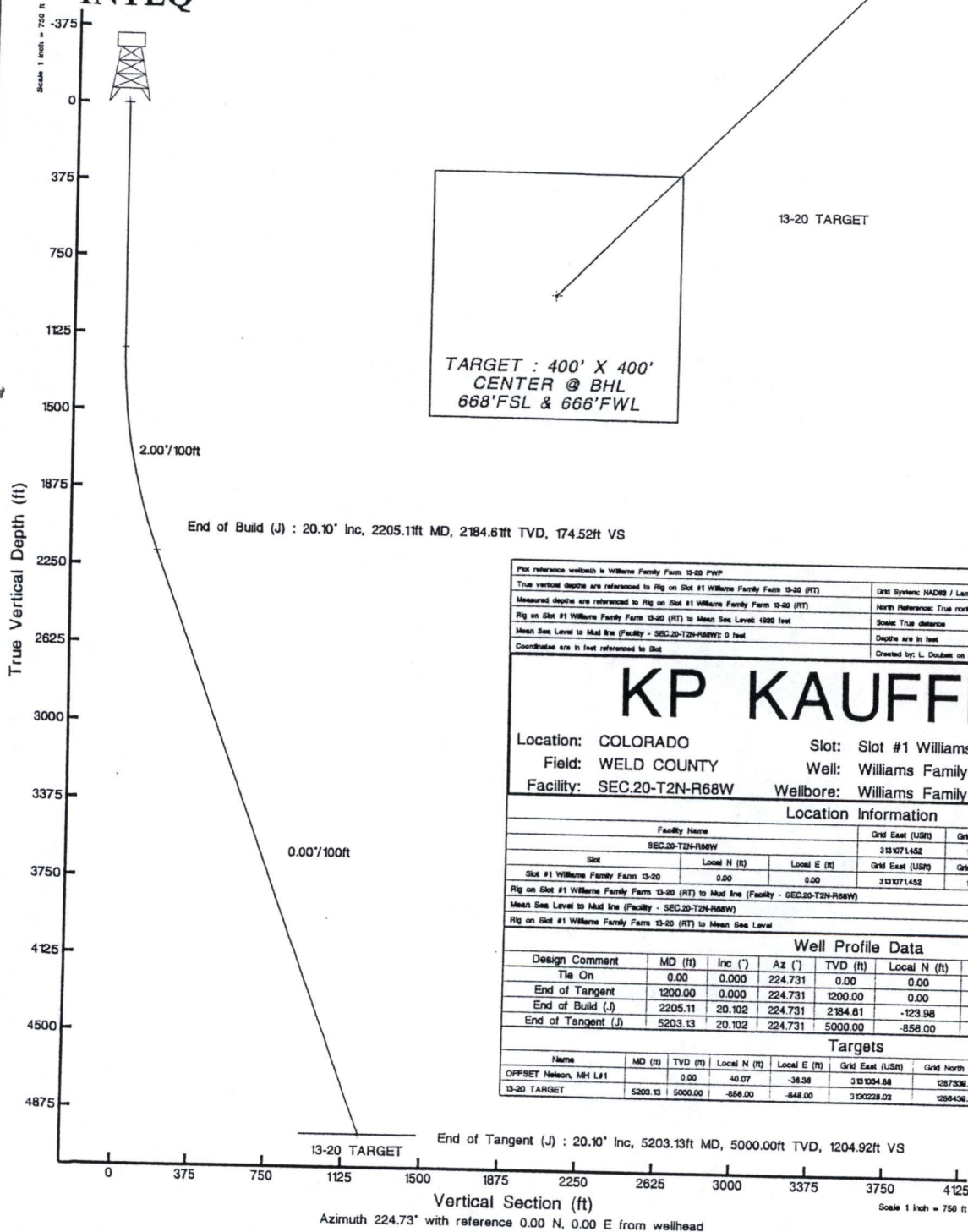


BGGM (1945.0 to 2007.0) Dip: 67.00° Field: 53534.6 nT  
Magnetic North is 9.66 degrees East of True North (at 05/12/06)  
To correct azimuth from Magnetic to True add 9.66 degrees



INTEQ



Plot reference wellbore is Williams Family Farm 13-20 PWB							
True vertical depths are referenced to Rig on Slot #1 Williams Family Farm 13-20 (RT)				Grid System: NAD83 / Lambert Colorado State Planes, Northern Zone (SOS, US feet)			
Measured depths are referenced to Rig on Slot #1 Williams Family Farm 13-20 (RT)				North Reference: True north			
Rig on Slot #1 Williams Family Farm 13-20 (RT) to Mean Sea Level: 4920 feet				Scale: True distance			
Mean Sea Level to Mud line (Facility - SEC.20-T2N-R68W): 0 feet				Depths are in feet			
Coordinates are in feet referenced to Slot				Created by: L. Douber on 5/12/2006			

KP KAUFFMAN							
Location: COLORADO				Slot: Slot #1 Williams Family Farm 13-20			
Field: WELD COUNTY				Well: Williams Family Farm 13-20			
Facility: SEC.20-T2N-R68W				Wellbore: Williams Family Farm 13-20 PWB			

Location Information							
Facility Name				Grid East (USRT)	Grid North (USRT)	Latitude	Longitude
SEC.20-T2N-R68W				3131071.452	1287298.791	40° 07' 15.888"N	105° 07' 52.710"W
Slot	Local N (ft)	Local E (ft)	Grid East (USRT)	Grid North (USRT)	Latitude	Longitude	
Slot #1 Williams Family Farm 13-20	0.00	0.00	3131071.452	1287298.791	40° 07' 15.888"N	105° 07' 52.710"W	
Rig on Slot #1 Williams Family Farm 13-20 (RT) to Mud line (Facility - SEC.20-T2N-R68W)				4920ft			
Mean Sea Level to Mud line (Facility - SEC.20-T2N-R68W)				0ft			
Rig on Slot #1 Williams Family Farm 13-20 (RT) to Mean Sea Level				4920ft			

Well Profile Data								
Design Comment	MD (ft)	Inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	224.731	0.00	0.00	0.00	0.00	0.00
End of Tangent	1200.00	0.000	224.731	1200.00	0.00	0.00	0.00	0.00
End of Build (J)	2205.11	20.102	224.731	2184.61	-123.98	-122.82	2.00	174.52
End of Tangent (J)	5203.13	20.102	224.731	5000.00	-858.00	-848.00	0.00	1204.92

Targets									
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (USRT)	Grid North (USRT)	Latitude	Longitude	
OFFSET Nelson, MH L#1	0.00	40.07	-36.38	3131094.88	1287306.87	40° 07' 16.284"N	105° 07' 53.184"W		
13-20 TARGET	5203.13	5000.00	-858.00	-848.00	3130228.02	1286436.36	40° 07' 07.422"N	105° 02' 03.837"W	

# Planned Wellpath Report

Wellpath: Williams Family Farm 13-20 PWP

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INTEQ

## REFERENCE WELL IDENTIFICATION

Operator	KP KAUFFMAN	Slot	Slot #1 Williams Family Farm 13-20
Area	COLORADO	Well	Williams Family Farm 13-20
Field	WELD COUNTY	Wellbore	Williams Family Farm 13-20 PWB
Facility	SEC.20-T2N-R68W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet	Software System	WellArchitect™
North Reference	True	User	L. Doubek
Scale	0.999959	Report Generated	05/12/06 at 11:55:
Wellbore last revised	05/12/06	Database/Source file	WA_Denver/Will

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North [feet]	East [feet]	Easting [US feet]	Northing [US feet]	Latitude [°]	Longitude [°]
Slot Location	0.00	0.00	3131071.45	1287299.79	40 07 15.888N	105 01 52.716W
Facility Reference Pt			3131071.45	1287299.79	40 07 15.888N	105 01 52.716W
Field Reference Pt			0.00	0.00	36 07 05.969N	115 39 12.952W

## WELLPATH DATUM

Calculation method	Minimum curvature	Rig on Slot #1 Williams Family Farm 13-20 (RT) to Facility Vertical Datum	4920.00 feet
Horizontal Reference Pt	Slot	Rig on Slot #1 Williams Family Farm 13-20 (RT) to Mean Sea Level	4920.00 feet
Vertical Reference Pt	Rig on Slot #1 Williams Family Farm 13-20 (RT)	Facility Vertical Datum to Mud Line	0.00 feet
MD Reference Pt	Rig on Slot #1 Williams Family Farm 13-20 (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	224.73°



# Planned Wellpath Report

Wellpath: Williams Family Farm 13-20 PWP

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INTEQ

## REFERENCE WELL PATH IDENTIFICATION

Operator	KP KAUFFMAN	Slot	Slot #1 Williams Family Farm 13-20
Area	COLORADO	Well	Williams Family Farm 13-20
Field	WELD COUNTY	Wellbore	Williams Family Farm 13-20 PWB
Facility	SEC.20-T2N-R68W		

## WELLPATH DATA (55 stations) † = interpolated/extrapolated station

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]
0.00	0.000	224.731	0.00	0.00	0.00	0.00	0.00
100.00†	0.000	0.000	100.00	0.00	0.00	0.00	0.00
200.00†	0.000	0.000	200.00	0.00	0.00	0.00	0.00
300.00†	0.000	0.000	300.00	0.00	0.00	0.00	0.00
400.00†	0.000	0.000	400.00	0.00	0.00	0.00	0.00
500.00†	0.000	0.000	500.00	0.00	0.00	0.00	0.00
600.00†	0.000	0.000	600.00	0.00	0.00	0.00	0.00
700.00†	0.000	0.000	700.00	0.00	0.00	0.00	0.00
800.00†	0.000	0.000	800.00	0.00	0.00	0.00	0.00
900.00†	0.000	0.000	900.00	0.00	0.00	0.00	0.00
1000.00†	0.000	0.000	1000.00	0.00	0.00	0.00	0.00
1100.00†	0.000	0.000	1100.00	0.00	0.00	0.00	0.00
1200.00	0.000	224.731	1200.00	0.00	0.00	0.00	0.00
1300.00†	2.000	224.731	1299.98	1.75	-1.24	-1.23	2.00
1400.00†	4.000	224.731	1399.84	6.98	-4.96	-4.91	2.00
1500.00†	6.000	224.731	1499.45	15.69	-11.15	-11.04	2.00
1600.00†	8.000	224.731	1598.70	27.88	-19.81	-19.62	2.00
1700.00†	10.000	224.731	1697.47	43.52	-30.92	-30.63	2.00
1800.00†	12.000	224.731	1795.62	62.60	-44.47	-44.06	2.00
1900.00†	14.000	224.731	1893.06	85.10	-60.45	-59.89	2.00
2000.00†	16.000	224.731	1989.64	110.98	-78.84	-78.10	2.00
2100.00†	18.000	224.731	2085.27	140.21	-99.61	-98.68	2.00
2200.00†	20.000	224.731	2179.82	172.77	-122.74	-121.59	2.00
2205.11	20.102	224.731	2184.61	174.52	-123.98	-122.82	2.00
2300.00†	20.102	224.731	2273.73	207.13	-147.15	-145.78	0.00
2400.00†	20.102	224.731	2367.63	241.50	-171.57	-169.96	0.00
2500.00†	20.102	224.731	2461.54	275.87	-195.98	-194.15	0.00
2600.00†	20.102	224.731	2555.45	310.24	-220.40	-218.34	0.00
2700.00†	20.102	224.731	2649.36	344.61	-244.82	-242.53	0.00
2800.00†	20.102	224.731	2743.27	378.98	-269.23	-266.72	0.00
2900.00†	20.102	224.731	2837.17	413.35	-293.65	-290.91	0.00
3000.00†	20.102	224.731	2931.08	447.72	-318.07	-315.10	0.00
3100.00†	20.102	224.731	3024.99	482.09	-342.48	-339.28	0.00
3200.00†	20.102	224.731	3118.90	516.46	-366.90	-363.47	0.00
3300.00†	20.102	224.731	3212.81	550.83	-391.32	-387.66	0.00
3400.00†	20.102	224.731	3306.71	585.20	-415.74	-411.85	0.00
3500.00†	20.102	224.731	3400.62	619.57	-440.15	-436.04	0.00
3600.00†	20.102	224.731	3494.53	653.94	-464.57	-460.23	0.00
3700.00†	20.102	224.731	3588.44	688.31	-488.99	-484.42	0.00
3800.00†	20.102	224.731	3682.35	722.68	-513.40	-508.60	0.00



# Planned Wellpath Report

Wellpath: Williams Family Farm 13-20 PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	KP KAUFFMAN	Slot	Slot #1 Williams Family Farm 13-20
Area	COLORADO	Well	Williams Family Farm 13-20
Field	WELD COUNTY	Wellbore	Williams Family Farm 13-20 PWB
Facility	SEC.20-T2N-R68W		

## WELLPATH DATA (55 stations) † = interpolated/extrapolated station

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [%/100ft]
3900.00†	20.102	224.731	3776.26	757.04	-537.82	-532.79	0.00
4000.00†	20.102	224.731	3870.16	791.41	-562.24	-556.98	0.00
4100.00†	20.102	224.731	3964.07	825.78	-586.65	-581.17	0.00
4200.00†	20.102	224.731	4057.98	860.15	-611.07	-605.36	0.00
4300.00†	20.102	224.731	4151.89	894.52	-635.49	-629.55	0.00
4400.00†	20.102	224.731	4245.80	928.89	-659.90	-653.73	0.00
4500.00†	20.102	224.731	4339.70	963.26	-684.32	-677.92	0.00
4600.00†	20.102	224.731	4433.61	997.63	-708.74	-702.11	0.00
4700.00†	20.102	224.731	4527.52	1032.00	-733.15	-726.30	0.00
4800.00†	20.102	224.731	4621.43	1066.37	-757.57	-750.49	0.00
4900.00†	20.102	224.731	4715.34	1100.74	-781.99	-774.68	0.00
5000.00†	20.102	224.731	4809.25	1135.11	-806.40	-798.87	0.00
5100.00†	20.102	224.731	4903.15	1169.48	-830.82	-823.05	0.00
5200.00†	20.102	224.731	4997.06	1203.85	-855.24	-847.24	0.00
5203.13	20.102	224.731	5000.00†	1204.92	-856.00	-848.00	0.00

## TARGETS

Name	MD [feet]	TVD [feet]	North [feet]	East [feet]	Grid East [us survey feet]	Grid North [us survey feet]	Latitude [°]	Longitude [°]	Shape
OFFSET Nelson, MH L#1		0.00	40.07	-36.36	3131034.88	1287339.67	40 07 16.284N	105 01 53.184W	circle
1) 13-20 TARGET	5203.13	5000.00	-856.00	-848.00	3130228.02	1286439.36	40 07 07.429N	105 02 03.631W	square