



Weatherford®

Drilling Services

FINAL PVA



McELMO DOME #YA-5

MONTEZUMA COUNTY, COLORADO

WELL FILE: **WTX0905D081**

OCTOBER 6, 2005

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McELMO DOME #YA-5 MONTEZUMA CO, COLORADO

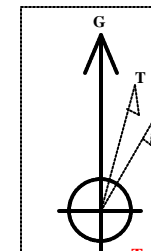


KB ELEV: N/A
GL ELEV: N/A

Survey: Wft Svy (McElmo Dome #YA-5/1)									
No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
6	8073.00	58.40	322.70	8054.22	40.52	113.02	63.51	0.00	-47.43

WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
McElmo Dome #YA-5	0.00	0.00	308896.00	1049774.00	37°28'09.389N	108°46'29.173W	N/A

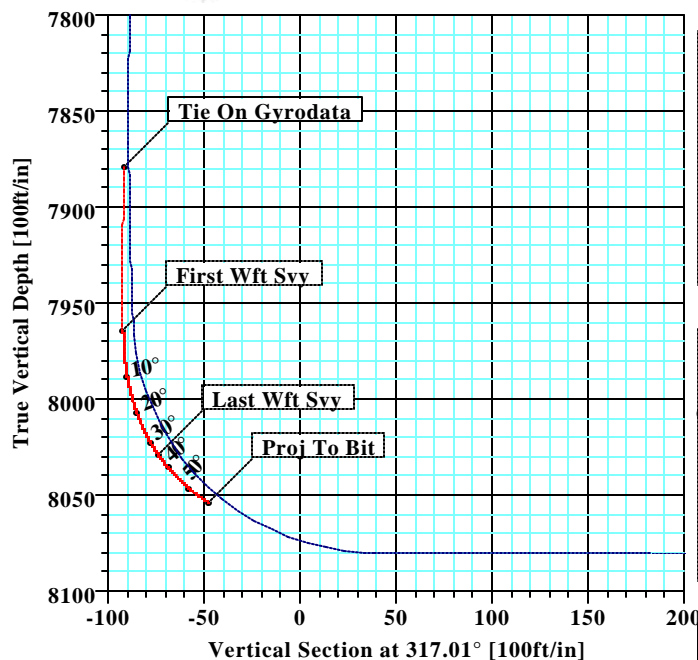
TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Pbhl	8080.00	1463.00	-1364.00	310359.00	1048410.00	Point



Azimuths to Grid North
True North: 2.01°
Magnetic North: 13.11°

Magnetic Field
Strength: 51632nT
Dip Angle: 64.02°
Date: 9/29/2005
Model: bggm2007

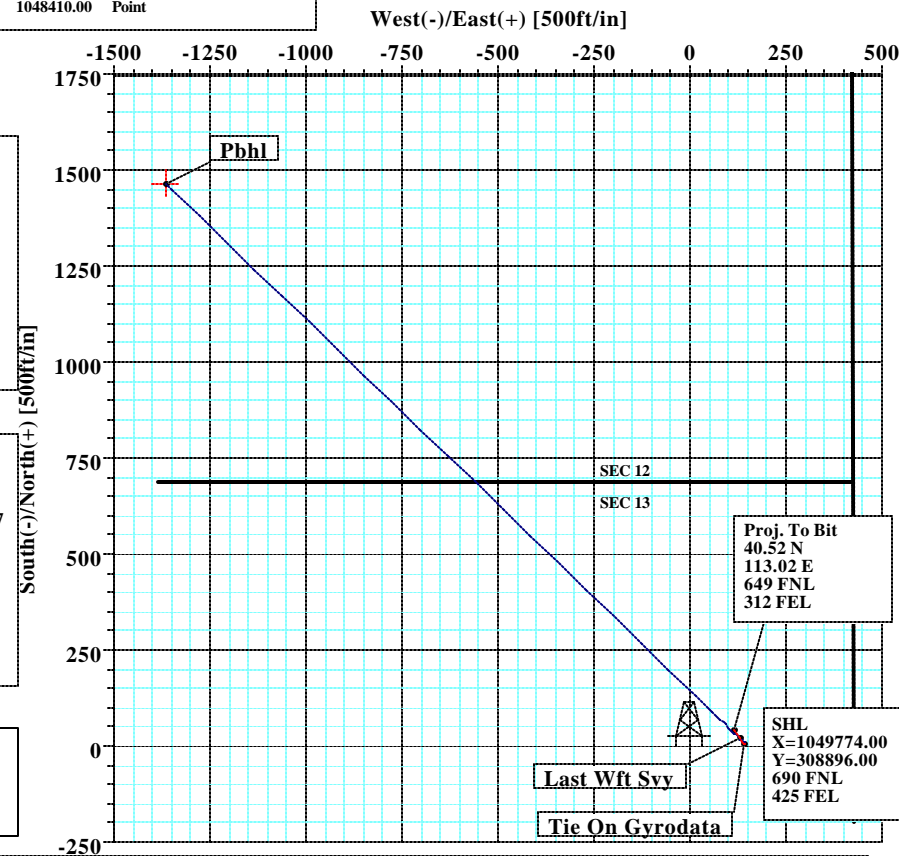
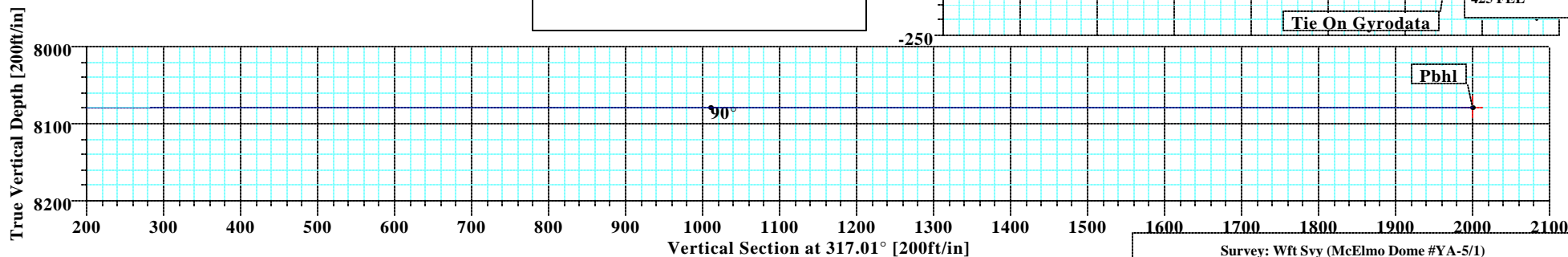
Total Correction to Grid North: 13.11°



SITE DETAILS	
McElmo Dome #YA-5	
Site Centre Northing:	308896.00
Easting:	1049774.00
Water Depth:	0.00
Positional Uncertainty:	0.00
Convergence:	-2.01

FIELD DETAILS	
Montezuma Co., CO (NAD 27)	
Geodetic System:	US State Plane Coordinate System 1927
Ellipsoid:	NAD27 (Clarke 1866)
Zone:	Colorado, Southern Zone
Magnetic Model:	bggm2007
System Datum:	Mean Sea Level
Local North:	Grid North

LEGEND
McElmo Dome #YA-5, Plan #1
Wft Svy



Proj. To Bit
40.52 N
113.02 E
649 FNL
312 FEL

SHL
X=1049774.00
Y=308896.00
690 FNL
425 FEL

Survey: Wft Svy (McElmo Dome #YA-5/1)

Created By: Russell W Joyner

Date: 4/21/2010



Company: Kinder Morgan Field: Montezuma Co., CO (NAD 27) Site: McElmo Dome #YA-5 Well: McElmo Dome #YA-5 Wellpath: 1	Date: 4/21/2010 Co-ordinate(NE) Reference: Site: McElmo Dome #YA-5, Grid North Vertical (TVD) Reference: SITE 0.0 Section (VS) Reference: Well (0.00N,0.00E,317.01Azi) Survey Calculation Method: Minimum Curvature Db: Sybase
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Survey: Wft Svy Company: Weatherford Tool: MWD;MWD - Standard	Start Date: 4/6/2010 Engineer: Russell W Joyner Tied-to: User Defined
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Field: Montezuma Co., CO (NAD 27)

Map System: US State Plane Coordinate System 1927
Geo Datum: NAD27 (Clarke 1866)
Sys Datum: Mean Sea Level

Map Zone: Colorado, Southern Zone
Coordinate System: Site Centre
Geomagnetic Model: bggm2007

Site: McElmo Dome #YA-5

Site Position:	Northing: 308896.00 ft	Latitude: 37 28 9.389 N
From: Map	Easting: 1049774.00 ft	Longitude: 108 46 29.173 W
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 0.00 ft		Grid Convergence: -2.01 deg

Well: McElmo Dome #YA-5

Slot Name:

Well Position: +N/-S 0.00 ft	Northing: 308896.00 ft	Latitude: 37 28 9.389 N
+E/-W 0.00 ft	Easting : 1049774.00 ft	Longitude: 108 46 29.173 W
Position Uncertainty: 0.00 ft		

Wellpath: 1

Current Datum: SITE	Height 0.00 ft	Drilled From: Surface
Magnetic Data: 9/29/2005		Tie-on Depth: 0.00 ft
Field Strength: 51632 nT		Above System Datum: Mean Sea Level
Vertical Section: Depth From (TVD) ft	+N/-S ft	Declination: 11.10 deg
		Mag Dip Angle: 64.02 deg
		+E/-W ft
		Direction deg
0.00	0.00	0.00 317.01

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
7883.00	1.83	146.78	7879.59	6.89	141.63	0.00	-91.53	308902.89	1049915.63	Tie On Gyrodata
7968.00	1.60	261.50	7964.57	5.58	141.20	3.40	-92.20	308901.58	1049915.20	First Wft Svy
7987.00	7.40	304.60	7983.51	6.24	139.93	33.30	-90.85	308902.24	1049913.93	
8018.00	23.40	322.70	8013.31	12.31	134.52	53.28	-82.72	308908.31	1049908.52	
8036.00	34.90	322.70	8029.00	19.27	129.21	63.89	-74.01	308915.27	1049903.21	Last Wft Svy
8073.00	58.40	322.70	8054.22	40.52	113.02	63.51	-47.43	308936.52	1049887.02	Proj To Bit

Annotation

MD ft	TVD ft	
7883.00	7879.59	Tie On Gyrodata
7968.00	7964.57	First Wft Svy
8036.00	8029.00	Last Wft Svy
8073.00	8054.22	Proj To Bit