.55	40°04'46.251"N	104°41'11.911"W	0.00	
9005.00†	90.209	0.141	7326.12	2000.73	2000.60	54.79	40°04'47.239"N	104°41'11.908"W	0.00	
9105.00†	90.209	0.141	7325.76	2100.73	2100.60	55.04	40°04'48.228"N	104°41'11.905"W	0.00	
9205.00†	90.209	0.141	7325.39	2200.73	2200.60	55.29	40°04'49.216"N	104°41'11.902"W	0.00	
9305.00†	90.209	0.141	7325.03	2300.73	2300.60	55.53	40°04'50.204"N	104°41'11.899"W	0.00	
9405.00†	90.209	0.141	7324.66	2400.73	2400.59	55.78	40°04'51.192"N	104°41'11.895"W	0.00	
9505.00†	90.209	0.141	7324.30	2500.73	2500.59	56.03	40°04'52.180"N	104°41'11.892"W	0.00	
9605.00†	90.209	0.141	7323.93	2600.73	2600.59	56.27	40°04'53.169"N	104°41'11.889"W	0.00	
9705.00†	90.209	0.141	7323.57	2700.73	2700.59	56.52	40°04'54.157"N	104°41'11.886"W	0.00	
9805.00†	90.209	0.141	7323.20	2800.72	2800.59	56.77	40°04'55.145"N	104°41'11.883"W	0.00	
9905.00†	90.209	0.141	7322.84	2900.72	2900.59	57.01	40°04'56.133"N	104°41'11.879"W	0.00	
10005.00†	90.209	0.141	7322.47	3000.72	3000.59	57.26	40°04'57.121"N	104°41'11.876"W	0.00	
10105.00†	90.209	0.141	7322.11	3100.72	3100.59	57.51	40°04'58.110"N	104°41'11.873"W	0.00	
10205.00†	90.209	0.141	7321.74	3200.72	3200.59	57.75	40°04'59.098"N	104°41'11.870"W	0.00	
10305.00†	90.209	0.141	7321.38	3300.72	3300.59	58.00	40°05'00.086"N	104°41'11.867"W	0.00	
10405.00†	90.209	0.141	7321.01	3400.72	3400.58	58.25	40°05'01.074"N	104°41'11.864"W	0.00	
10505.00†	90.209	0.141	7320.65	3500.72	3500.58	58.49	40°05'02.062"N	104°41'11.860"W	0.00	
10605.00†	90.209	0.141	7320.29	3600.72	3600.58	58.74	40°05'03.051"N	104°41'11.857"W	0.00	
10705.00†	90.209	0.141	7319.92	3700.72	3700.58	58.99	40°05'04.039"N	104°41'11.854"W	0.00	
10805.00†	90.209	0.141	7319.56	3800.72	3800.58	59.23	40°05'05.027"N	104°41'11.851"W	0.00	
10905.00†	90.209	0.141	7319.19	3900.72	3900.58	59.48	40°05'06.015"N	104°41'11.848"W	0.00	
11005.00†	90.209	0.141	7318.83	4000.72	4000.58	59.73	40°05'07.003"N	104°41'11.845"W	0.00	
11105.00†	90.209	0.141	7318.46	4100.72	4100.58	59.97	40°05'07.992"N	104°41'11.841"W	0.00	
11205.00†	90.209	0.141	7318.10	4200.72	4200.58	60.22	40°05'08.980"N	104°41'11.838"W	0.00	
11305.00†	90.209	0.141	7317.73	4300.71	4300.58	60.47	40°05'09.968"N	104°41'11.835"W	0.00	
11405.00†	90.209	0.141	7317.37	4400.71	4400.57	60.71	40°05'10.956"N	104°41'11.832"W	0.00	
11505.00†	90.209	0.141	7317.00	4500.71	4500.57	60.96	40°05'11.945"N	104°41'11.829"W	0.00	
11605.00†	90.209	0.141	7316.64	4600.71	4600.57	61.21	40°05'12.933"N	104°41'11.825"W	0.00	
11705.00†	90.209	0.141	7316.27	4700.71	4700.57	61.45	40°05'13.921"N	104°41'11.822"W	0.00	
11780.02	90.209	0.141	7316.00 ¹	4775.73	4775.59	61.64	40°05'14.662"N	104°41'11.820"W	0.00	TOTAL DEPTH

Planned Wellpath Report

BOYD 28C-32HZ (REV-B.0) PWP

Page 5 of 6

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BOYD 28C-32HZ (347' FSL & 2356' FEL, SEC.05)
Area	COLORADO	Well	BOYD 28C-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BOYD 28C-32HZ PWB
Facility	SEC.05-T1N-R65W		

HOLE & CASING SECTIONS - Ref Wellbore: BOYD 28C-32HZ PWB Ref Wellpath: BOYD 28C-32HZ (REV-B.0) PWP

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
13.5in Open Hole	25.00	1064.00	1039.00	25.00	1063.99	0.00	0.00	1.48	0.67
9.625in Casing Surface	25.00	1064.00	1039.00	25.00	1063.99	0.00	0.00	1.48	0.67
8.75in Open Hole	1064.00	7667.15	6603.15	1063.99	7331.00	1.48	0.67	662.76	51.49
7in Casing Intermediate	25.00	7667.15	7642.15	25.00	7331.00	0.00	0.00	662.76	51.49
6.125in Open Hole	7667.15	11780.02	4112.87	7331.00	7316.00	662.76	51.49	4775.59	61.64
4.5in Casing Production	25.00	11780.02	11755.02	25.00	7316.00	0.00	0.00	4775.59	61.64

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
BOYD PAD HARDLINES LINES (460' SETBACKS SEC.05)		7019.00	0.00	0.00	3227559.17	1270954.76	40°04'27.469"N	104°41'12.613"W	polygon
BOYD PAD HARDLINES LINES (460' SETBACKS SEC.32)		7019.00	0.00	0.00	3227559.17	1270954.76	40°04'27.469"N	104°41'12.613"W	polygon
BOYD PAD SECTION LINES (SEC.05)		7019.00	0.00	0.00	3227559.17	1270954.76	40°04'27.469"N	104°41'12.613"W	polygon
BOYD PAD SECTION LINES (SEC.32)		7019.00	0.00	0.00	3227559.17	1270954.76	40°04'27.469"N	104°41'12.613"W	polygon
BOYD 28C-32HZ BHL ON PLAT REV-1 (460' FNL & 2310' FEL, SEC. 32)		7316.00	9717.19	73.82	3227543.89	1280671.82	40°06'03.496"N	104°41'11.663"W	point
1) BOYD 28C-32HZ BHL REV-2 (100' FNL & 2333' FEL, SEC.05)	11780.02	7316.00	4775.59	61.64	3227577.02	1275730.52	40°05'14.662"N	104°41'11.820"W	point
BOYD 28C-32HZ LANDBOX		7316.00	0.00	0.00	3227559.17	1270954.76	40°04'27.469"N	104°41'12.613"W	polygon

SURVEY PROGRAM - Ref Wellbore: BOYD 28C-32HZ PWB Ref Wellpath: BOYD 28C-32HZ (REV-B.0) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	1005.00	Generic gyro - continuous (Standard)		BOYD 28C-32HZ AWB
1005.00	7667.15	NaviTrak (MAGCORR,IFR)		BOYD 28C-32HZ PWB
7667.15	11780.02	NaviTrak (MAGCORR,IFR)		BOYD 28C-32HZ PWB

Planned Wellpath Report

BOYD 28C-32HZ (REV-B.0) PWP

Page 6 of 6

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#01 BOYD 28C-32HZ (347' FSL & 2356' FEL, SEC.05)
Area	COLORADO	Well	BOYD 28C-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	BOYD 28C-32HZ PWB
Facility	SEC.05-T1N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
4433.52	0.000	0.142	4428.00	SUSSEX
6960.68	20.767	0.142	6950.00	SHARON SPRINGS
6990.81	22.575	0.142	6978.00	NIOBRARA A
7092.56	32.750	0.142	7068.00	NIOBRARA B
7199.45	43.439	0.142	7152.00	NIOBRARA C
7475.71	71.065	0.141	7300.00	FORT HAYS
7589.28	82.422	0.141	7326.00	CODELL

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1005.00	0.220	10.440	1004.99	TIE-ON
1164.01	0.220	10.440	1164.00	BEGIN NUDGE
1653.84	10.000	32.600	1651.30	END NUDGE
1682.98	10.000	32.600	1680.00	BEGIN DROP
2182.98	0.000	0.142	2177.47	END DROP
6742.36	0.000	0.142	6736.85	KOP, BUILD @ 10°/100'
6934.07	19.171	0.142	6925.00	BUILD @ 6°/100'
6990.81	22.575	0.142	6978.00	BUILD @ 10°/100'
7667.15	90.209	0.141	7331.00	LANDING POINT
11780.02	90.209	0.141	7316.00	TOTAL DEPTH