

NOBLE ENERGY, INC

Location: COLORADO
Field: WELD COUNTY (NOBLE NAD 83)
Facility: SEC.30-T6N-R65W
Slot: Monfort E30-4
Well: Monfort E30-4
Wellbore: Monfort E30-4

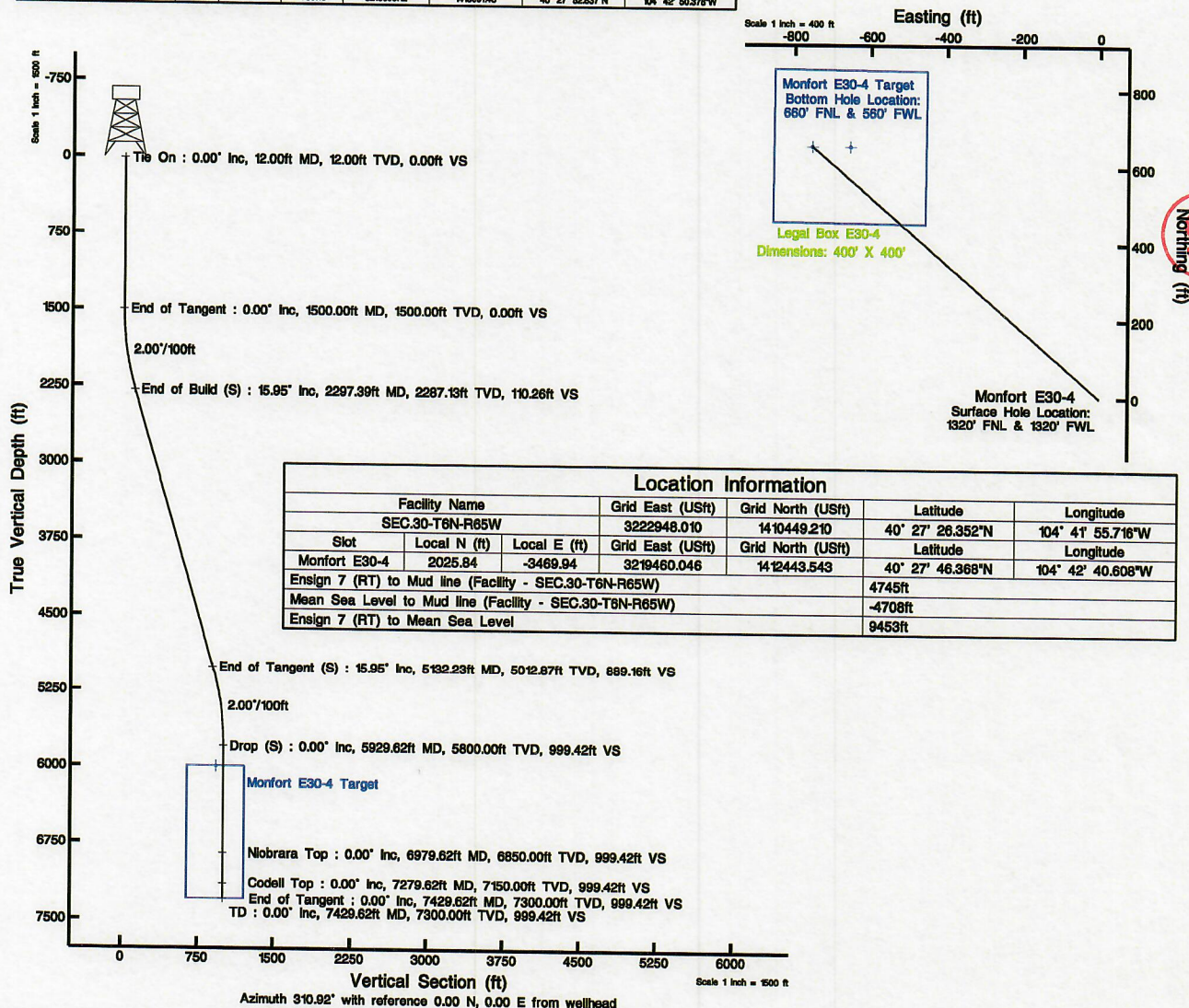


BAKER
HUGHES

INTEQ

Plot reference wellpath is Monfort E30-4 PWP	
True vertical depths are referenced to Ensign 7 (RT)	Grid System: NAD83 / Lambert Colorado State Plane, Northern Zone (501), US feet
Measured depths are referenced to Ensign 7 (RT)	North Reference: True north
Ensign 7 (RT) to Mean Sea Level: 9453 feet	Scale: True distance
Mean Sea Level to Mud line (Facility - SEC.30-T6N-R65W): -4708 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: minovale on 5/22/2006

Targets								
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (USft)	Grid North (USft)	Latitude	Longitude
Legal Box E30-4	6000.00	654.65	-855.16	3218799.11	143692.31	143692.31	40° 27' 52.637"N	104° 42' 49.064"W
Monfort E30-4 Target	6000.00	654.65	-755.16	3218669.12	143691.43	143691.43	40° 27' 52.637"N	104° 42' 50.378"W



Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	12.00	0.000	310.922	12.00	0.00	0.00	0.00	0.00
End of Tangent	1500.00	0.000	310.922	1500.00	0.00	0.00	0.00	0.00
End of Build (S)	2297.39	15.948	310.922	2287.13	72.22	-83.31	2.00	110.26
End of Tangent (S)	5132.23	15.948	310.922	5012.87	582.43	-671.85	0.00	889.16
Drop (S)	5929.62	0.000	310.922	5800.00	654.65	-755.16	2.00	999.42
End of Tangent	7429.62	0.000	310.922	7300.00	654.65	-755.16	0.00	999.42



BHGM (1945.0 to 2007.0) Dip: 87.33° Field: 53708.1 mT
Magnetic North is 9.50 degrees East of True North (at 05/22/06)
To correct azimuth from Magnetic to True add 9.50 degrees



Planned Wellpath Report

Wellpath: Monfort E30-4 PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	Monfort E30-4
Area	COLORADO	Well	Monfort E30-4
Field	WELD COUNTY (NOBLE NAD 83)	Wellbore	Monfort E30-4
Facility	SEC.30-T6N-R65W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado State Planes, Northern Zone (501), US feet	Software System	WellArchitect™ 1.1
North Reference	True	User	Minovala
Scale	0.999964	Report Generated	05/22/06 at 15:03:55
Wellbore last revised	05/19/06	Database/Source file	WA_Denver/Monfort_E30-4.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North [feet]	East [feet]	Easting [US feet]	Northing [US feet]	Latitude [°]	Longitude [°]
Slot Location	2025.84	-3469.94	3219460.05	1412443.54	40 27 46.368N	104 42 40.608W
Facility Reference Pt			3222948.01	1410449.21	40 27 26.352N	104 41 55.716W
Field Reference Pt			3000000.00	4454105.15	48 46 34.315N	105 30 00.000W

WELLPATH DATUM

Calculation method	Minimum curvature	Ensign 7 (RT) to Installation Vertical Datum	4745.00 feet
Horizontal Reference Pt	Slot	Ensign 7 (RT) to Mean Sea Level	9453.00 feet
Vertical Reference Pt	Ensign 7 (RT)	Installation Vertical Datum to Mud Line	0.00 feet
MD Reference Pt	Ensign 7 (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	310.92°



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Facility	SEC.30-T6N-R65W		

WELLPATH DATA (81 stations) † = interpolated/extrapolated station

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]
0.00†	0.000	310.922	0.00	0.00	0.00	0.00	0.00
12.00	0.000	310.922	12.00	0.00	0.00	0.00	0.00
112.00†	0.000	0.000	112.00	0.00	0.00	0.00	0.00
212.00†	0.000	0.000	212.00	0.00	0.00	0.00	0.00
312.00†	0.000	0.000	312.00	0.00	0.00	0.00	0.00
412.00†	0.000	0.000	412.00	0.00	0.00	0.00	0.00
512.00†	0.000	0.000	512.00	0.00	0.00	0.00	0.00
612.00†	0.000	0.000	612.00	0.00	0.00	0.00	0.00
712.00†	0.000	0.000	712.00	0.00	0.00	0.00	0.00
812.00†	0.000	0.000	812.00	0.00	0.00	0.00	0.00
912.00†	0.000	0.000	912.00	0.00	0.00	0.00	0.00
1012.00†	0.000	0.000	1012.00	0.00	0.00	0.00	0.00
1112.00†	0.000	0.000	1112.00	0.00	0.00	0.00	0.00
1212.00†	0.000	0.000	1212.00	0.00	0.00	0.00	0.00
1312.00†	0.000	0.000	1312.00	0.00	0.00	0.00	0.00
1412.00†	0.000	0.000	1412.00	0.00	0.00	0.00	0.00
1500.00	0.000	310.922	1500.00	0.00	0.00	0.00	0.00
1512.00†	0.240	310.922	1512.00	0.03	0.02	-0.02	2.00
1612.00†	2.240	310.922	1611.97	2.19	1.43	-1.65	2.00
1712.00†	4.240	310.922	1711.81	7.84	5.14	-5.92	2.00
1812.00†	6.240	310.922	1811.38	16.97	11.12	-12.82	2.00
1912.00†	8.240	310.922	1910.58	29.57	19.37	-22.35	2.00
2012.00†	10.240	310.922	2009.28	45.63	29.89	-34.48	2.00
2112.00†	12.240	310.922	2107.36	65.12	42.66	-49.21	2.00
2212.00†	14.240	310.922	2204.69	88.02	57.66	-66.51	2.00
2297.39	15.948	310.922	2287.13	110.26	72.22	-83.31	2.00
2312.00†	15.948	310.922	2301.18	114.27	74.85	-86.35	0.00
2412.00†	15.948	310.922	2397.33	141.75	92.85	-107.11	0.00
2512.00†	15.948	310.922	2493.48	169.23	110.85	-127.87	0.00
2612.00†	15.948	310.922	2589.64	196.70	128.85	-148.63	0.00
2712.00†	15.948	310.922	2685.79	224.18	146.84	-169.39	0.00
2812.00†	15.948	310.922	2781.94	251.65	164.84	-190.15	0.00
2912.00†	15.948	310.922	2878.09	279.13	182.84	-210.91	0.00
3012.00†	15.948	310.922	2974.24	306.61	200.84	-231.67	0.00
3112.00†	15.948	310.922	3070.39	334.08	218.83	-252.43	0.00
3212.00†	15.948	310.922	3166.54	361.56	236.83	-273.19	0.00
3312.00†	15.948	310.922	3262.69	389.03	254.83	-293.96	0.00
3412.00†	15.948	310.922	3358.85	416.51	272.83	-314.72	0.00
3512.00†	15.948	310.922	3455.00	443.99	290.82	-335.48	0.00
3612.00†	15.948	310.922	3551.15	471.46	308.82	-356.24	0.00



Planned Wellpath Report

Wellpath: Monfort E30-4 PWP

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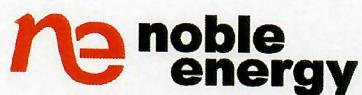
INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY, INC	Slot	Monfort E30-4
Area	COLORADO	Well	Monfort E30-4
Field	WELD COUNTY (NOBLE NAD 83)	Wellbore	Monfort E30-4
Facility	SEC.30-T6N-R65W		

WELLPATH DATA (81 stations) † = interpolated/extrapolated station

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]
3712.00†	15.948	310.922	3647.30	498.94	326.82	-377.00	0.00
3812.00†	15.948	310.922	3743.45	526.41	344.82	-397.76	0.00
3912.00†	15.948	310.922	3839.60	553.89	362.81	-418.52	0.00
4012.00†	15.948	310.922	3935.75	581.37	380.81	-439.28	0.00
4112.00†	15.948	310.922	4031.90	608.84	398.81	-460.04	0.00
4212.00†	15.948	310.922	4128.06	636.32	416.81	-480.80	0.00
4312.00†	15.948	310.922	4224.21	663.79	434.81	-501.57	0.00
4412.00†	15.948	310.922	4320.36	691.27	452.80	-522.33	0.00
4512.00†	15.948	310.922	4416.51	718.75	470.80	-543.09	0.00
4612.00†	15.948	310.922	4512.66	746.22	488.80	-563.85	0.00
4712.00†	15.948	310.922	4608.81	773.70	506.80	-584.61	0.00
4812.00†	15.948	310.922	4704.96	801.18	524.79	-605.37	0.00
4912.00†	15.948	310.922	4801.11	828.65	542.79	-626.13	0.00
5012.00†	15.948	310.922	4897.27	856.13	560.79	-646.89	0.00
5112.00†	15.948	310.922	4993.42	883.60	578.79	-667.65	0.00
5132.23	15.948	310.922	5012.87	889.16	582.43	-671.85	0.00
5212.00†	14.352	310.922	5089.86	910.01	596.08	-687.61	2.00
5312.00†	12.352	310.922	5187.16	933.10	611.21	-705.05	2.00
5412.00†	10.352	310.922	5285.19	952.78	624.10	-719.93	2.00
5512.00†	8.352	310.922	5383.86	969.03	634.75	-732.21	2.00
5612.00†	6.352	310.922	5483.03	981.83	643.13	-741.87	2.00
5712.00†	4.352	310.922	5582.59	991.16	649.24	-748.92	2.00
5812.00†	2.352	310.922	5682.41	997.01	653.07	-753.34	2.00
5912.00†	0.352	310.922	5782.38	999.37	654.61	-755.12	2.00
5929.62	0.000	310.922	5800.00†	999.42	654.65	-755.16	2.00
6012.00†	0.000	0.000	5882.38	999.42	654.65	-755.16	0.00
6112.00†	0.000	0.000	5982.38	999.42	654.65	-755.16	0.00
6212.00†	0.000	0.000	6082.38	999.42	654.65	-755.16	0.00
6312.00†	0.000	0.000	6182.38	999.42	654.65	-755.16	0.00
6412.00†	0.000	0.000	6282.38	999.42	654.65	-755.16	0.00
6512.00†	0.000	0.000	6382.38	999.42	654.65	-755.16	0.00
6612.00†	0.000	0.000	6482.38	999.42	654.65	-755.16	0.00
6712.00†	0.000	0.000	6582.38	999.42	654.65	-755.16	0.00
6812.00†	0.000	0.000	6682.38	999.42	654.65	-755.16	0.00
6912.00†	0.000	0.000	6782.38	999.42	654.65	-755.16	0.00
7012.00†	0.000	0.000	6882.38	999.42	654.65	-755.16	0.00
7112.00†	0.000	0.000	6982.38	999.42	654.65	-755.16	0.00
7212.00†	0.000	0.000	7082.38	999.42	654.65	-755.16	0.00
7312.00†	0.000	0.000	7182.38	999.42	654.65	-755.16	0.00
7412.00†	0.000	0.000	7282.38	999.42	654.65	-755.16	0.00



Planned Wellpath Report

Wellpath: Monfort E30-4 PWP

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WELLPATH DATA (81 stations)

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [%/100ft]
7429.62	0.000	310.922	7300.00	999.42	654.65	-755.16	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
Legal Box E30-4		6000.00	654.65	-655.16	3218799.11	1413092.31	40 27 52.837N	104 42 49.084W	square
1) Monfort E30-4 Target		6000.00	654.65	-755.16	3218699.12	1413091.43	40 27 52.837N	104 42 50.378W	point

SURVEY PROGRAM Ref Wellbore: Monfort E30-4 Ref Wellpath: Monfort E30-4 PWP

Start MD [feet]	End MD [feet]	Tool Type	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7429.62	MTC (Collar, pre-2000)	MTC (Collar, pre-2000) (Standard)		Monfort E30-4