



Company: MATADOR RESOURCES
 Lease/Well: STEBBINS 19 FED/124H

30-015-44172

Rig Name: PATTERSON 809
 State/County: NEW MEXICO/EDDY
 VS-Azi: 0.00 Degrees



Latitude: 32.55210, Longitude: -104.10563
 Grid North = True North -0.12 degs (NAD 27)
 Grid Correction Applied = -0.12 degs

Depth Reference : RKB = 28.5 FEET

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: msgyro_run01-01-de_01.ut
 Minimum Curvature Method
 Report Date/Time: 12/20/2017 / 14:11

VES Survey International
 Midland, TX
 432-563-5444

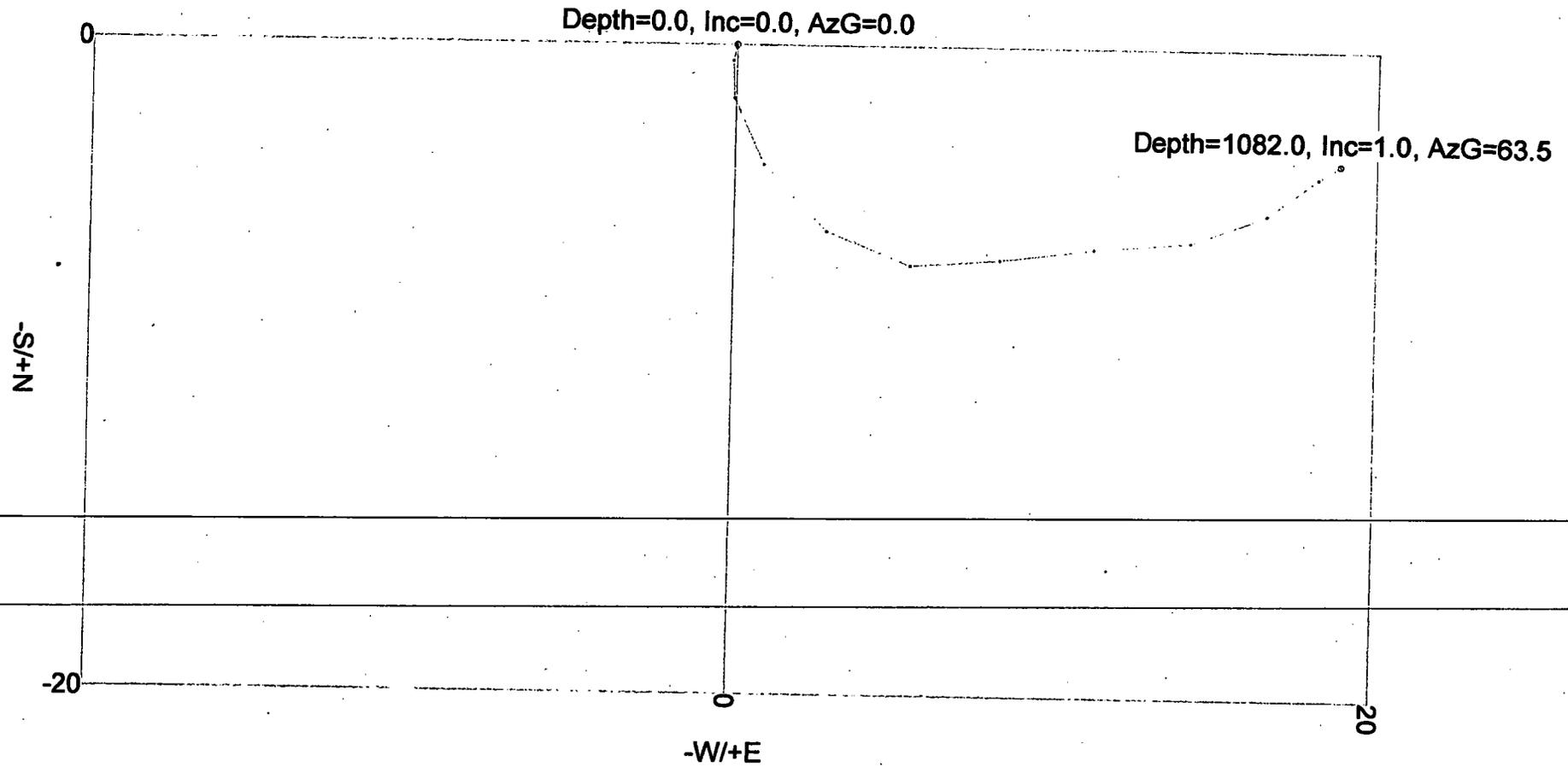
Surveyor: Christopher Hair
 Stebbins 19 Fed 124H / API 30-015-44172

RECEIVED
 MAY 07 2018
 DISTRICT II-ARTESIA O.C.D.

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	****
98.00	0.11	189.05	98.00	-0.09	-0.01	-0.09	0.09	189.05	0.11
192.00	0.39	193.72	192.00	-0.49	-0.10	-0.49	0.50	192.01	0.30
286.00	1.06	171.53	285.99	-1.66	-0.05	-1.66	1.66	181.81	0.76
380.00	1.74	145.12	379.96	-3.69	0.89	-3.69	3.79	166.40	0
474.00	1.79	126.20	473.92	-5.72	2.89	-5.72	6.41	153.20	0.62
568.00	1.74	96.18	567.88	-6.74	5.49	-6.74	8.69	140.85	0
662.00	1.72	75.48	661.84	-6.54	8.27	-6.54	10.55	128.35	0
756.00	1.96	89.64	755.79	-6.18	11.24	-6.18	12.83	118.80	0.54
850.00	1.81	80.90	849.74	-5.93	14.31	-5.93	15.49	112.53	0.34
944.00	1.28	53.22	943.70	-5.07	16.61	-5.07	17.37	106.99	0
1038.00	1.06	53.43	1037.68	-3.93	18.15	-3.93	18.57	102.21	0.22
1082.00	1.04	63.49	1081.68	-3.50	18.83	-3.50	19.16	100.54	0.42

GTI
GYRO TECHNOLOGIES INC.

VES Survey International
Midland, TX
432-563-5444
Surveyor: Christopher Hair
Stebbins 19 Fed 124H / API 30-015-44172



VES Survey Date: 12/15/2017



I Christopher Hair certify that I am employed by VES Survey International. That I did on the day(s) of 12/16/17 through 12/16/17 conduct or supervise the taking of a Rate Gyro survey from a depth of 0.00 feet to a depth of 1,082.00 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Matador Production Company for the Stebbins 19 Fed Well # 124H API # 30-015-44172 in Eddy County/ Parish New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by VES Survey International.

A handwritten signature in cursive script, appearing to read "Chris Hair", written over a horizontal line.

Christopher Hair
Service Technician
VES Survey International