



Gyrodatta Incorporated
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Houston, Texas 77043

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SURVEY REPORT
PETRO-TECH PERUANA
LO-6-18
PEPESA-48
CAMPO LOBITOS, PERU
HT0301GME260

MARCH 17, 2001

CENTRAL FIL
GEOSCIENCES

PETRO-TECH PERUANA S.A.
GERENCIA GEO-TECNICAS

20 ABR. 2001

Firma:

RECIBIDO

A Gyrodata Directional Survey

for

PETRO-TECH PERUANA S.A.

Well: LO-6-18, PRODUCTION PIPE 2 3/8"

Location: PEPESA-48/LO-06, CAMPO LOBITOS

Job Number: HT0301GME260

Run Date: 3/17/01

Surveyor: Angel Cordozo

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 4.450000 deg. S

Azimuth Correction:

Gyro: Bearings are Relative to True North

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location

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MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	BORE HOLE BEARING deg. min.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. feet	AZIMUTH deg.	HORIZONTAL COORDINATES feet
0.0	0.00	0.00	N 0 0 E	0.00	0.0	0.0	0.0	0.00 N 0.00 E

PROFUNDIDADES REFERIDAS A CABEZA DEL POZO LO-18

GYRO MULTISHOT CORRIDO EN PRODUCTION PIPE DE 2 3/8" DESDE 2500' HASTA SUPERFICIE

100.0	0.54	33.02	N 33 1 E	0.54	100.0	0.5	33.0	0.39 N 0.26 E
200.0	0.50	25.70	N 25 42 E	0.08	200.0	1.4	30.7	1.18 N 0.70 E
300.0	0.63	314.90	N 45 6 W	0.66	300.0	2.0	14.2	1.96 N 0.50 E
400.0	0.92	332.62	N 27 23 W	0.37	400.0	3.1	355.1	3.06 N 0.26 W
500.0	0.76	322.90	N 37 6 W	0.21	500.0	4.4	346.5	4.30 N 1.03 W
600.0	1.01	344.47	N 15 32 W	0.41	600.0	5.9	343.6	5.68 N 1.67 W
700.0	1.10	354.80	N 5 12 W	0.21	699.9	7.7	345.1	7.49 N 1.99 W
800.0	4.40	339.90	N 20 6 W	3.35	799.8	12.5	344.2	12.05 N 3.40 W
900.0	8.82	344.09	N 15 55 W	4.44	899.1	24.0	343.5	23.04 N 6.82 W
1000.0	13.21	341.84	N 18 10 W	4.40	997.3	43.1	343.2	41.27 N 12.49 W
1100.0	17.11	346.59	N 13 25 W	4.10	1093.8	69.2	343.7	66.45 N 19.47 W
1200.0	20.14	356.50	N 3 30 W	4.37	1188.5	100.8	346.3	97.96 N 23.93 W
1300.0	23.38	4.61	N 4 36 E	4.41	1281.4	137.0	350.2	134.94 N 23.39 W
1400.0	26.16	9.37	N 9 22 E	3.42	1372.2	177.4	354.1	176.48 N 18.21 W
1500.0	29.89	14.84	N 14 50 E	4.52	1460.5	222.5	357.9	222.34 N 8.24 W
1600.0	31.57	16.15	N 16 9 E	1.81	1546.5	271.6	1.1	271.57 N 5.43 E
1700.0	32.08	7.84	N 7 50 E	4.41	1631.5	323.5	2.9	323.05 N 16.34 E
1800.0	33.37	0.40	N 0 24 E	4.22	1715.6	377.4	3.1	376.88 N 20.15 E
1900.0	34.54	357.67	N 2 20 W	1.93	1798.6	433.1	2.5	432.71 N 19.19 E
2000.0	34.86	357.21	N 2 47 W	0.41	1880.8	489.9	1.9	489.58 N 16.65 E

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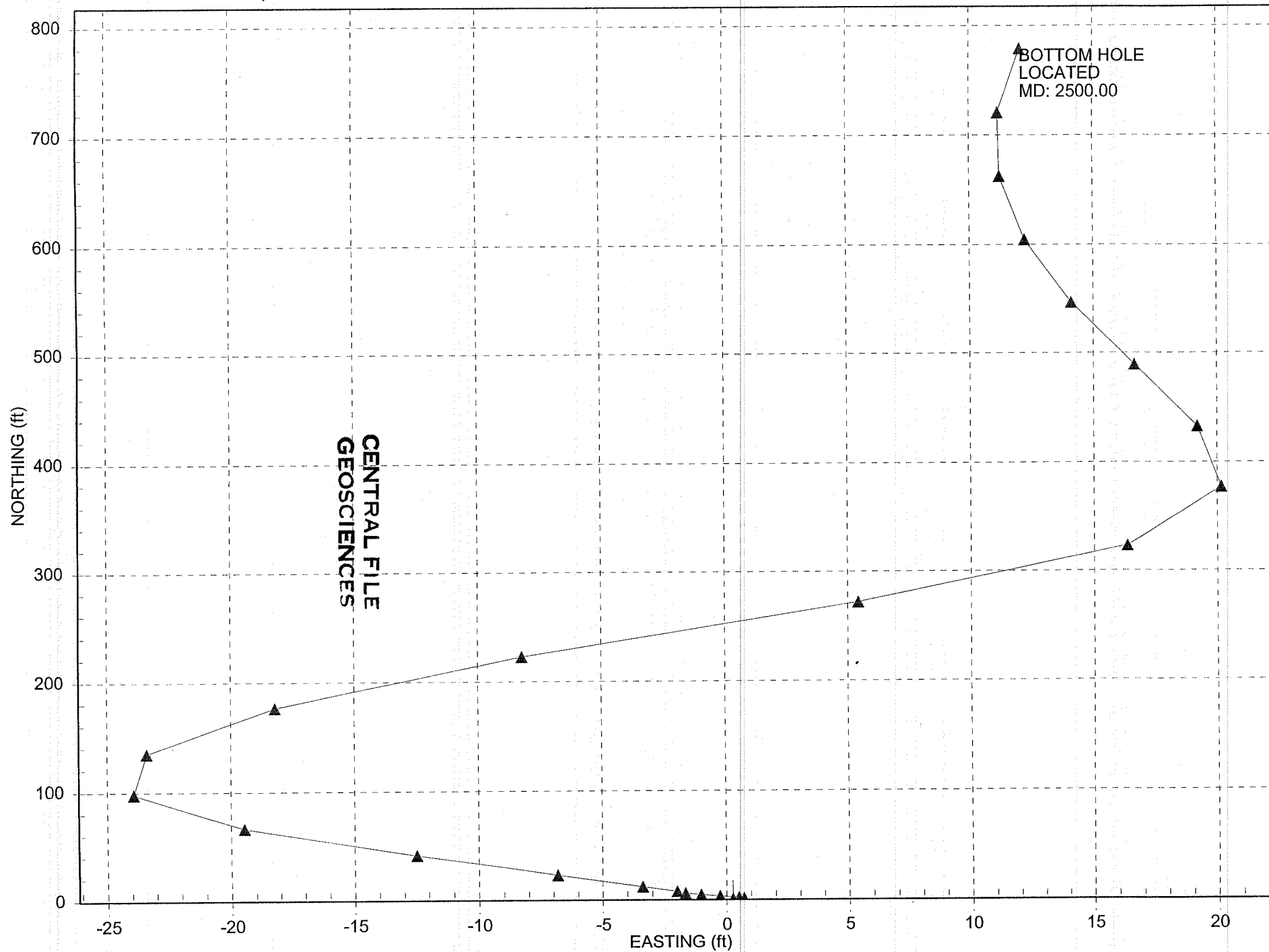
MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	BORE HOLE BEARING deg. min.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
2100.0	35.17	357.69	N 2 19 W	0.42	1962.7	547.1 1.5	546.91 N 14.09 E
2200.0	35.32	358.57	N 1 26 W	0.53	2044.4	604.7 1.2	604.58 N 12.21 E
2300.0	35.51	359.44	N 0 34 W	0.54	2125.9	662.6 1.0	662.52 N 11.20 E
2400.0	35.56	0.44	N 0 26 E	0.58	2207.2	720.7 0.9	720.64 N 11.14 E
2500.0	35.64	1.33	N 1 20 E	0.53	2288.5	778.9 0.9	778.84 N 12.04 E

Final Station Closure: Distance: 778.93 ft Az: 0.89 deg.

CENTRAL
GEOSCIENCE

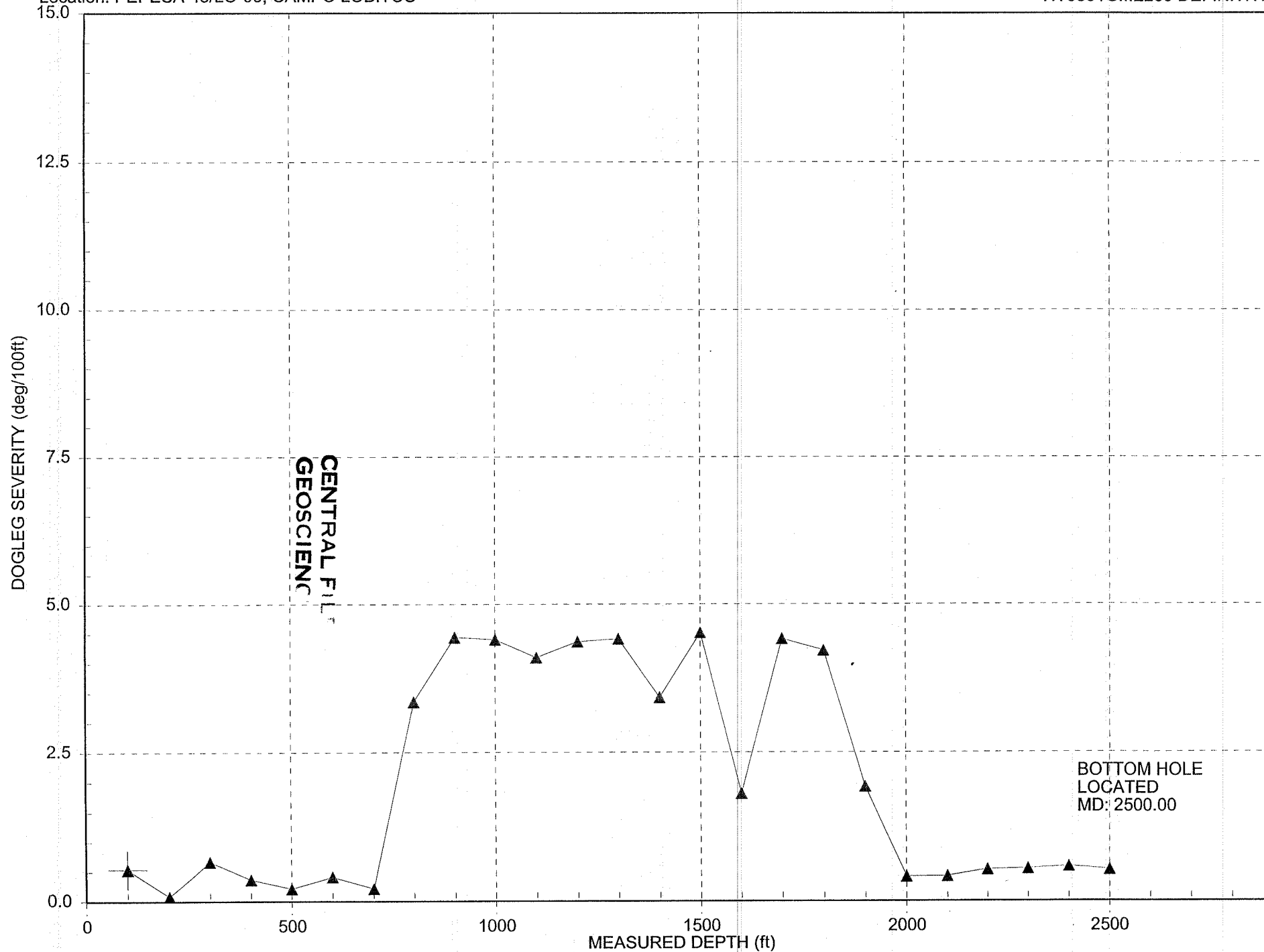
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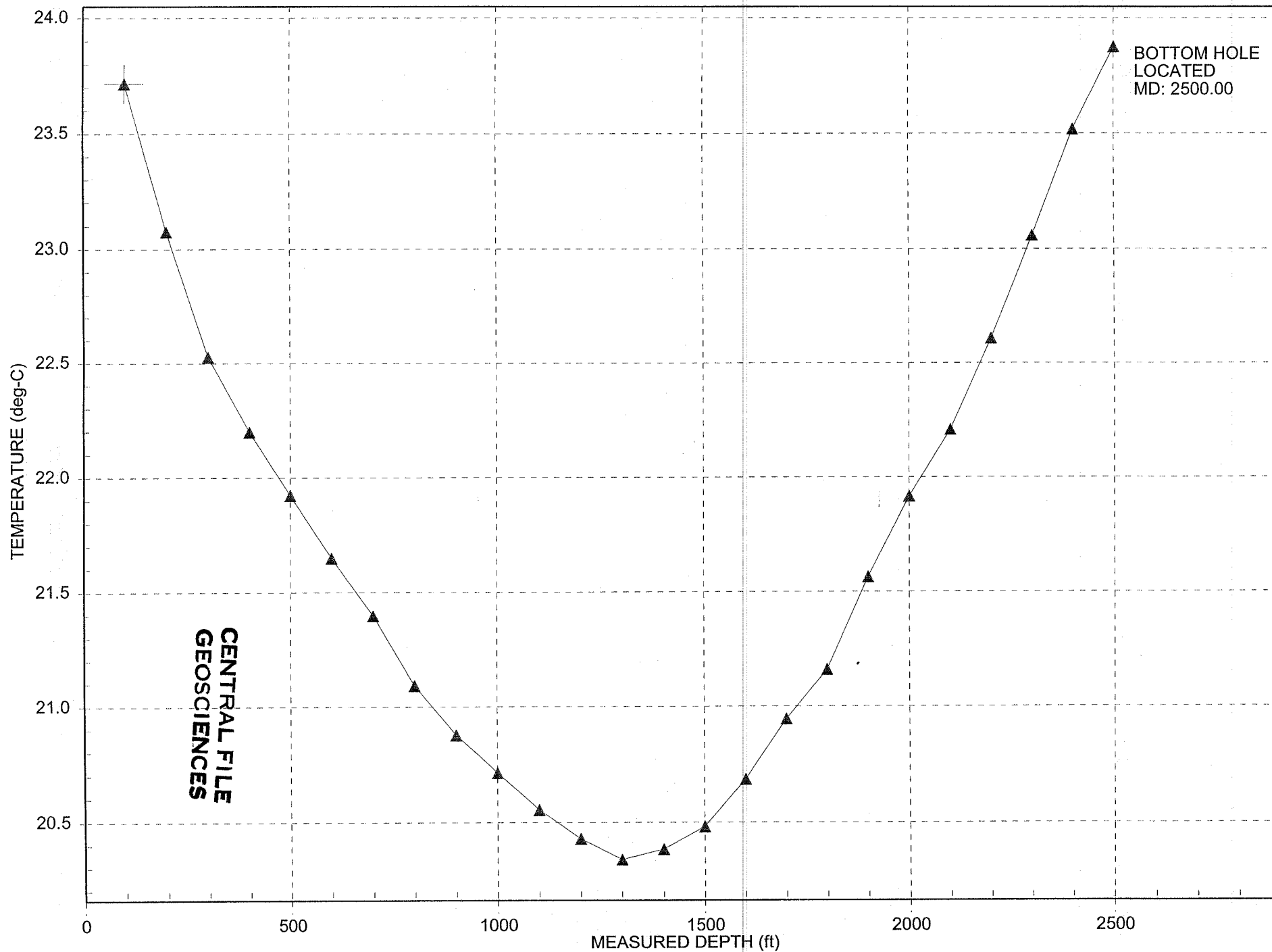
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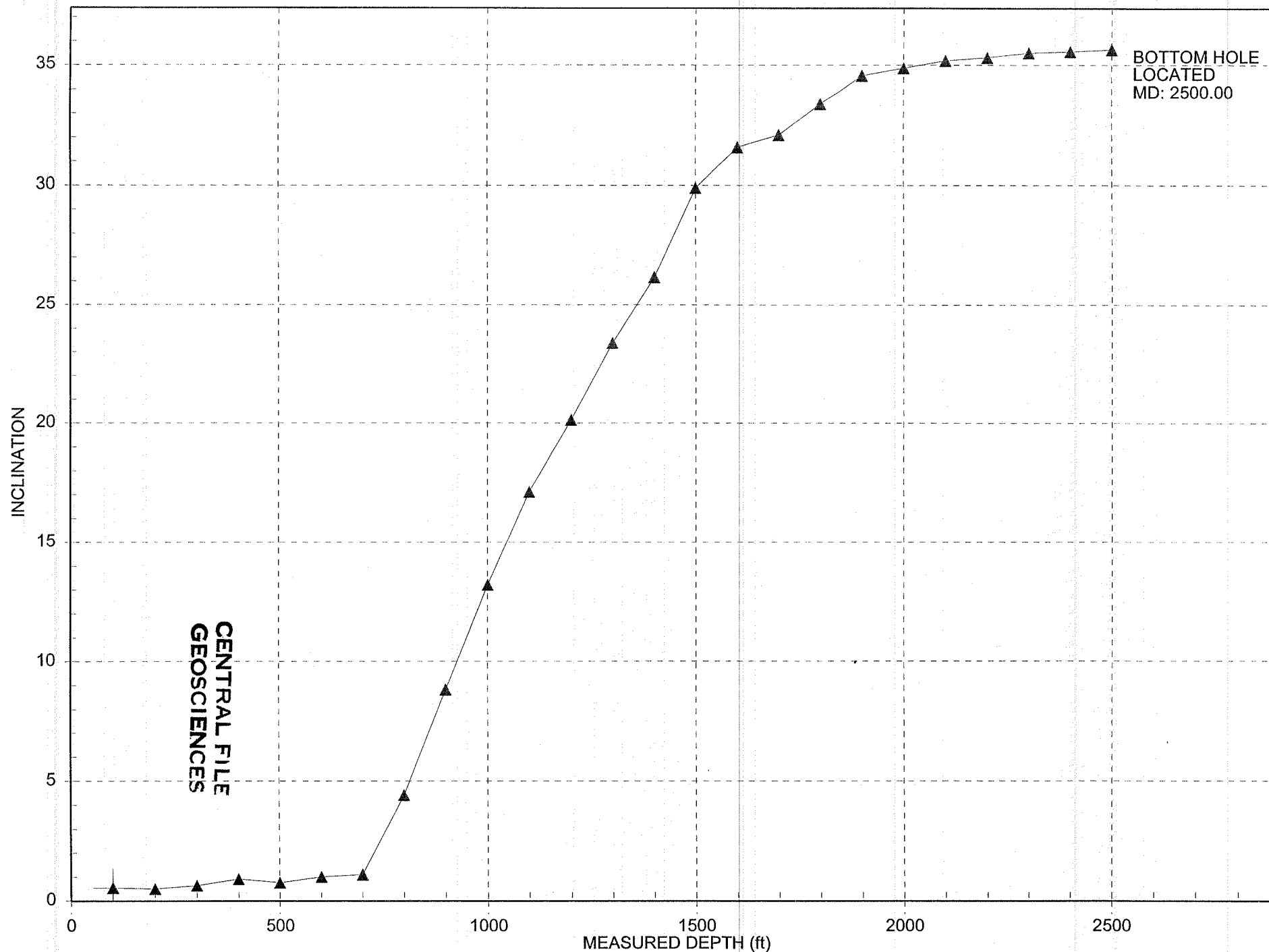
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