



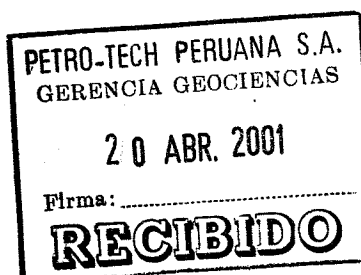
Gyrodata Incorporated
1682 W. Sam Houston Pkwy. N.
Houston, Texas 77043

713/461-3146
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SURVEY REPORT
PETRO-TECH PERUANA
LO-6-17
PEPESA-48
CAMPO LOBITOS, PERU
HT0301GME262

MARCH 15, 2001

CENTRAL FILE
GEOSCIENCES



A Gyrodata Directional Survey

for

PETRO-TECH PERUANA S.A.

Well: LO-6-17, CASING 5 1/2"

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

Job Number: HT0301GME262

Run Date: 3/15/01

Surveyor: Angel Cordozo

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 4.450000 deg. S

Azimuth Correction:

Gyro: Bearings are Relative to True North

Proposed Well Direction: 285.000 deg

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.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
0.0	0.00	0.00	0.0	0.00	0.0	0.0 0.0	0.00 N 0.00 E

PROFUNDIDADES CON REFERENCIA A CABEZA DE POZO LO-6-17
GYRO MULTISHOT CORRIDO EN CASING DE 5 1/2" DESDE 2500' HASTA SUPERFICIE

CENTRAL FILE
GEOSCIENCES

100.0	0.79	33.20	-0.2	0.79	100.0	0.7 33.2	0.58 N 0.38 E
200.0	0.55	17.30	-0.5	0.30	200.0	1.9 29.1	1.62 N 0.90 E
300.0	0.47	327.53	-0.2	0.44	300.0	2.6 18.7	2.43 N 0.82 E
400.0	0.36	306.27	0.4	0.19	400.0	3.0 6.7	2.97 N 0.35 E
500.0	0.75	317.56	1.3	0.40	500.0	3.7 354.5	3.64 N 0.35 W
600.0	0.96	322.09	2.5	0.22	600.0	5.0 344.7	4.78 N 1.31 W
700.0	4.26	257.20	6.5	3.95	699.9	7.1 310.3	4.62 N 5.44 W
800.0	9.84	250.09	16.8	5.64	799.1	17.1 273.0	0.89 N 17.11 W
900.0	13.58	247.45	33.1	3.78	897.0	36.6 259.7	6.53 S 35.99 W
1000.0	16.92	250.89	54.4	3.46	993.4	62.6 255.4	15.80 S 60.59 W
1100.0	20.62	258.03	82.2	4.35	1088.1	94.7 255.2	24.22 S 91.58 W
1200.0	25.36	265.21	118.1	5.49	1180.2	133.5 257.2	29.66 S 130.17 W
1300.0	30.68	269.08	162.8	5.63	1268.4	179.9 259.8	31.86 S 177.06 W
1400.0	33.96	263.58	213.3	4.40	1352.9	233.1 261.3	35.39 S 230.35 W
1500.0	36.10	260.33	266.1	2.84	1434.8	290.4 261.4	43.46 S 287.17 W
1600.0	37.39	255.43	319.3	3.20	1515.0	350.1 260.8	56.05 S 345.61 W
1700.0	39.54	255.02	373.3	2.17	1593.3	412.1 259.9	71.92 S 405.75 W
1800.0	40.17	255.69	429.0	0.76	1670.0	476.0 259.3	88.13 S 467.76 W
1900.0	40.53	257.40	485.9	1.17	1746.2	540.7 259.0	103.19 S 530.72 W
2000.0	40.22	258.13	543.5	0.56	1822.4	605.4 258.9	116.92 S 594.03 W

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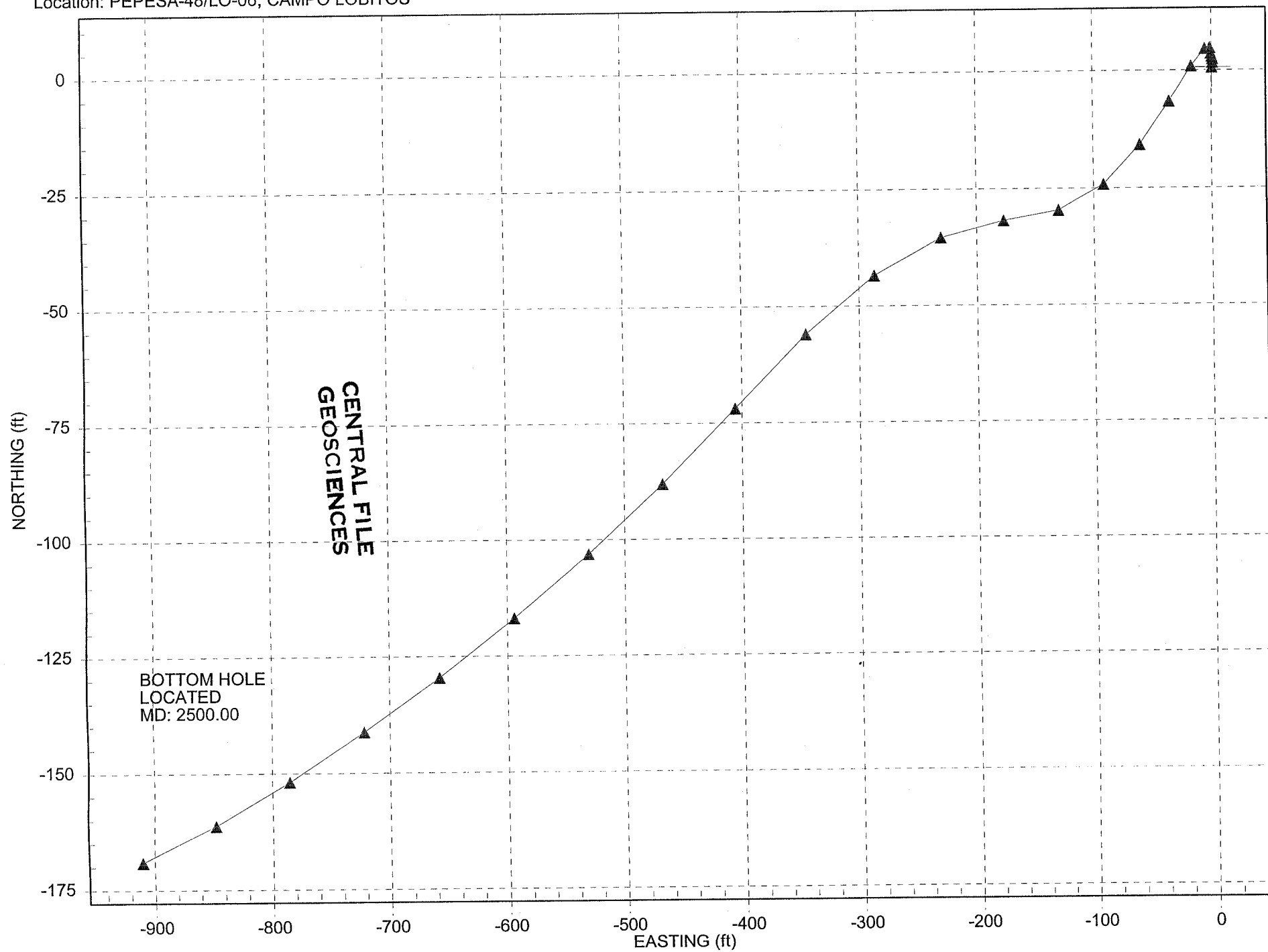
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2100.0	40.79	259.27	601.8	0.93	1898.4	670.4 258.8	129.64 S 657.72 W
2200.0	40.47	260.15	660.6	0.65	1974.3	735.5 258.9	141.27 S 721.79 W
2300.0	39.68	260.92	719.2	0.93	2050.9	799.8 259.1	151.86 S 785.30 W
2400.0	39.09	262.16	777.4	0.99	2128.1	863.2 259.2	161.20 S 848.06 W
2500.0	38.32	263.39	835.3	1.09	2206.2	925.7 259.5	169.07 S 910.09 W

Final Station Closure: Distance: 925.66 ft Az: 259.48 deg.

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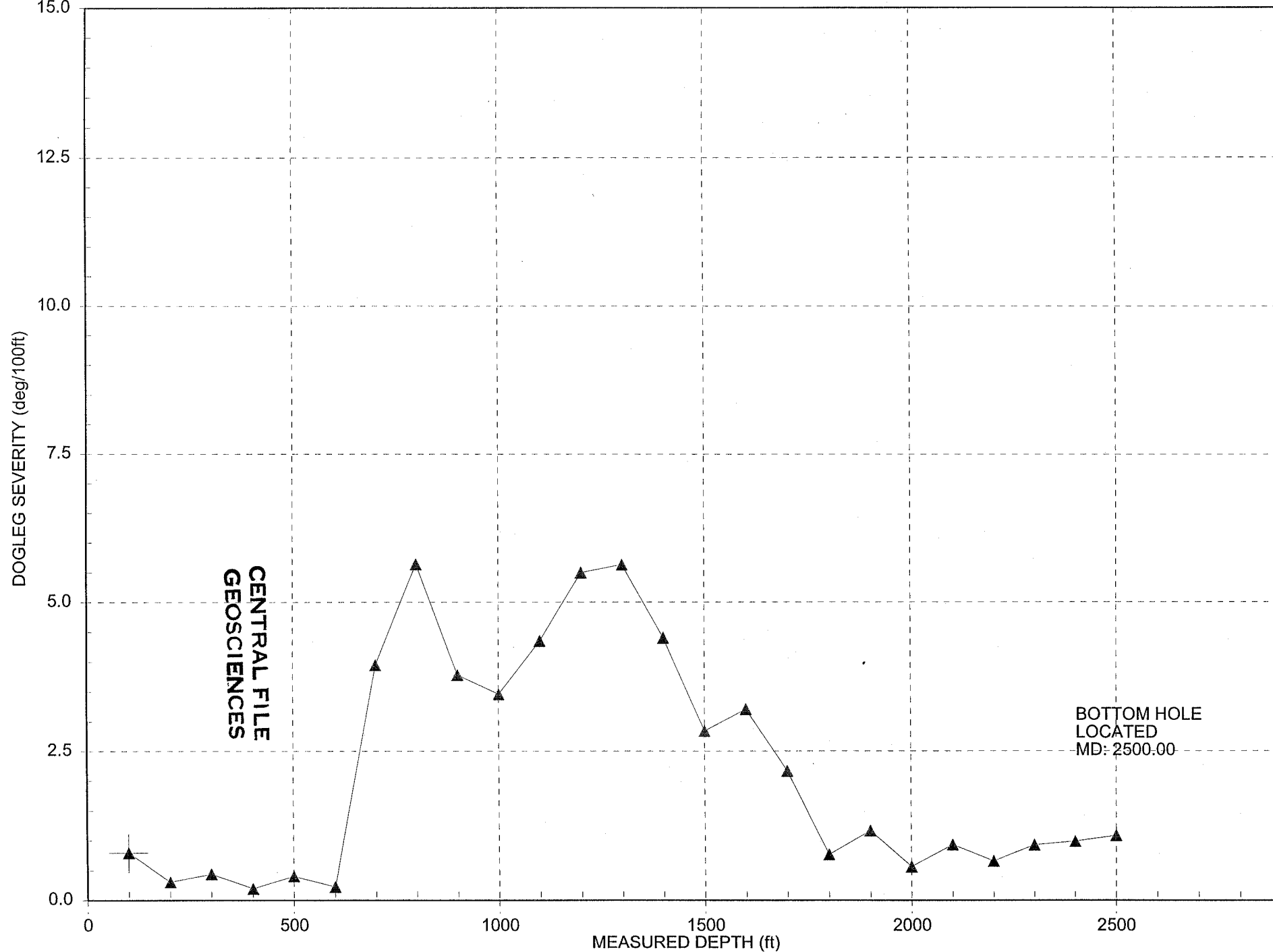
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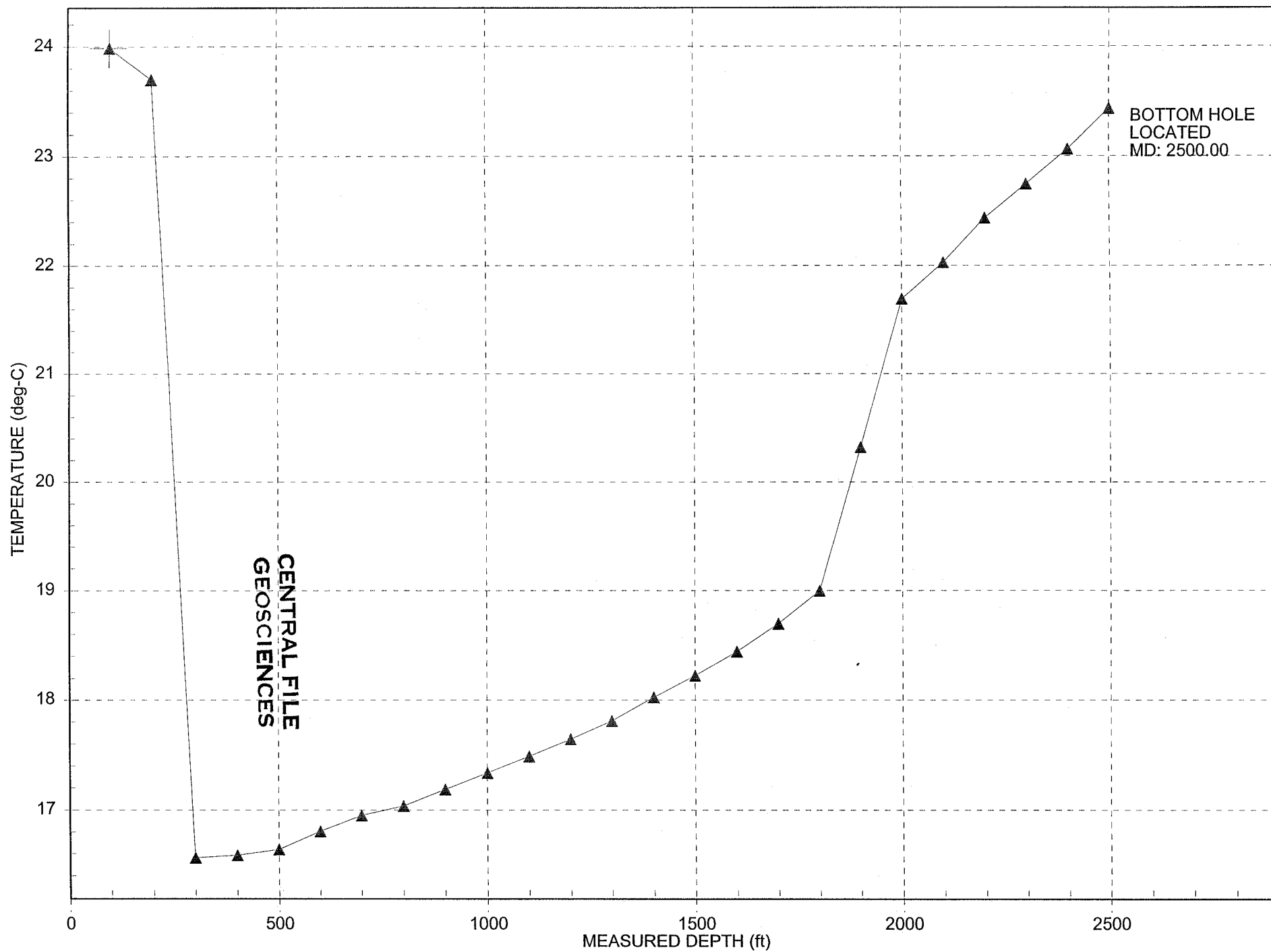
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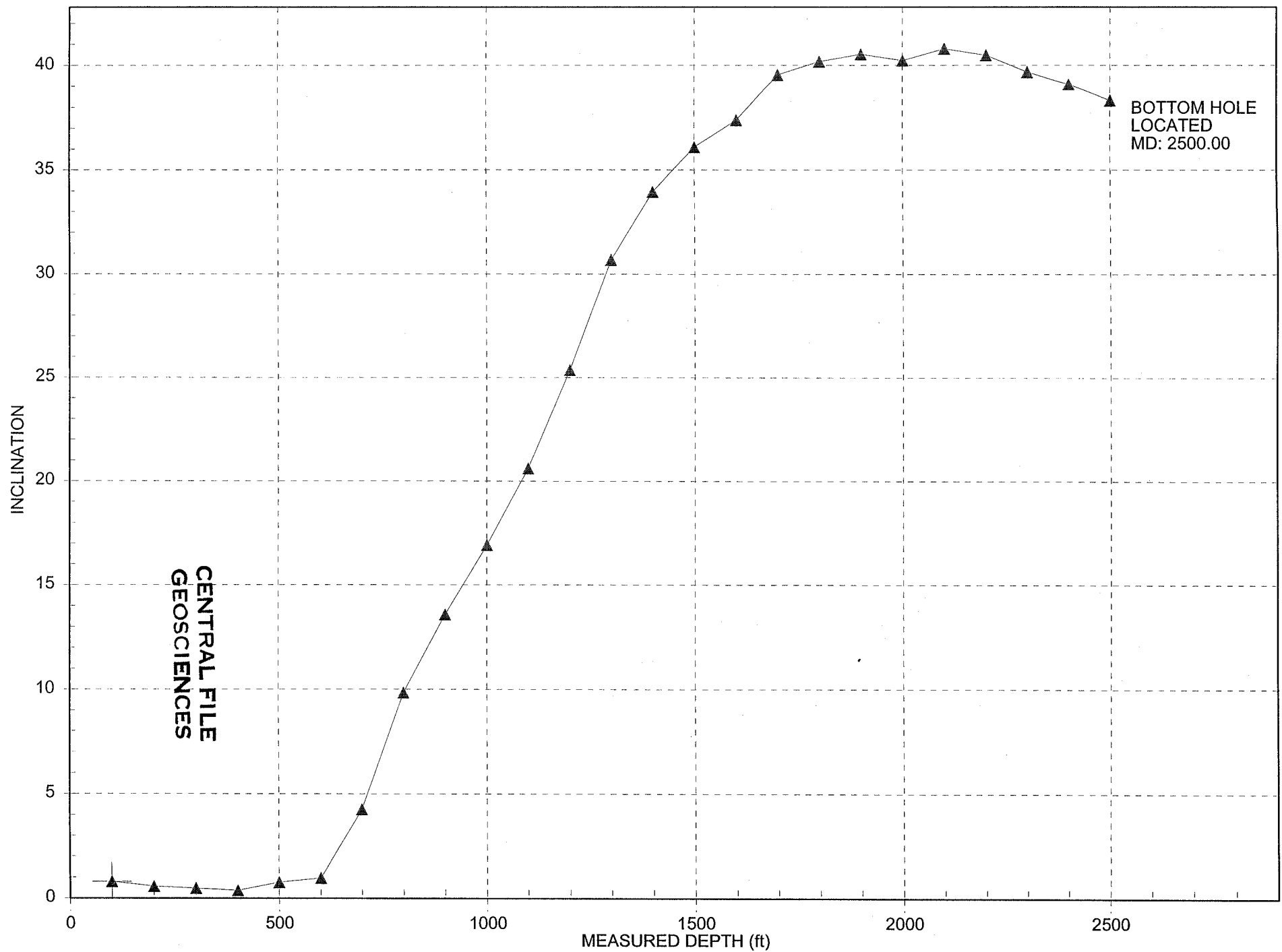
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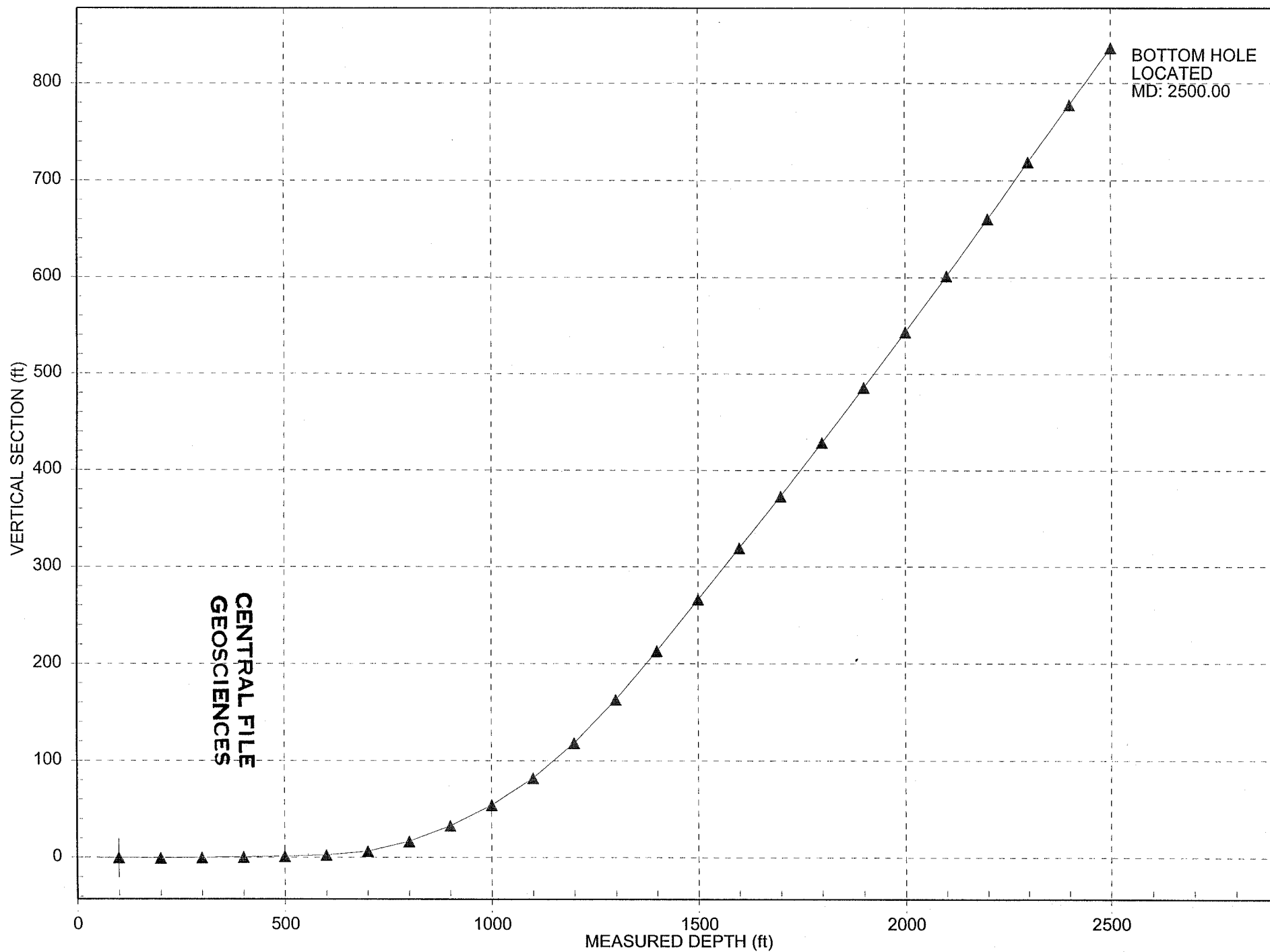
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