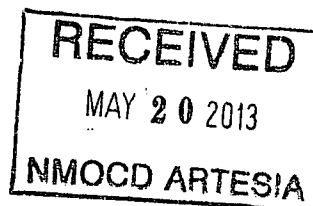




A GYRO TECHNOLOGIES INC. COMPANY

PO Box 261021
Corpus Christi, Texas 78426
(361) 767-0602 • (800) 606-GYRO • Fax (361) 767-0612



May 7, 2013

Chesapeake Energy Corporation
P.O. Box 18496
Oklahoma City, OK 73154

Attn: Bryan Arrant

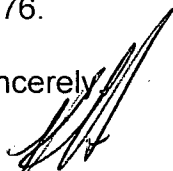
Re: **West Shugart 2-19-30 State No 004H**

API# 30-015-40843

Please find enclosed a copy of the survey from 0' to 600' ran on the above referenced well.

If I can be of any further service, please do not hesitate to call me at 800-606-4976.

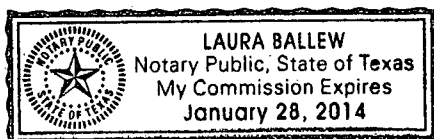
Sincerely,

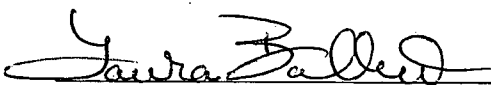

Keith Havelka
Operations

*Need tie-in survey
from 600' to TD* 

STATE OF TEXAS §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 7th day of May,
A.D., 2013, by Keith Havelka.




Laura Ballew
Notary Public, State of Texas



Company: Chesapeake Energy
Lease/Well: West Shugart 2-19-30 State/No 004H

Rig Name: Trinidad 110
State/County: New Mexico/Eddy
Latitude: 32.70, Longitude: -103.95
GRID North is 0.21 Degrees East of True North
VS-Azi: 89.82 Degrees



Depth Reference : RKB=17 FT

DRILLOG HA GYRO SURVEY CALCULATIONS

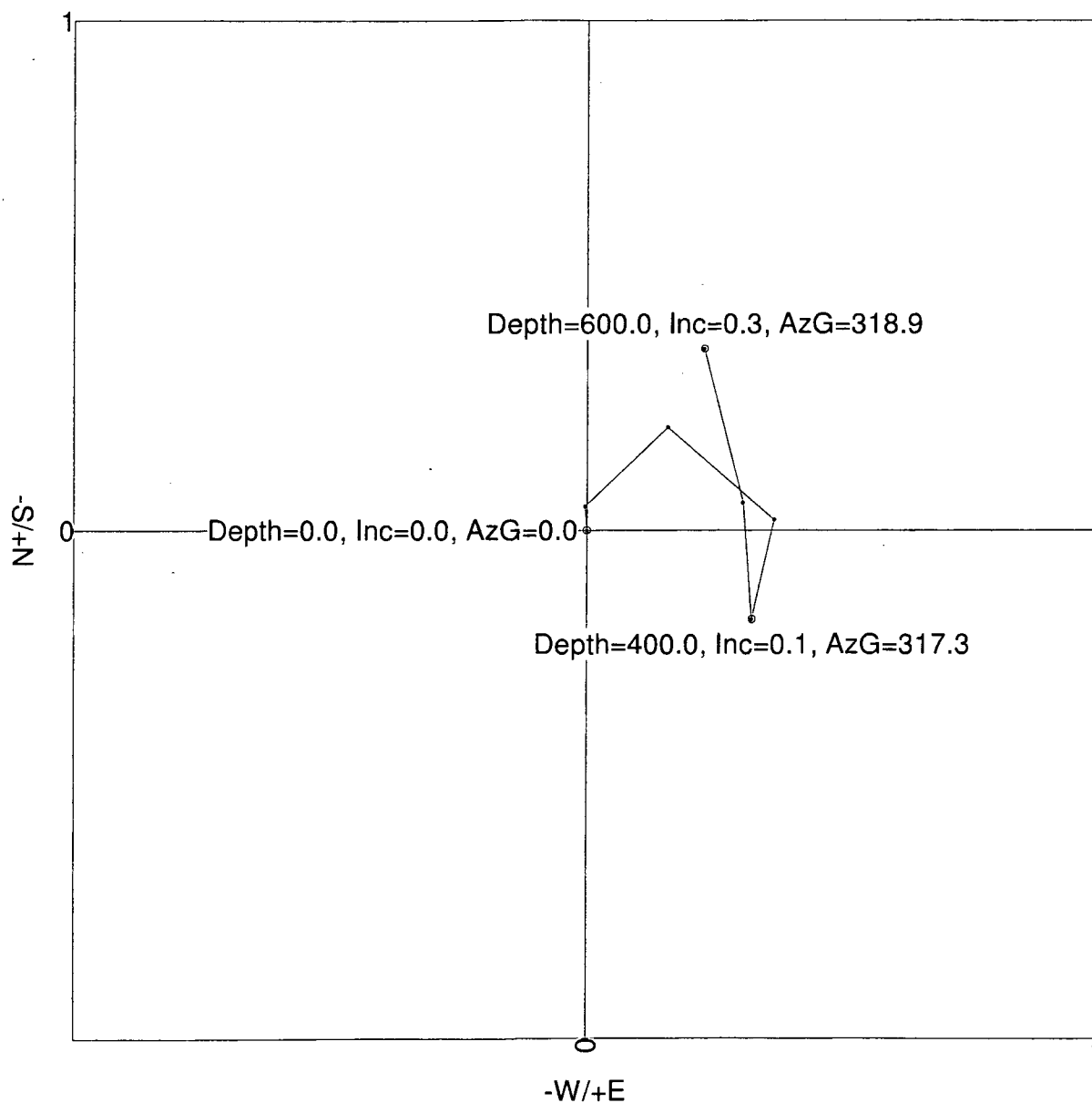
Filename: survey.ut
Minimum Curvature Method
Report Date/Time: 5/6/2013 / 09:06

Vaughn Energy Services
432-563-5444
Gardendale, Texas
Surveyor: Kyle Willis
West Shugart 2-19-30 State No 004H / API 30-015-40843

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.05	357.10	100.00	0.05	0.00	0.00	0.05	357.10	0.05
200.00	0.22	55.98	200.00	0.20	0.16	0.16	0.26	37.56	0.20
300.00	0.34	171.10	300.00	0.02	0.36	0.36	0.36	86.69	0.48
400.00	0.15	317.26	400.00	-0.18	0.32	0.32	0.37	118.61	0.47
500.00	0.17	27.43	500.00	0.05	0.30	0.30	0.31	79.77	0.19
600.00	0.25	318.89	600.00	0.36	0.23	0.23	0.42	32.46	0.25



Vaughn Energy Services
432-563-5444
Gardendale, Texas
Surveyor: Kyle Willis
West Shugart 2-19-30 State No 004H / API 30-015-40843



VES Survey Date: 05/02/2013