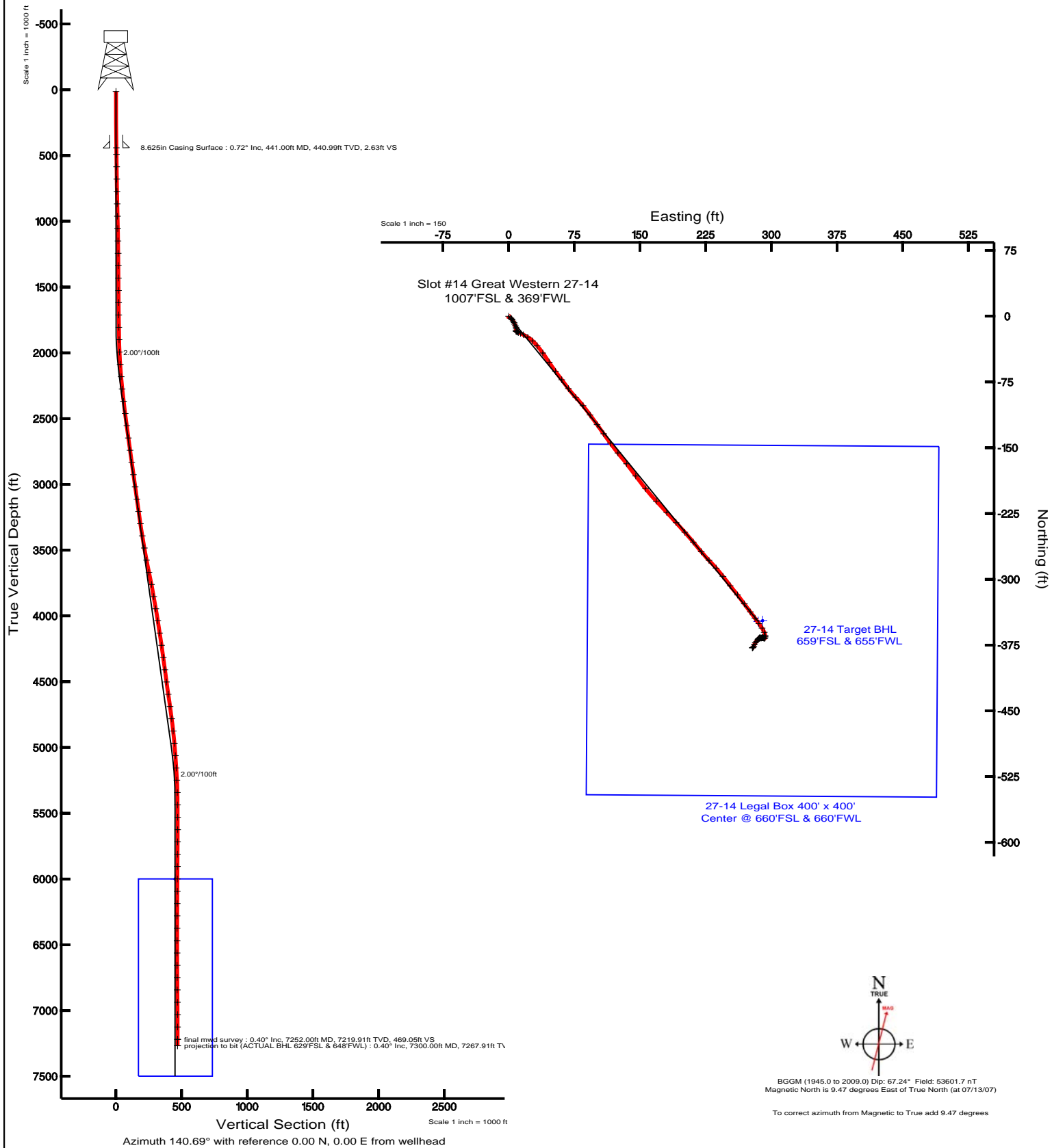


GREAT WESTERN OIL & GAS

Location:	COLORADO	Slot:	Slot #14 Great Western 27-14 1007'FSL & 369'FWL
Field:	WELD COUNTY (NAD83)	Well:	Great Western 27-14
Facility:	SEC.27-T6N-R67W	Wellbore:	Great Western 27-14 PWB



Plot reference wellpath is Great Western 27-14 PWP	Grid System: NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet
True vertical depths are referenced to Ensign 120 (RT)	North Reference: True north
Measured depths are referenced to Ensign 120 (RT)	Scale: True distance
Ensign 120 (RT) to Mean Sea Level: 4762.4 feet	Depths are in feet
Mean Sea Level to Mud line (Facility - SEC-27-T6N-R67W): 0 feet	Created by: Suzanne Thompson on 9/13/2007
Coordinates are in foot line referenced to Slot	



Actual Wellpath Report

Great Western 27-14 AWP

Page 1 of 4



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	GREAT WESTERN OIL & GAS	Slot	Slot #14 Great Western 27-14 1007'FSL & 369'FWL
Area	COLORADO	Well	Great Western 27-14
Field	WELD COUNTY (NAD83)	Wellbore	Great Western 27-14 AWB
Facility	SEC.27-T6N-R67W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet	Software System	WellArchitect™ 1.2
North Reference	True	User	Suzanne Thompson
Scale	0.999963	Report Generated	09/13/07 at 12:16:55
Wellbore last revised	09/12/07	Database/Source file	WA_Denver/Great_W

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North [feet]	East [feet]	Easting [US feet]	Northing [US feet]	Latitude [°]	Longitude [°]
Slot Location	-2885.11	-3656.88	3170359.86	1408627.51	40 27 12.492N	104 53 16.188W
Facility Reference Pt			3173996.16	1411538.22	40 27 41.004N	104 52 28.884W
Field Reference Pt			3173996.16	1411538.22	40 27 41.004N	104 52 28.884W

WELLPATH DATUM

Calculation method	Minimum curvature	Ensign 120 (RT) to Facility Vertical Datum	4762.40 feet
Horizontal Reference Pt	Slot	Ensign 120 (RT) to Mean Sea Level	4762.40 feet
Vertical Reference Pt	Ensign 120 (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00 feet
MD Reference Pt	Ensign 120 (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	140.69°

Actual Wellpath Report

Great Western 27-14 AWP

Page 2 of 4



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	GREAT WESTERN OIL & GAS	Slot	Slot #14 Great Western 27-14 1007'FSL & 369'FWL
Area	COLORADO	Well	Great Western 27-14
Field	WELD COUNTY (NAD83)	Wellbore	Great Western 27-14 AWB
Facility	SEC.27-T6N-R67W		

WELLPATH DATA (76 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
12.00	0.000	0.000	12.00	0.00	0.00	0.00	0.00
491.00	0.800	129.700	490.98	3.28	-2.14	2.57	0.17
585.00	0.800	148.700	584.98	4.58	-3.12	3.42	0.28
679.00	0.700	147.600	678.97	5.80	-4.16	4.07	0.11
773.00	1.300	139.900	772.95	7.43	-5.46	5.06	0.65
867.00	1.200	155.700	866.93	9.45	-7.17	6.15	0.38
961.00	1.200	168.700	960.91	11.27	-9.04	6.75	0.29
1055.00	1.200	143.200	1054.89	13.12	-10.79	7.53	0.56
1149.00	1.200	159.900	1148.87	15.03	-12.50	8.46	0.37
1243.00	0.800	188.100	1242.86	16.41	-14.08	8.71	0.66
1337.00	1.300	194.700	1336.84	17.48	-15.76	8.34	0.55
1431.00	0.400	134.300	1430.83	18.43	-17.02	8.31	1.23
1525.00	0.500	98.100	1524.83	19.06	-17.31	8.95	0.31
1618.00	0.500	122.700	1617.82	19.74	-17.58	9.69	0.23
1712.00	0.400	148.300	1711.82	20.46	-18.08	10.21	0.24
1806.00	1.100	99.500	1805.81	21.46	-18.51	11.27	0.95
1900.00	1.900	118.100	1899.78	23.58	-19.39	13.54	0.99
1994.00	2.600	116.400	1993.71	26.96	-21.08	16.82	0.75
2088.00	4.300	120.600	2087.53	32.22	-23.82	21.77	1.83
2182.00	4.300	133.900	2181.27	39.03	-28.06	27.34	1.06
2276.00	5.100	139.200	2274.96	46.70	-33.66	32.61	0.97
2370.00	7.600	144.500	2368.37	57.08	-41.89	38.95	2.73
2464.00	8.100	146.000	2461.49	69.88	-52.44	46.26	0.57
2558.00	7.500	144.500	2554.62	82.59	-62.92	53.53	0.67
2651.00	7.100	142.000	2646.87	94.40	-72.39	60.59	0.55
2745.00	8.400	144.100	2740.01	107.06	-82.53	68.19	1.42
2839.00	7.700	135.000	2833.08	120.18	-92.55	76.67	1.54
2933.00	7.600	142.000	2926.25	132.66	-101.90	84.95	1.00
3027.00	8.800	144.100	3019.29	146.05	-112.62	93.00	1.32
3121.00	7.900	143.800	3112.29	159.68	-123.66	101.03	0.96
3215.00	7.700	144.500	3205.42	172.42	-134.00	108.50	0.24
3309.00	8.400	144.800	3298.49	185.55	-144.74	116.11	0.75
3403.00	9.000	139.600	3391.41	199.75	-155.95	124.84	1.05
3497.00	10.300	142.700	3484.08	215.50	-168.23	134.70	1.49
3591.00	11.000	143.400	3576.46	232.85	-182.12	145.14	0.76
3685.00	11.500	141.300	3668.65	251.18	-196.63	156.34	0.69
3779.00	11.600	137.100	3760.75	269.98	-210.86	168.63	0.90
3873.00	9.900	137.100	3853.10	287.48	-223.71	180.57	1.81
3967.00	9.300	137.800	3945.78	303.13	-235.25	191.17	0.65

Actual Wellpath Report

Great Western 27-14 AWP

Page 3 of 4



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	GREAT WESTERN OIL & GAS	Slot	Slot #14 Great Western 27-14 1007'FSL & 369'FWL
Area	COLORADO	Well	Great Western 27-14
Field	WELD COUNTY (NAD83)	Wellbore	Great Western 27-14 AWB
Facility	SEC.27-T6N-R67W		

WELLPATH DATA (76 stations) † = interpolated/extrapolated station

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]
4060.00	9.300	138.100	4037.56	318.14	-246.41	201.24	0.05
4154.00	8.800	140.600	4130.39	332.92	-257.62	210.87	0.68
4248.00	8.600	139.600	4223.31	347.14	-268.53	219.99	0.27
4342.00	7.700	137.100	4316.36	360.45	-278.50	228.83	1.03
4436.00	6.900	137.400	4409.60	372.37	-287.27	236.94	0.85
4530.00	8.100	142.400	4502.79	384.63	-296.67	244.81	1.45
4624.00	8.400	142.400	4595.82	398.11	-307.36	253.04	0.32
4718.00	8.000	140.600	4688.86	411.52	-317.85	261.38	0.51
4812.00	7.700	144.500	4781.98	424.34	-328.03	269.19	0.65
4906.00	6.200	142.400	4875.28	435.70	-337.18	275.94	1.62
5000.00	4.800	144.100	4968.85	444.70	-344.39	281.34	1.50
5094.00	4.500	143.800	5062.54	452.31	-350.55	285.83	0.32
5188.00	3.300	146.900	5156.32	458.68	-355.79	289.48	1.30
5281.00	3.300	157.100	5249.17	463.91	-360.50	291.99	0.63
5375.00	1.100	187.000	5343.09	467.13	-363.89	292.93	2.56
5469.00	0.900	172.200	5437.08	468.38	-365.52	292.92	0.35
5563.00	0.800	193.300	5531.07	469.41	-366.89	292.87	0.35
5657.00	0.600	280.900	5625.06	469.43	-367.43	292.23	1.04
5750.00	0.500	300.600	5718.06	468.67	-367.13	291.41	0.23
5844.00	0.500	298.500	5812.06	467.91	-366.73	290.69	0.02
5938.00	0.400	245.400	5906.05	467.45	-366.67	290.03	0.44
6032.00	0.300	283.700	6000.05	467.17	-366.75	289.50	0.26
6126.00	0.700	243.300	6094.05	466.84	-366.95	288.75	0.54
6219.00	0.500	302.700	6187.04	466.33	-366.98	287.90	0.67
6313.00	0.500	293.500	6281.04	465.58	-366.60	287.18	0.09
6407.00	0.700	225.700	6375.04	465.26	-366.84	286.39	0.73
6501.00	0.700	219.000	6469.03	465.43	-367.68	285.62	0.09
6595.00	0.500	241.500	6563.03	465.47	-368.33	284.89	0.32
6689.00	1.100	200.000	6657.02	465.85	-369.37	284.22	0.85
6782.00	1.100	228.900	6750.00	466.34	-370.80	283.25	0.59
6876.00	1.500	219.700	6843.98	466.60	-372.34	281.78	0.48
6970.00	1.500	194.000	6937.94	467.57	-374.48	280.70	0.71
7064.00	1.000	209.900	7031.92	468.60	-376.38	279.99	0.64
7158.00	0.700	215.800	7125.91	469.04	-377.56	279.25	0.33
7252.00	0.400	254.200	7219.91	469.05	-378.11	278.59	0.49
7300.00†	0.400	254.200	7267.91	468.92	-378.20	278.27	0.00

HOLE & CASING SECTIONS Ref Wellbore: Great Western 27-14 AWB Ref Wellpath: Great Western 27-14 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]
8.625in Casing Surface	12.00	441.00	429.00	12.00	440.99	0.00	0.00	-1.71	2.06

Actual Wellpath Report

Great Western 27-14 AWP

Page 4 of 4



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	GREAT WESTERN OIL & GAS	Slot	Slot #14 Great Western 27-14 1007'FSL & 369'FWL
Area	COLORADO	Well	Great Western 27-14
Field	WELD COUNTY (NAD83)	Wellbore	Great Western 27-14 AWB
Facility	SEC.27-T6N-R67W		

TARGETS

Name	MD [feet]	TVD [feet]	North [feet]	East [feet]	Grid East [us survey feet]	Grid North [us survey feet]	Latitude [°]	Longitude [°]	Shape
27-14 Legal Box 400' x 400' Center @ 660'FSL & 660'FWL		6000.00	-347.19	290.06	3170652.30	1408282.34	40 27 09.061N	104 53 12.436W	square
27-14 Target BHL 659'FSL & 655'FWL		6000.00	-348.19	285.06	3170647.31	1408281.30	40 27 09.051N	104 53 12.501W	point

WELLPATH COMPOSITION Ref Wellbore: Great Western 27-14 AWB Ref Wellpath: Great Western 27-14 AWP

Start MD [feet]	End MD [feet]	Positional Uncertainty Model	Log Name/Comment	Wellbore
12.00	7252.00	NaviTrak (Standard)	BHI MWD <491-7300>	Great Western 27-14 AWB
7252.00	7300.00	Blind Drilling (std)	Projection to bit	Great Western 27-14 AWB

WELLPATH COMMENTS

MD [feet]	Inclination [degrees]	Azimuth [degrees]	TVD [feet]	Comment
7252.00	0.400	254.200	7219.91	final mwd survey
7300.00	0.400	254.200	7267.91	projection to bit (ACTUAL BHL 629'FSL & 648'FWL)