

123-24335



INTEQ



KerrMcGee

**ENSIGN**

United States Drilling

# KERR MCGEE

Location: COLORADO

Field: WELD COUNTY (KERR MCGEE)

Facility: SEC.24-T3N-R68W

Slot: Reynolds 27-24

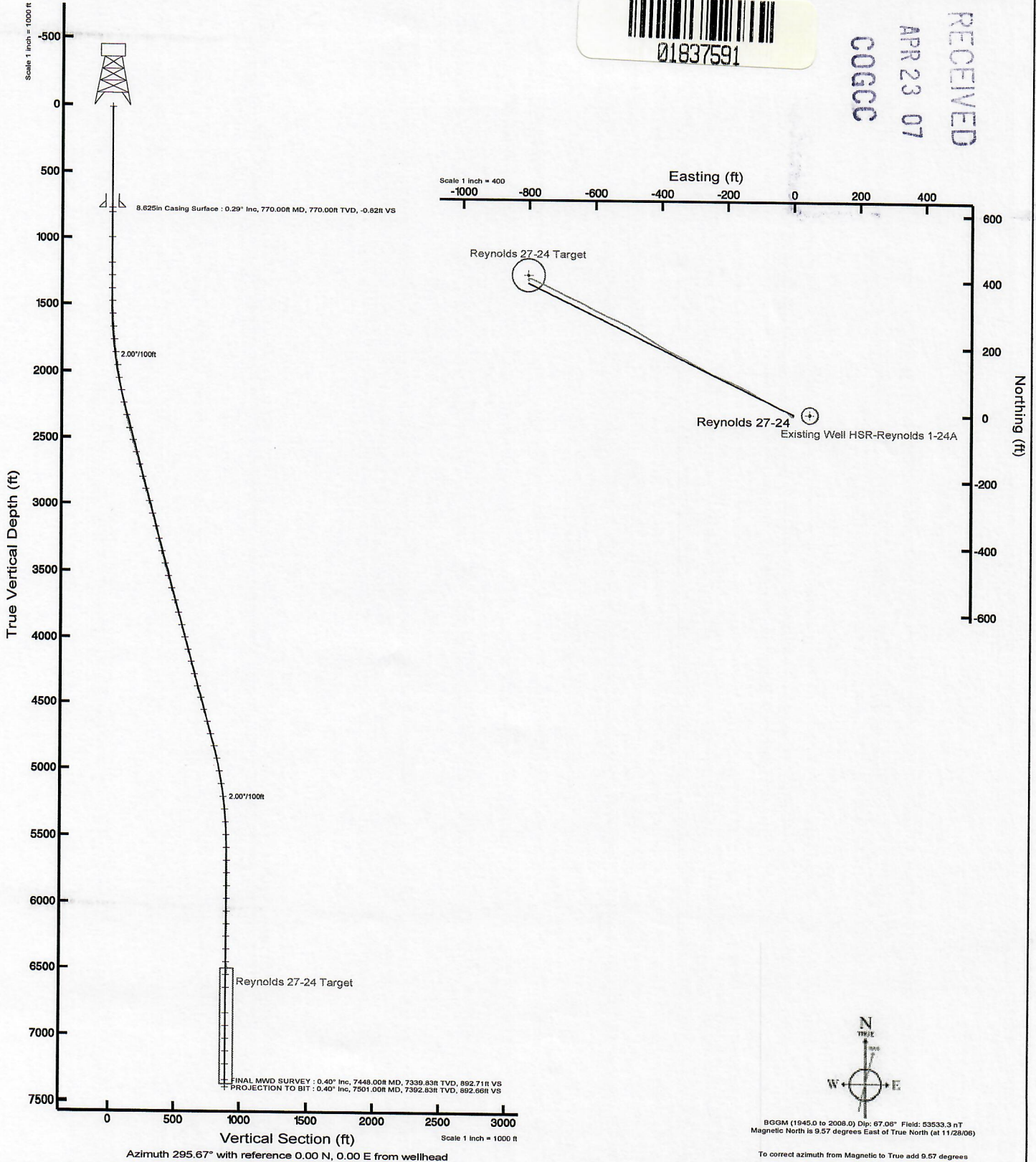
Well: Reynolds 27-24

Wellbore: Reynolds 27-24 PWB

Plot reference wellpath is Reynolds 27-24 PWB	
True vertical depths are referenced to Ensign 5 (RT)	Grid System: NAD83 / Lambert Colorado State Planes, Northern Zone (601), US Feet
Measured depths are referenced to Ensign 5 (RT)	North Reference: True north
Ensign 5 (RT) to Mean Sea Level: 4904 feet	Scale: True distance
Mean Sea Level to Mud line (Facility - SEC.24-T3N-R68W): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: thomsuzo on 12/7/2008



RECEIVED  
APR 23 07  
COGCC



BGGM (1945.0 to 2008.0) Dip: 67.06° Field: 53533.3 nT  
Magnetic North is 9.57 degrees East of True North (at 11/28/06)  
To correct azimuth from Magnetic to True add 9.57 degrees



# Actual Wellpath Report

Reynolds 27-24 AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	<b>KERR MCGEE</b>	Slot	<b>Reynolds 27-24</b>
Area	<b>COLORADO</b>	Well	<b>Reynolds 27-24</b>
Field	<b>WELD COUNTY (KERR MCGEE)</b>	Wellbore	<b>Reynolds 27-24 AWB</b>
Facility	<b>SEC.24-T3N-R68W</b>		

## REPORT SETUP INFORMATION

Projection System	<b>NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet</b>	Software System	<b>WellArchitect™ 1.2</b>
North Reference	<b>True</b>	User	<b>Thomsuzc</b>
Scale	<b>0.999957</b>	Report Generated	<b>12/07/06 at 11:06:36</b>
Wellbore last revised	<b>12/07/06</b>	Database/Source file	<b>WA_Denver/Reynold</b>

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North [feet]	East [feet]	Easting [US feet]	Northing [US feet]	Latitude [°]	Longitude [°]
Slot Location	1154.86	1147.81	3155367.42	1322677.75	<b>40 13 04.116N</b>	<b>104 56 37.104W</b>
Facility Reference Pt			3154226.88	1321515.82	<b>40 12 52.704N</b>	<b>104 56 51.900W</b>
Field Reference Pt			<b>3197771.84</b>	<b>1268891.29</b>	40 04 09.600N	104 47 36.000W

## WELLPATH DATUM

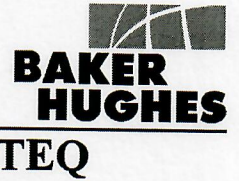
Calculation method	<b>Minimum curvature</b>	Ensign 5 (RT) to Facility Vertical Datum	<b>4904.00 feet</b>
Horizontal Reference Pt	<b>Slot</b>	Ensign 5 (RT) to Mean Sea Level	<b>4904.00 feet</b>
Vertical Reference Pt	<b>Ensign 5 (RT)</b>	Facility Vertical Datum to Mud Line (Facility)	<b>0.00 feet</b>
MD Reference Pt	<b>Ensign 5 (RT)</b>	Section Origin	<b>N 0.00, E 0.00 ft</b>
Field Vertical Reference	<b>Mean Sea Level</b>	Section Azimuth	<b>295.67°</b>



# Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE	Slot	Reynolds 27-24
Area	COLORADO	Well	Reynolds 27-24
Field	WELD COUNTY (KERR MCGEE)	Wellbore	Reynolds 27-24 AWB
Facility	SEC.24-T3N-R68W		

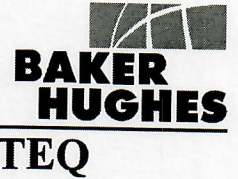
WELLPATH DATA (70 stations) † = interpolated/extrapolated station							
MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]
0.00†	0.000	0.000	0.00	0.00	0.00	0.00	0.00
14.00	0.000	0.000	14.00	0.00	0.00	0.00	0.00
804.00	0.300	180.100	804.00	-0.89	-2.07	0.00	0.04
997.00	0.400	193.800	996.99	-1.25	-3.23	-0.17	0.07
1190.00	0.500	237.700	1189.99	-0.94	-4.33	-1.04	0.18
1285.00	0.500	281.000	1284.98	-0.32	-4.47	-1.79	0.39
1382.00	0.800	275.300	1381.98	0.72	-4.33	-2.88	0.32
1477.00	1.900	295.700	1476.95	2.92	-3.59	-4.96	1.25
1572.00	2.600	310.200	1571.88	6.58	-1.51	-8.03	0.94
1669.00	3.600	312.300	1668.73	11.63	1.96	-11.96	1.04
1765.00	5.700	304.500	1764.41	19.23	6.69	-18.12	2.28
1861.00	7.200	299.600	1859.80	29.94	12.36	-27.28	1.66
1957.00	8.200	296.500	1954.94	42.79	18.38	-38.64	1.13
2053.00	9.400	295.400	2049.81	57.48	24.80	-51.85	1.26
2150.00	11.000	295.700	2145.27	74.65	32.21	-67.34	1.65
2245.00	12.000	297.200	2238.36	93.59	40.66	-84.30	1.10
2341.00	13.500	301.700	2331.99	114.71	51.11	-102.71	1.87
2438.00	15.600	300.300	2425.88	138.97	63.64	-123.60	2.19
2533.00	15.500	295.400	2517.41	164.40	75.53	-146.10	1.39
2629.00	15.500	296.500	2609.91	190.05	86.76	-169.17	0.31
2726.00	15.600	292.900	2703.37	216.04	97.61	-192.78	1.00
2821.00	15.000	293.300	2795.00	241.08	107.45	-215.84	0.64
2917.00	15.000	292.300	2887.73	265.90	117.08	-238.74	0.27
3014.00	15.300	298.600	2981.36	291.21	127.97	-261.60	1.72
3110.00	15.200	297.200	3073.98	316.44	139.78	-283.91	0.40
3206.00	15.300	297.900	3166.60	341.68	151.46	-306.30	0.22
3302.00	14.000	298.900	3259.48	365.93	163.00	-327.66	1.38
3398.00	14.600	294.000	3352.51	389.62	173.53	-348.88	1.41
3493.00	15.100	295.400	3444.33	413.96	183.71	-370.99	0.65
3589.00	16.000	301.000	3536.82	439.64	195.89	-393.63	1.82
3684.00	14.900	301.700	3628.39	464.82	209.05	-415.25	1.17
3780.00	16.400	301.400	3720.83	490.58	222.60	-437.32	1.56
3876.00	16.200	300.300	3812.97	517.42	236.42	-460.45	0.38
3973.00	14.600	301.400	3906.48	543.07	249.61	-482.57	1.68
4068.00	14.400	297.500	3998.46	566.79	261.31	-503.26	1.05
4164.00	15.300	293.600	4091.26	591.38	271.89	-525.46	1.40
4261.00	14.300	290.800	4185.04	616.11	281.27	-548.39	1.27
4357.00	15.000	297.900	4277.92	640.34	291.29	-570.45	2.01
4451.00	15.400	295.400	4368.64	664.97	302.34	-592.48	0.82
4548.00	14.600	298.200	4462.33	690.07	313.64	-614.89	1.11



# Actual Wellpath Report

Reynolds 27-24 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE	Slot	Reynolds 27-24
Area	COLORADO	Well	Reynolds 27-24
Field	WELD COUNTY (KERR MCGEE)	Wellbore	Reynolds 27-24 AWB
Facility	SEC.24-T3N-R68W		

WELLPATH DATA (70 stations) † = interpolated/extrapolated station							
MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]
4643.00	15.700	297.500	4554.03	714.88	325.23	-636.84	1.17
4739.00	16.200	293.600	4646.33	741.24	336.59	-660.63	1.23
4835.00	16.400	295.000	4738.48	768.18	347.68	-685.19	0.46
4931.00	14.200	297.900	4831.07	793.50	358.92	-707.88	2.43
5027.00	12.600	296.100	4924.45	815.73	369.04	-727.69	1.72
5123.00	10.200	294.000	5018.55	834.70	377.10	-744.86	2.54
5219.00	9.200	293.600	5113.18	850.87	383.63	-759.66	1.04
5315.00	7.500	295.400	5208.16	864.81	389.39	-772.35	1.79
5411.00	5.700	295.700	5303.52	875.84	394.15	-782.31	1.88
5506.00	4.400	296.100	5398.15	884.20	397.80	-789.83	1.37
5602.00	2.600	282.700	5493.97	890.01	399.90	-795.27	2.05
5697.00	1.700	268.300	5588.90	893.36	400.33	-798.78	1.10
5793.00	1.300	262.300	5684.87	895.53	400.14	-801.28	0.45
5887.00	0.600	209.300	5778.85	896.45	399.57	-802.58	1.12
5984.00	0.500	203.300	5875.85	896.47	398.74	-802.99	0.12
6080.00	0.400	178.300	5971.85	896.30	398.02	-803.15	0.23
6176.00	0.400	200.100	6067.84	896.11	397.37	-803.25	0.16
6272.00	0.400	156.900	6163.84	895.83	396.74	-803.24	0.31
6368.00	0.400	112.200	6259.84	895.24	396.31	-802.79	0.32
6464.00	0.300	113.200	6355.84	894.65	396.08	-802.25	0.10
6560.00	0.300	114.700	6451.84	894.15	395.88	-801.79	0.01
6655.00	0.200	175.900	6546.84	893.82	395.61	-801.56	0.28
6752.00	0.100	158.000	6643.84	893.67	395.36	-801.51	0.11
6944.00	0.200	187.100	6835.84	893.44	394.88	-801.49	0.06
7040.00	0.300	73.300	6931.83	893.20	394.78	-801.27	0.44
7136.00	0.400	41.200	7027.83	892.93	395.11	-800.81	0.23
7232.00	0.300	15.200	7123.83	892.88	395.60	-800.52	0.19
7328.00	0.200	52.800	7219.83	892.85	395.94	-800.32	0.19
7448.00	0.400	32.800	7339.83	892.71	396.42	-799.93	0.19
7501.00†	0.400	32.800	7392.83	892.66	396.73	-799.73	0.00

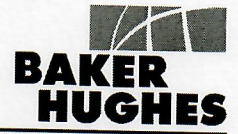
HOLE & CASING SECTIONS Ref Wellbore: Reynolds 27-24 AWP Ref Wellpath: Reynolds 27-24 AWP									
String/Diameter	Start MD [feet]	End MD [feet]	Interval [feet]	Start TVD [feet]	End TVD [feet]	Start N/S [feet]	Start E/W [feet]	End N/S [feet]	End E/W [feet]
12.25in Open Hole	14.00	770.00	756.00	14.00	770.00	0.00	0.00	-1.89	0.00
8.625in Casing Surface	14.00	770.00	756.00	14.00	770.00	0.00	0.00	-1.89	0.00
7.78in Open Hole	770.00	7501.00	6731.00	770.00	7392.83	-1.89	0.00	396.73	-799.73



# Actual Wellpath Report

Reynolds 27-24 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR MCGEE	Slot	Reynolds 27-24
Area	COLORADO	Well	Reynolds 27-24
Field	WELD COUNTY (KERR MCGEE)	Wellbore	Reynolds 27-24 AWB
Facility	SEC.24-T3N-R68W		

TARGETS									
Name	MD [feet]	TVD [feet]	North [feet]	East [feet]	Grid East [us survey feet]	Grid North [us survey feet]	Latitude [°]	Longitude [°]	Shape
Existing Well HSR-Reynolds 1-24A		0.00	0.00	50.00	3155417.42	1322678.07	40 13 04.116N	104 56 36.459W	circle
Reynolds 27-24 Target		6500.00	411.00	-803.00	3154561.89	1323083.69	40 13 08.177N	104 56 47.455W	circle

WELLPATH COMPOSITION Ref Wellbore: Reynolds 27-24 AWB Ref Wellpath: Reynolds 27-24 AWP				
Start MD [feet]	End MD [feet]	Positional Uncertainty Model	Log Name/Comment	Wellbore
14.00	7448.00	NaviTrak (Standard)	BHI MWD <804-7501>	Reynolds 27-24 AWB
7448.00	7501.00	Blind Drilling (std)	Projection to bit	Reynolds 27-24 AWB

WELLPATH COMMENTS				
MD [feet]	Inclination [degrees]	Azimuth [degrees]	TVD [feet]	Comment
7448.00	0.400	32.800	7339.83	FINAL MWD SURVEY
7501.00	0.400	32.800	7392.83	PROJECTION TO BIT