

30-015-3808Z



Job Number: SVCO-101046
 Company: Yates Petroleum
 Lease/Well: Cassiopeia BQD State Com 1H
 Location: Eddy County, NM
 Rig Name: Patriot Drilling #5
 RKB: 27'
 G.L. or M.S.L.: GL

State/Country: New Mexico / USA
 Declination: 7.8°
 Grid: East To Grid
 File name: F:\SURVEY\2010SU~1\YATESP~1\CASSIO1H.SVY
 Date/Time: 04-Dec-10 / 10:50
 Curve Name: Surface - 400' M.D. (Gyro)

MS SURVEY

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 359.81
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from
Surface MD to 400' MD is, to the best of
 our knowledge a true and accurate account of the
 well bore.
Dana Tuttle 12/6/10
 MS Energy Services Date

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200.00	.50	359.65	200.00	.87	-.01	.87	.87	359.65	.25
Last Survey Depth Recorded									
400.00	.25	47.57	399.99	2.04	.31	2.04	2.06	8.68	.19

