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Booster Dipole Field Computations

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U.S. Department of Energy

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BOOSTER DIPOLE FIELD COMPUTATIONS

*Booster Technical Note
No.5*

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January 10, 1986

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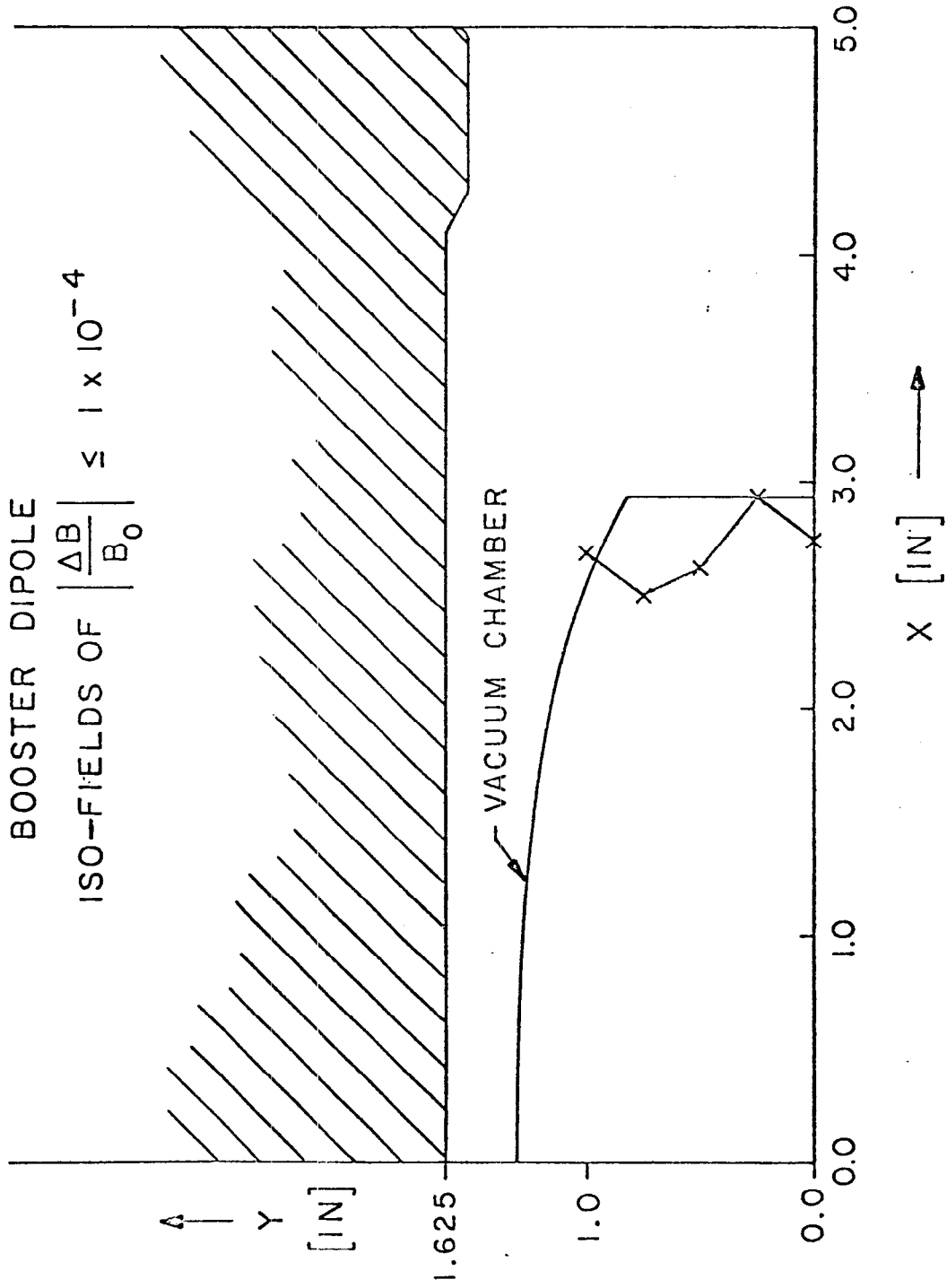
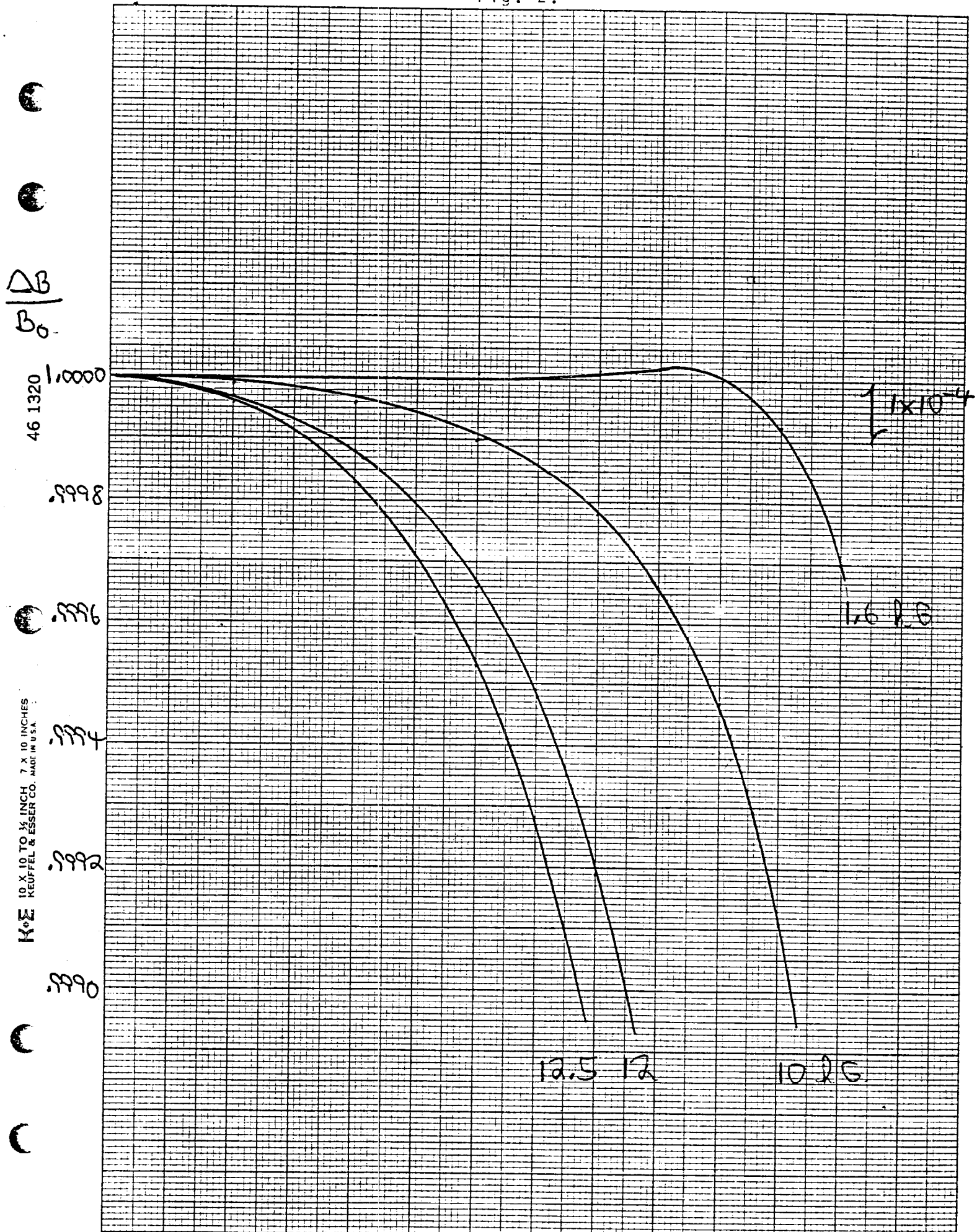


Fig. 1.

Fig. 2.



10 X 10 TO 1/2 INCH 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

K&E

.9990

.9992

.9994

.9996

.9998

1.0000

TABLE I.
 BOOSTER DIPOLE CONCEPTUAL DESIGN

B_0 (kG)	1.6	10	11	12	12.5	13
B_2/B_0	1.6	-0.314	-0.545	-1.042	-1.466	-2.032
B_4/B_0	0.2	-0.038	-0.076	-0.161	-0.229	-0.307
B_6/B_0	0.1	-0.003	-0.008	-0.015	-0.018	-0.019
B_8/B_0	0.1	-0.001	0.000	0.000	0.000	0.000
B_{10}/B_0	0.0	0.000	0.000	0.000	0.000	0.000

MULTIPOLES EXPRESSED IN UNITS OF 10^{-4} AT $X = 1$ IN., $Y = 0$ EXCEPT FOR 1.6 kG
 (INJECTION) WHICH IS EXPRESSED IN PPM'S.