

Figure 25 ISOTHERMAL DSC AT 350°C OF pH=3.5 CATALYST 5685-61

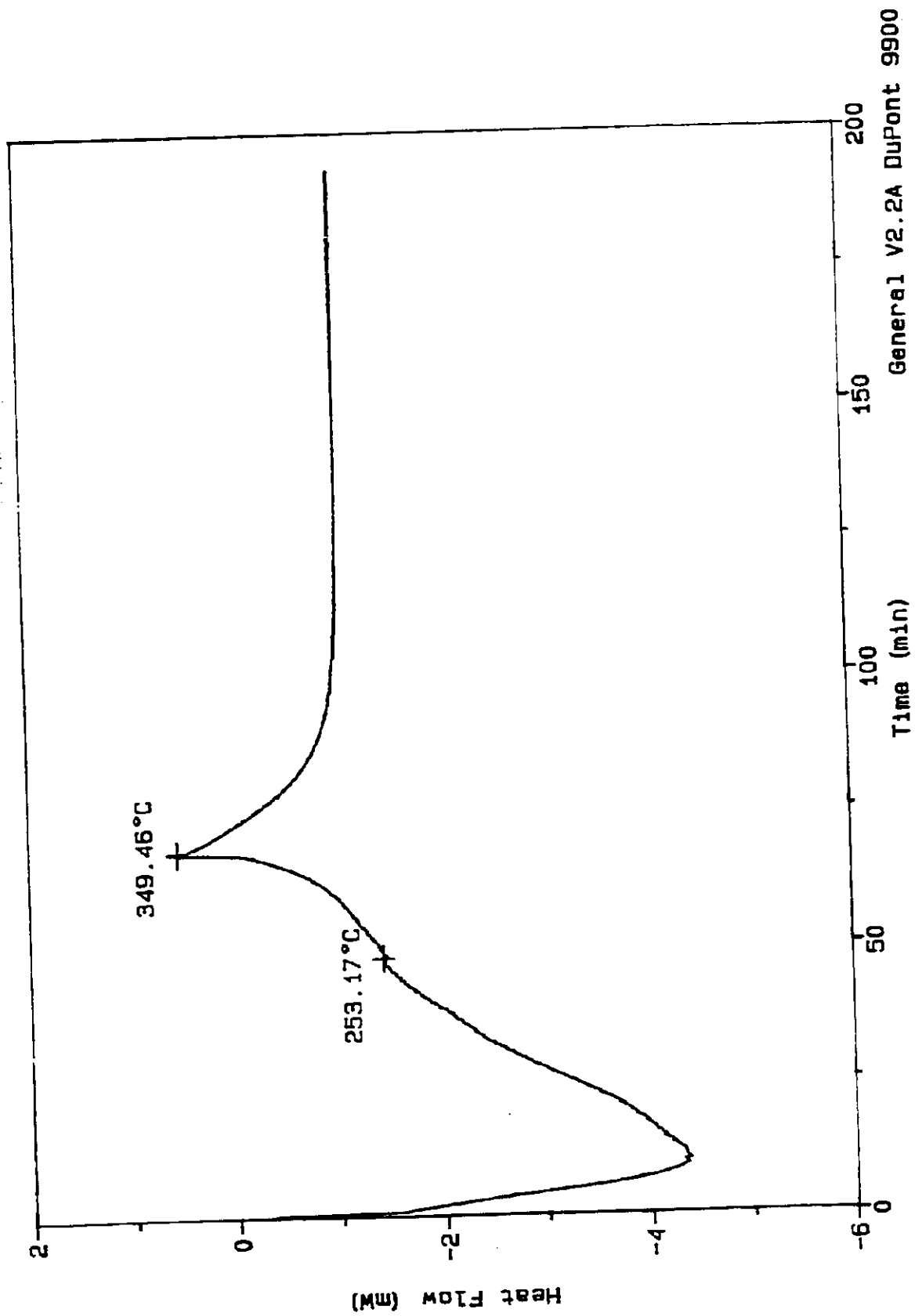
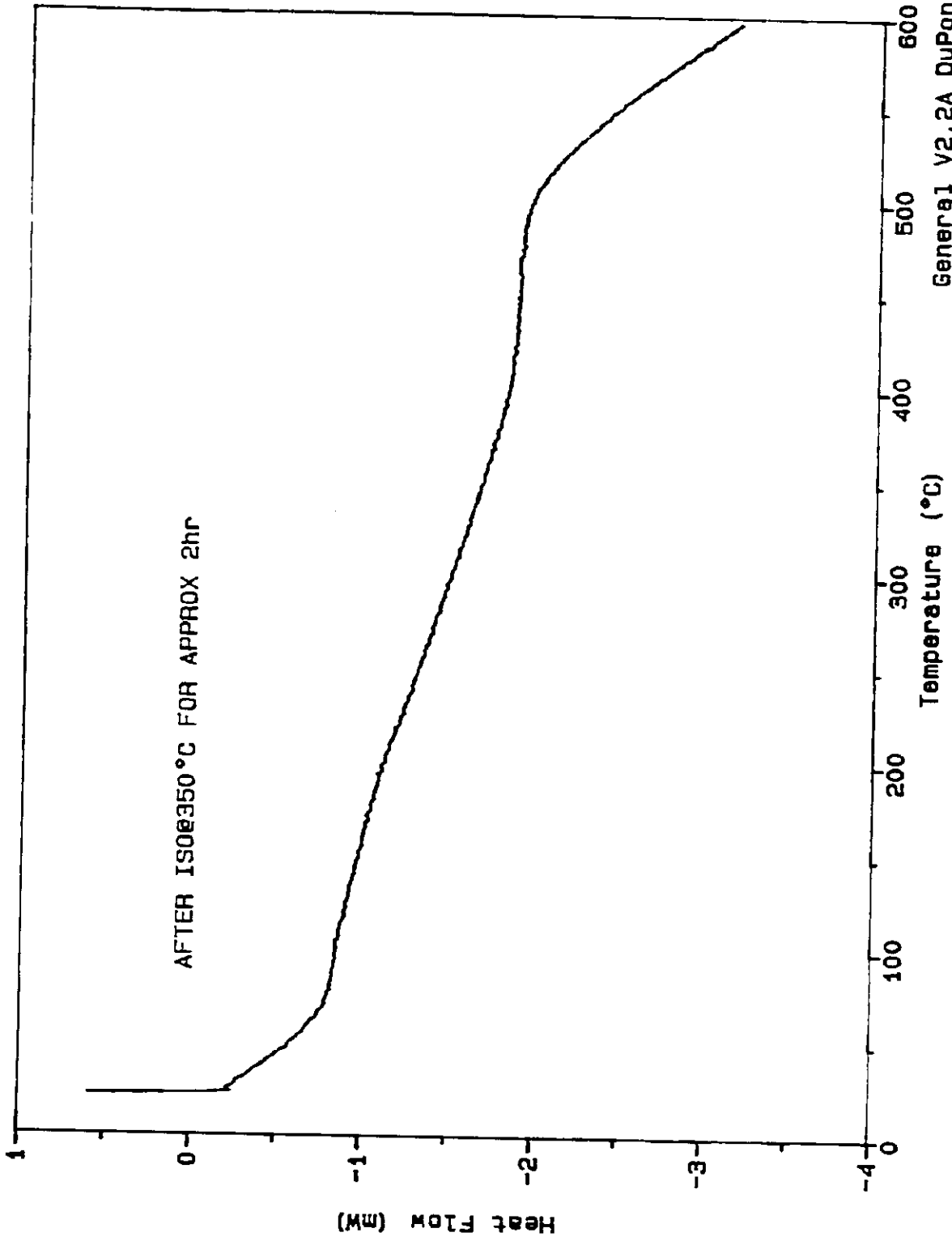


Figure 26 STANDARD DSC AFTER ISOTHERMAL DSC OF pH=3.5 CATALYST 5685-61



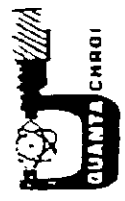
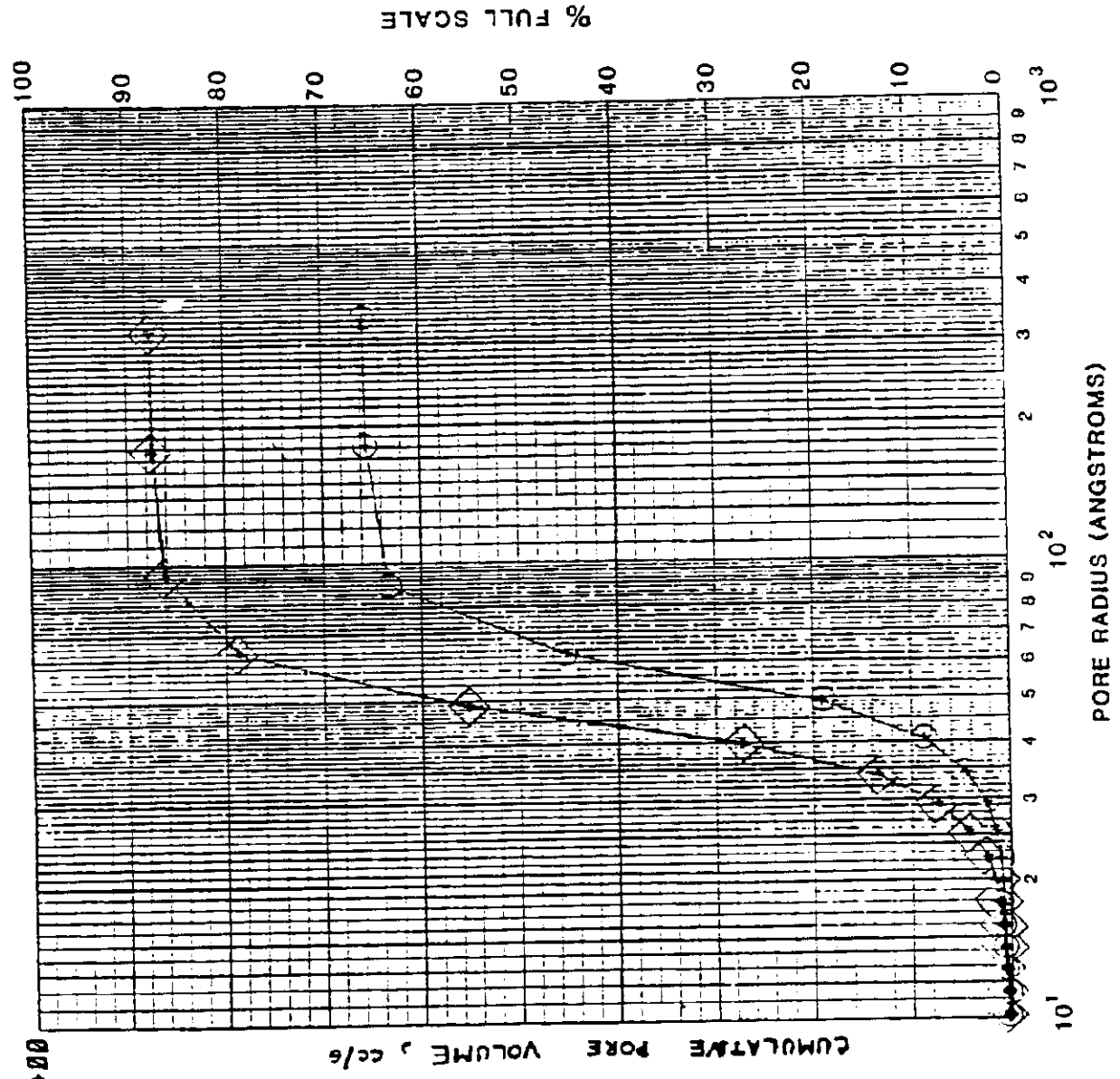


Figure 27

CUMULATIVE PORE VOLUME WITH pH=4.3 CATALYSTS CALCINED AT 380°C AND 450°C



.2500E+00

CUMULATIVE PORE VOLUME, cc/g

PORE RADIUS (ANGSTROMS)

% FULL SCALE

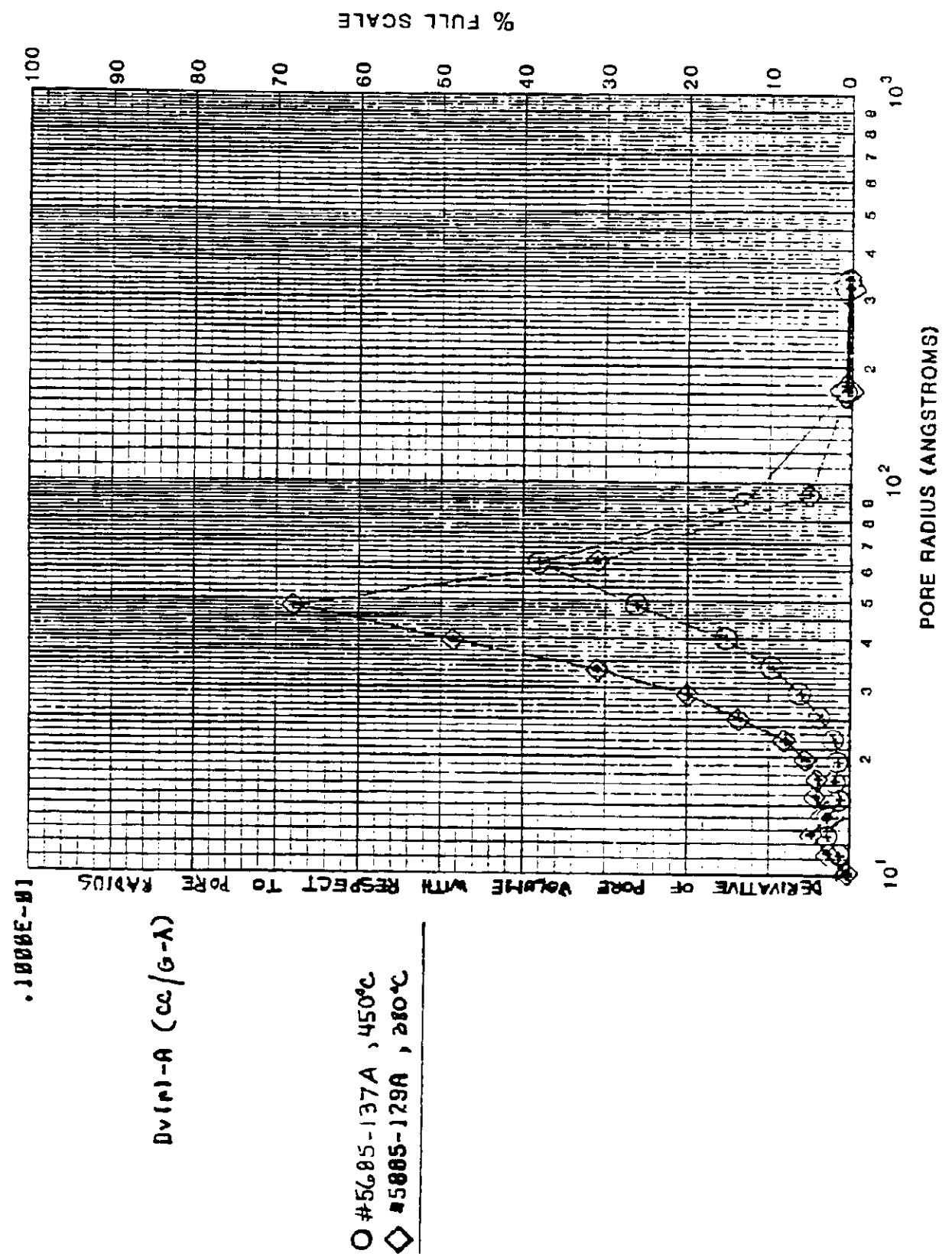
VP-A

- #5685-137A, 450°C
- ◇ #5885-129A, 380°C

00000000



Figure 28 PORE SIZE DISTRIBUTION WITH pH=4.3 CATALYSTS CALCINED AT 380°C AND 450°C



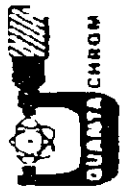
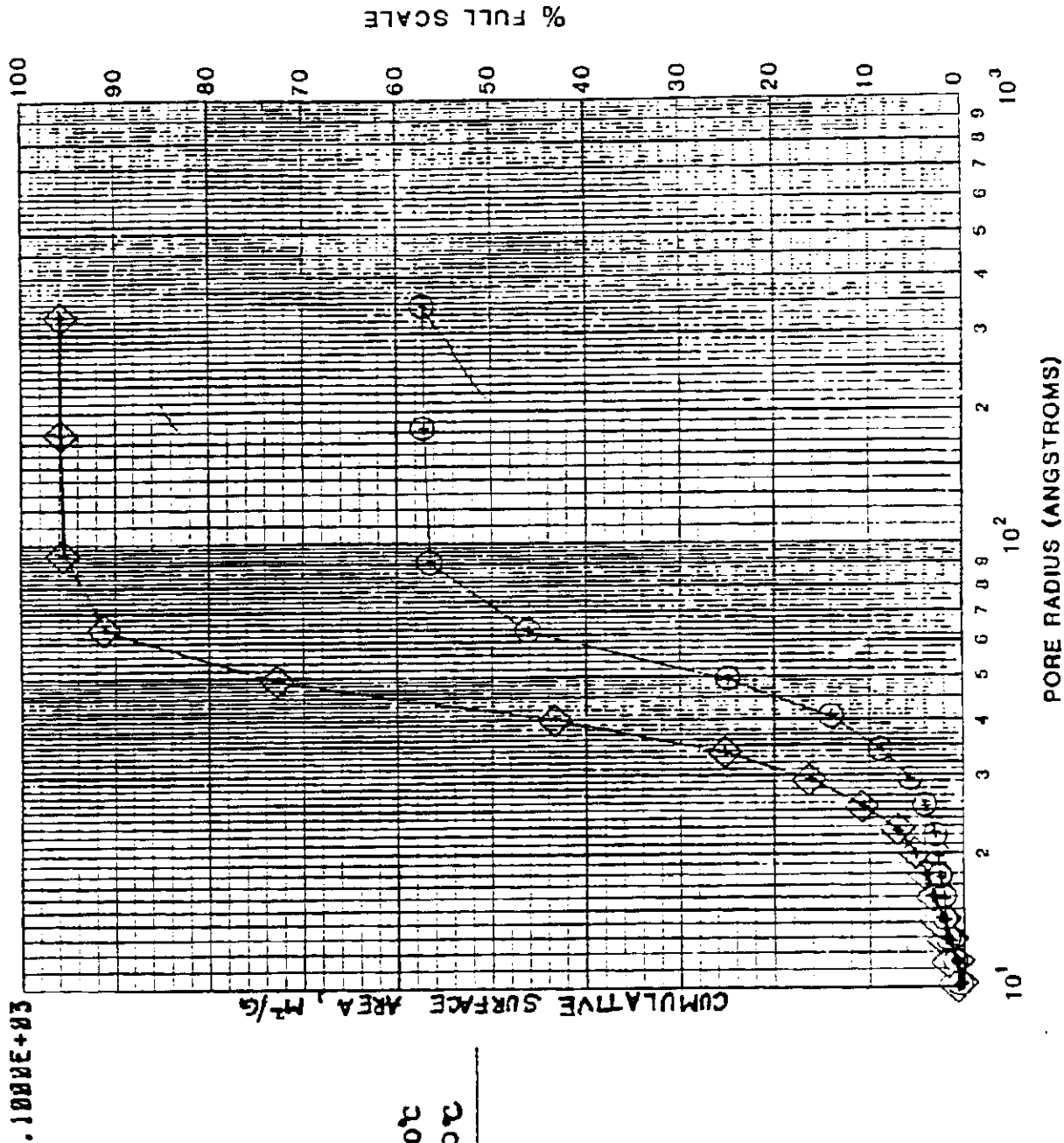


Figure 29

CUMULATIVE SURFACE AREA WITH pH=4.3 ACATALYSTS CALCINED AT 380°C AND 450°C

AUTOSORB



Sp-A

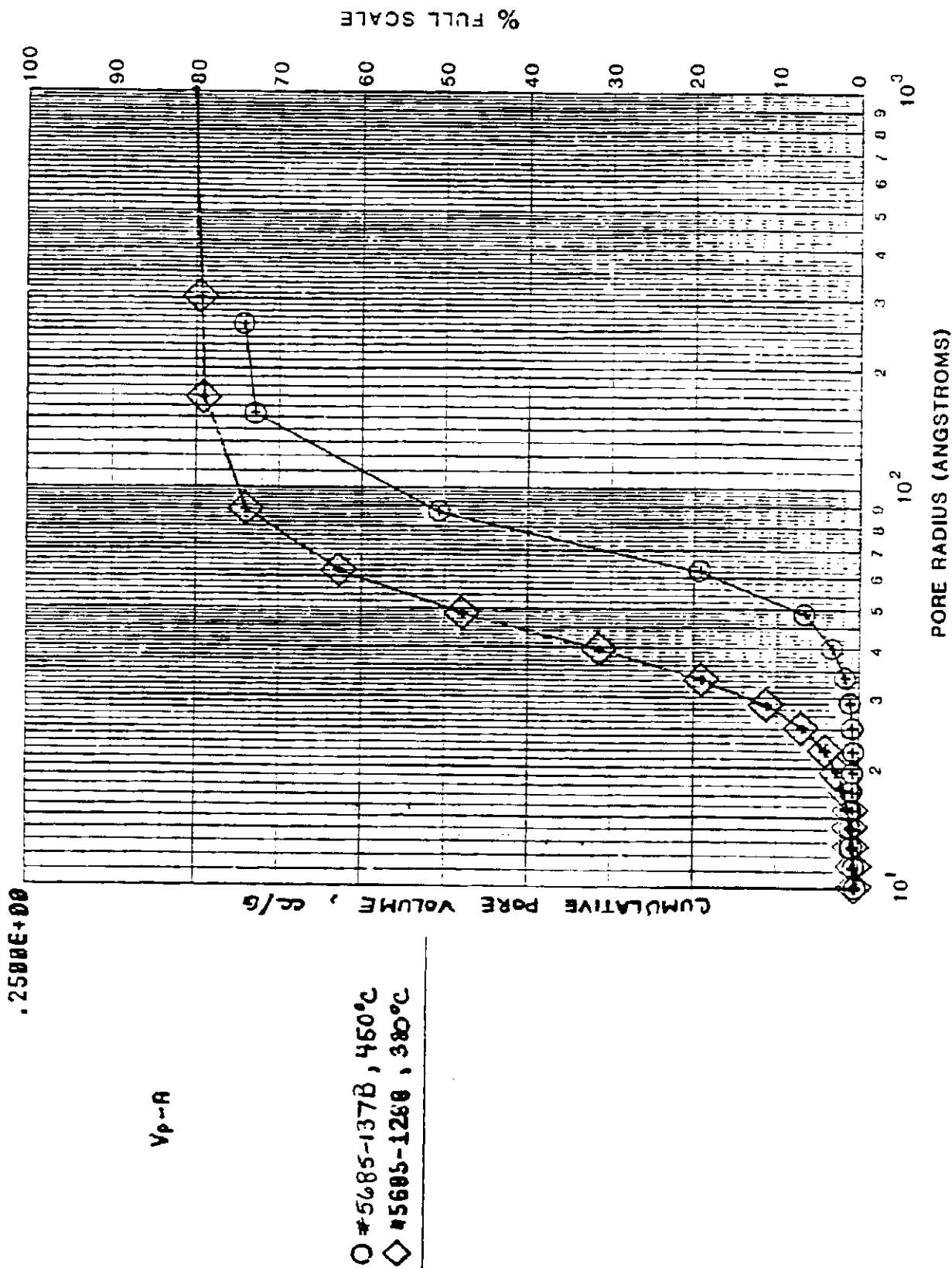
- #5685-137A, 450°C
- ◇ #5685-128A, 380°C



Figure 30

CUMULATIVE PORE VOLUME WITH pH-9.7 CATALYSTS CALCINED AT 380°C AND 450°C

AUTOSORB



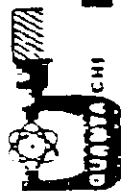
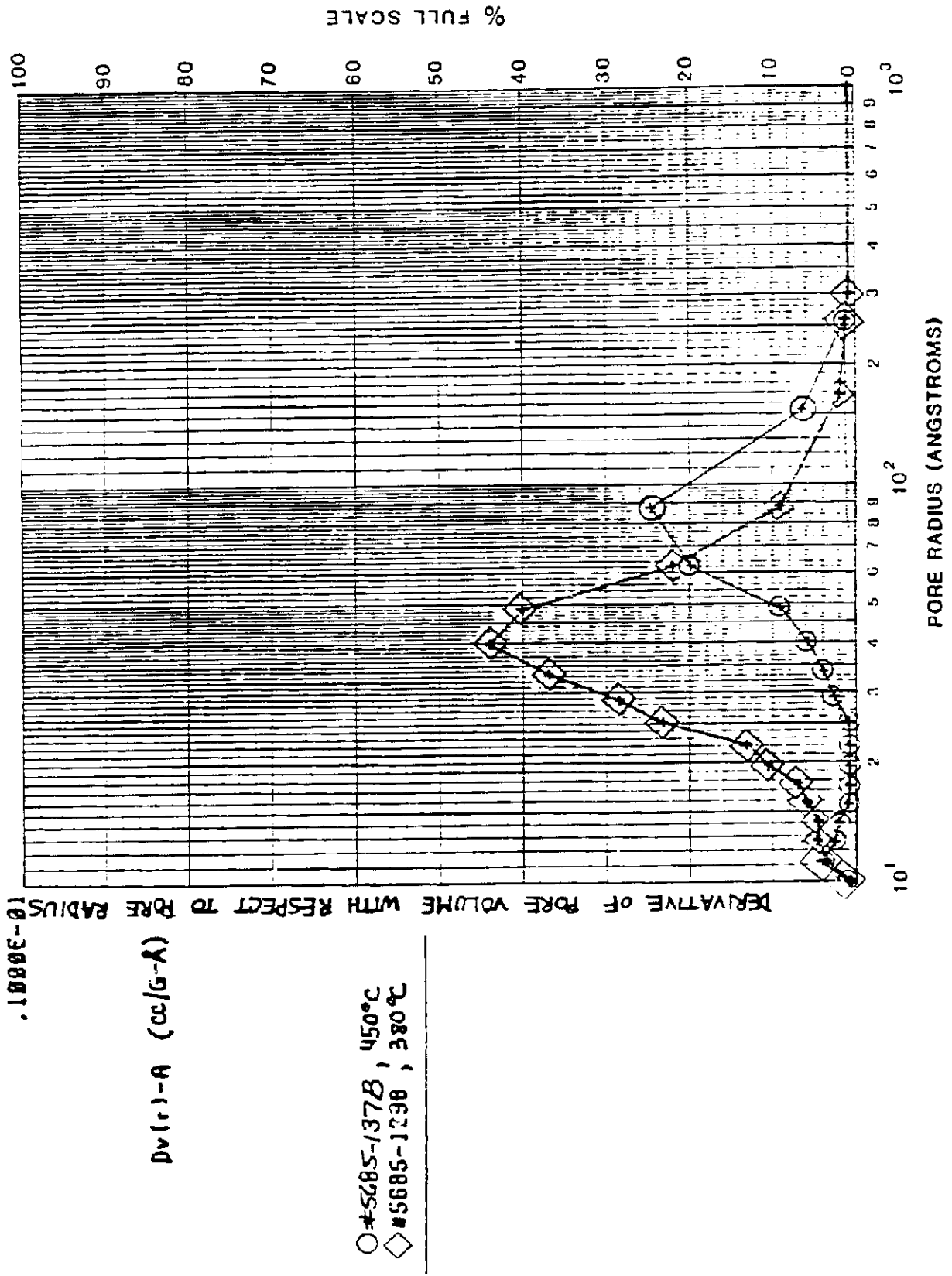


Figure 31 PORE SIZE DISTRIBUTION WITH pH=9.7 CATALYSTS CALCINED AT 380°C AND 450°C





AUTOSORB

Figure 32 CUMULATIVE SURFACE AREA WITH pH=9.7 CATALYSTS CALCINED AT 380°C AD 450°C

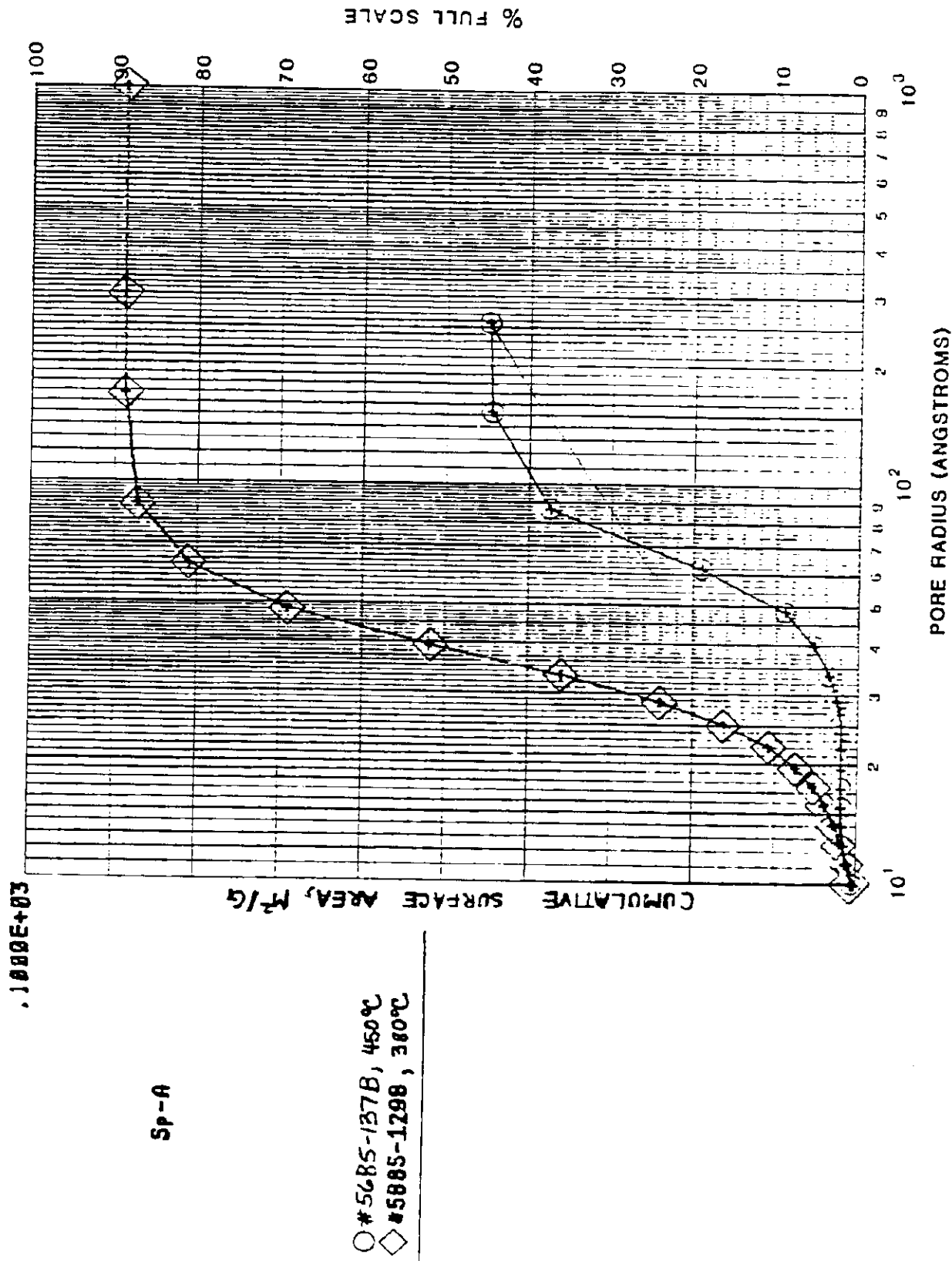


Figure 33
EFFECT OF CALCINATION TEMPERATURE ON TPR OF Fe/Cu CATALYSTS
PRECIPITATED AT PH 4.3

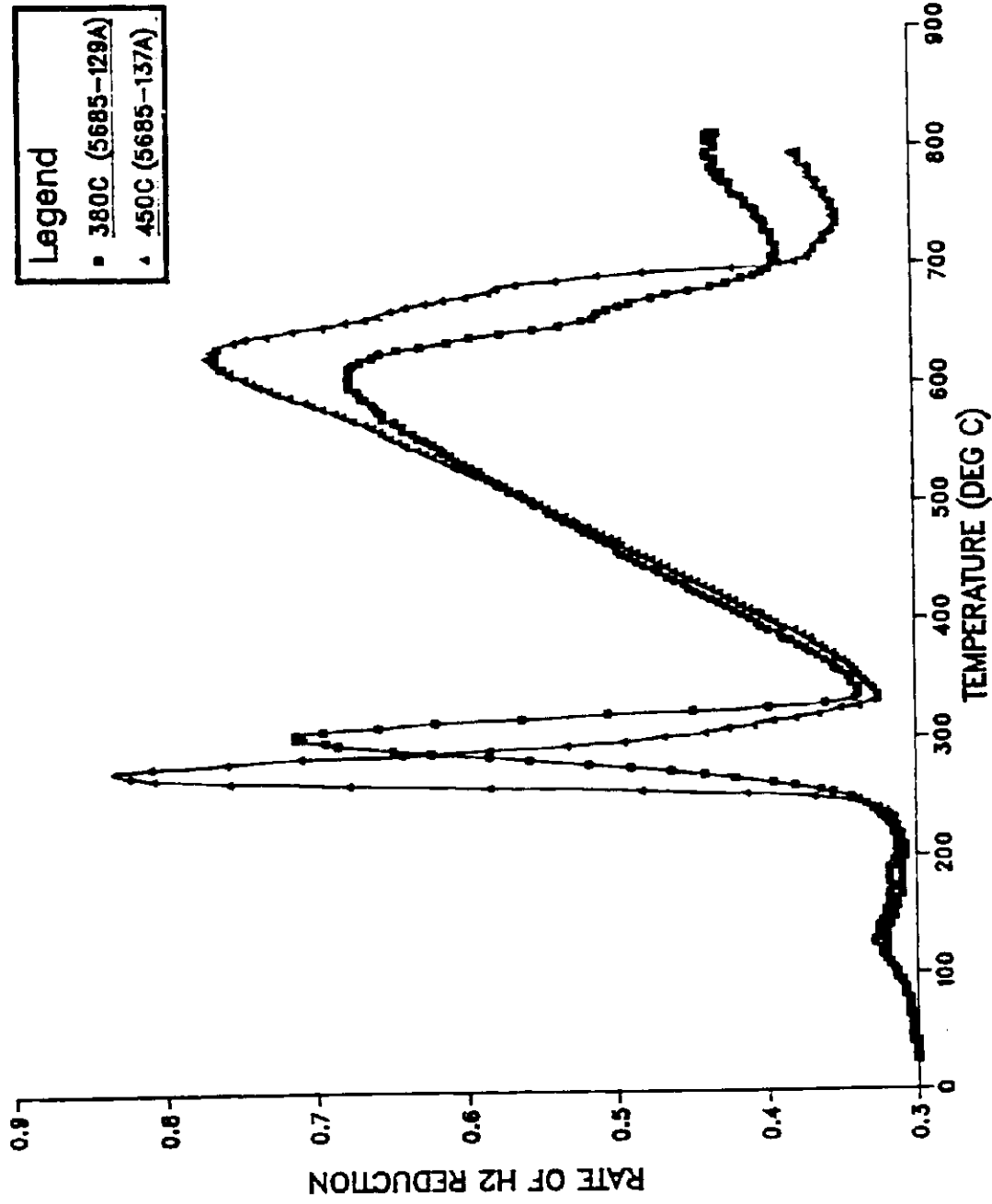
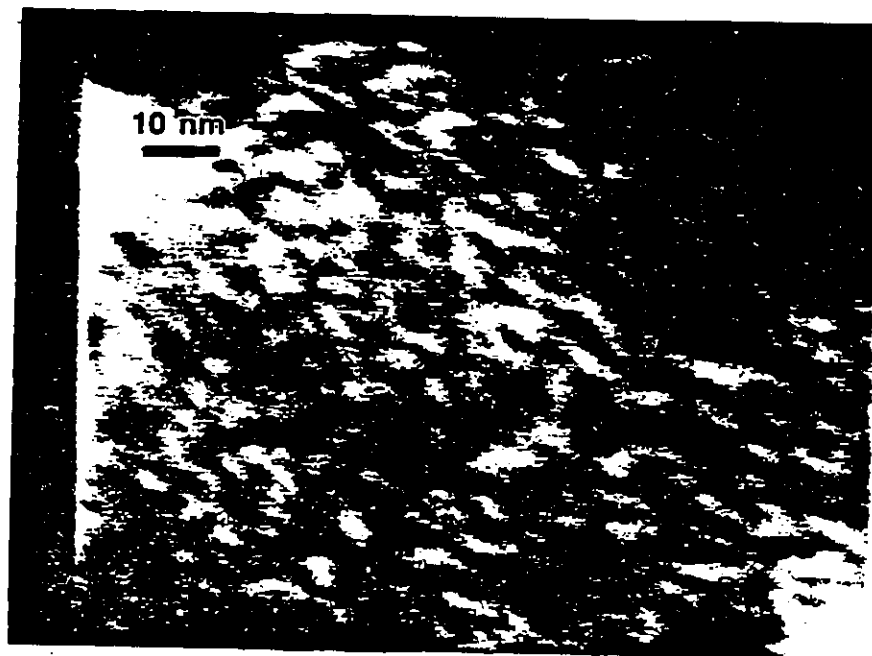
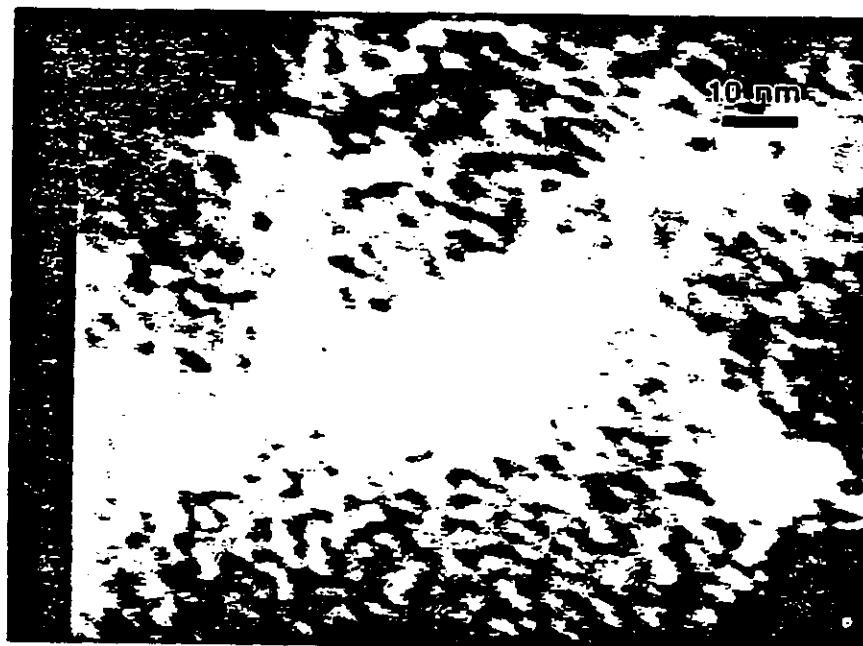


Figure 34 STEM MICROGRAPHS OF pH=3.5 AND pH=4.3 CATALYSTS AFTER 110°C DRYING



pH=4.3



pH=3.5

Figure 35 STEM MICROGRAPHS OF pH-5.5 AND pH-6.5 CATALYSTS AFTER 110°C DRYING



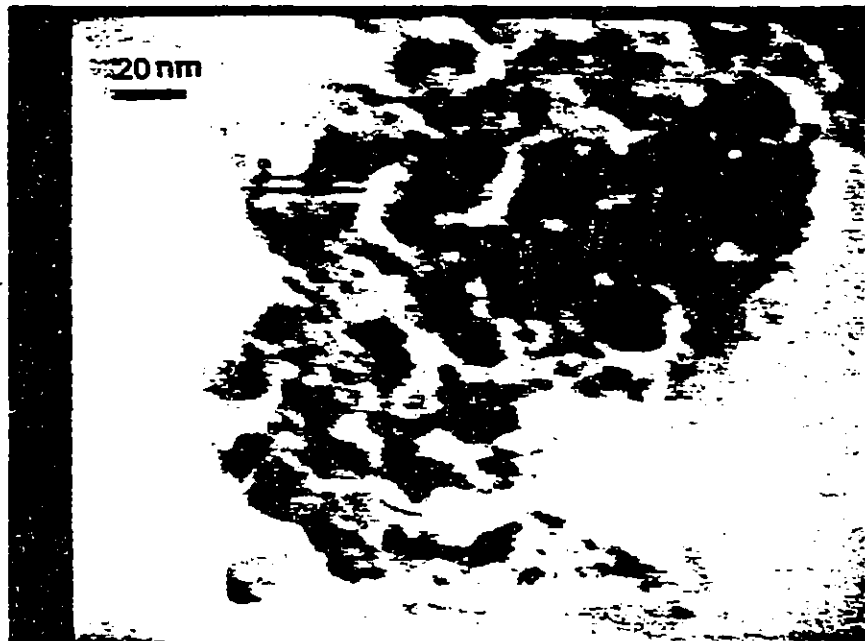
pH=5.5



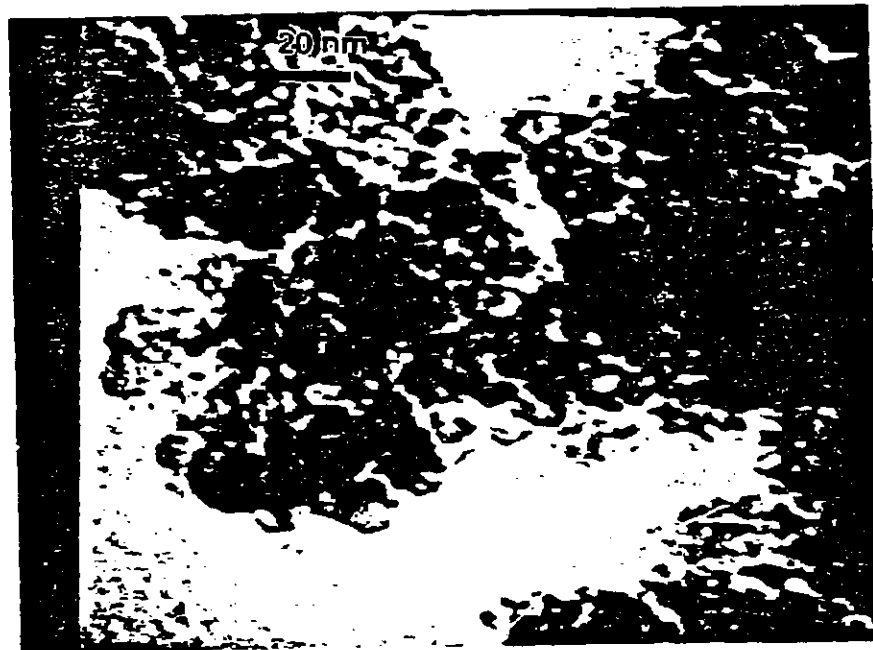
pH=6.5

Figure 36

STEM MICROGRAPHS OF pH-7.9 AND pH-9.7 CATALYSTS AFTER 110°C DRYING



pH-7.9



pH-9.7

Figure 37 XRD OF pH-9.7 CATALYST AFTER 110°C DRYING

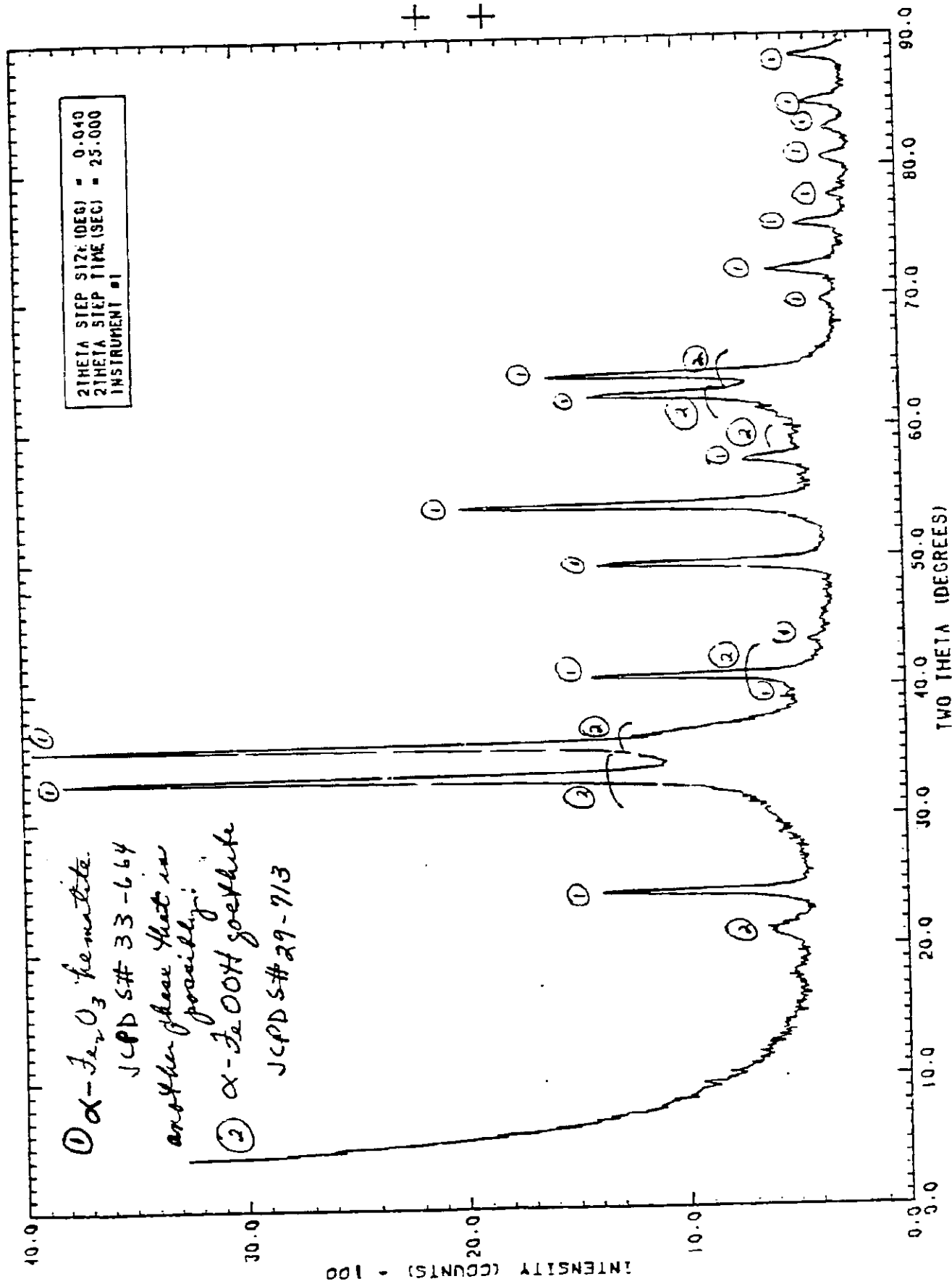
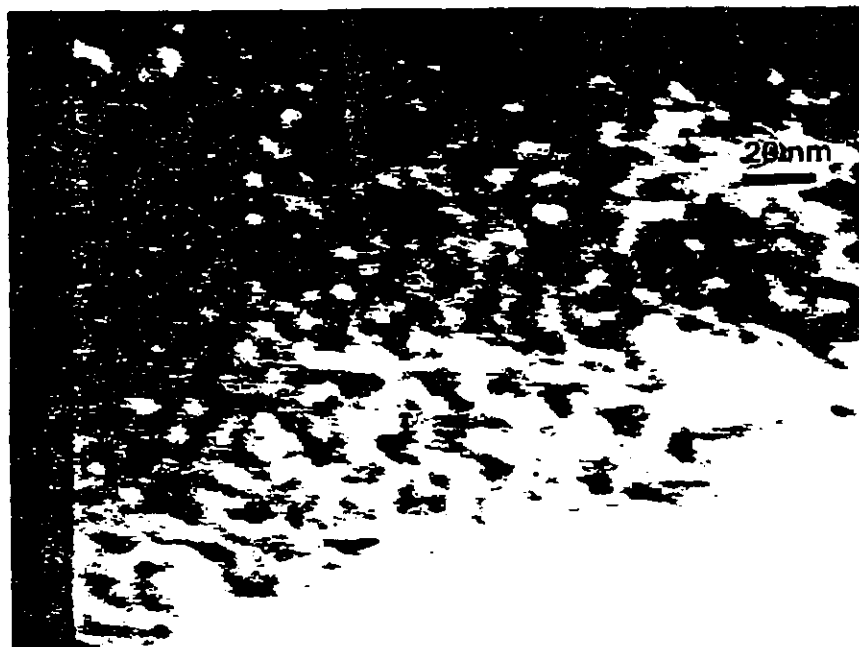
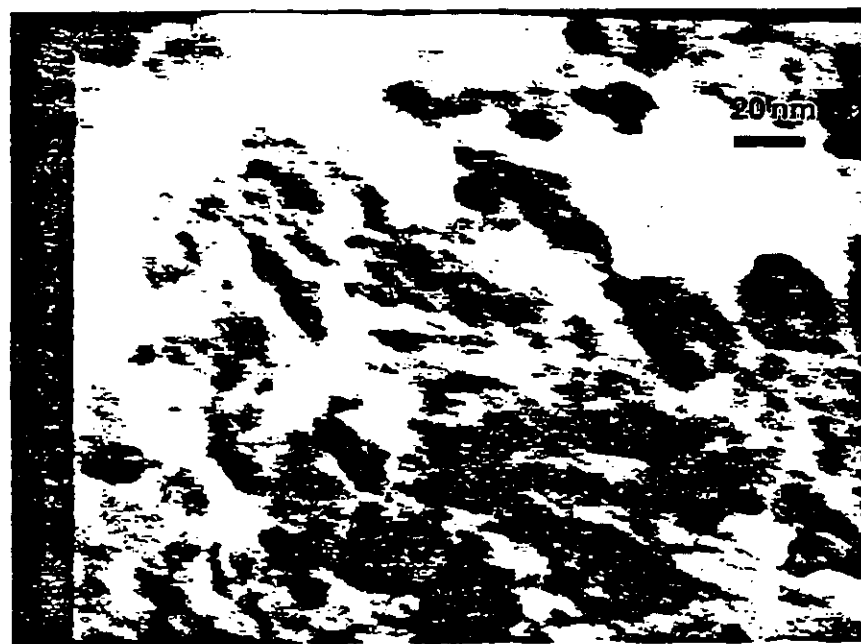


Figure 38

STEM MICROGRAPHS OF pH-4.3 AND pH-9.7 CATALYSTS AFTER 380°C CALCINATION



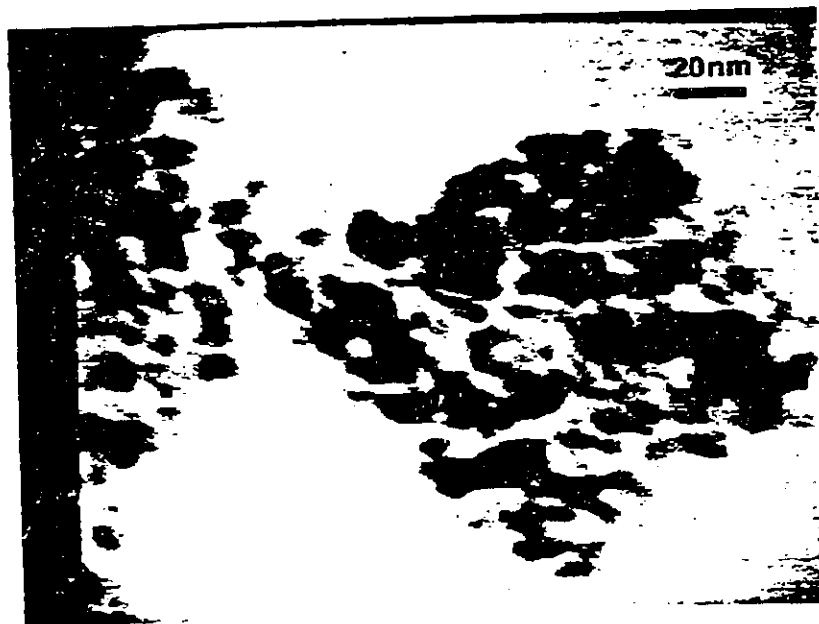
pH-4.3



pH-9.7

Figure 39

STEM MICROGRAPHS OF pH-4.3 AND pH-9.7 CATALYSTS AFTER 450°C CALCINATION



pH-4.3



pH-9.7

Figure 40 DIFFERENTIAL SCANNING CALORIMETRY

\bar{e}/Cu CATALYSTS PRECIPITATED AT DIFFERENT pH'S

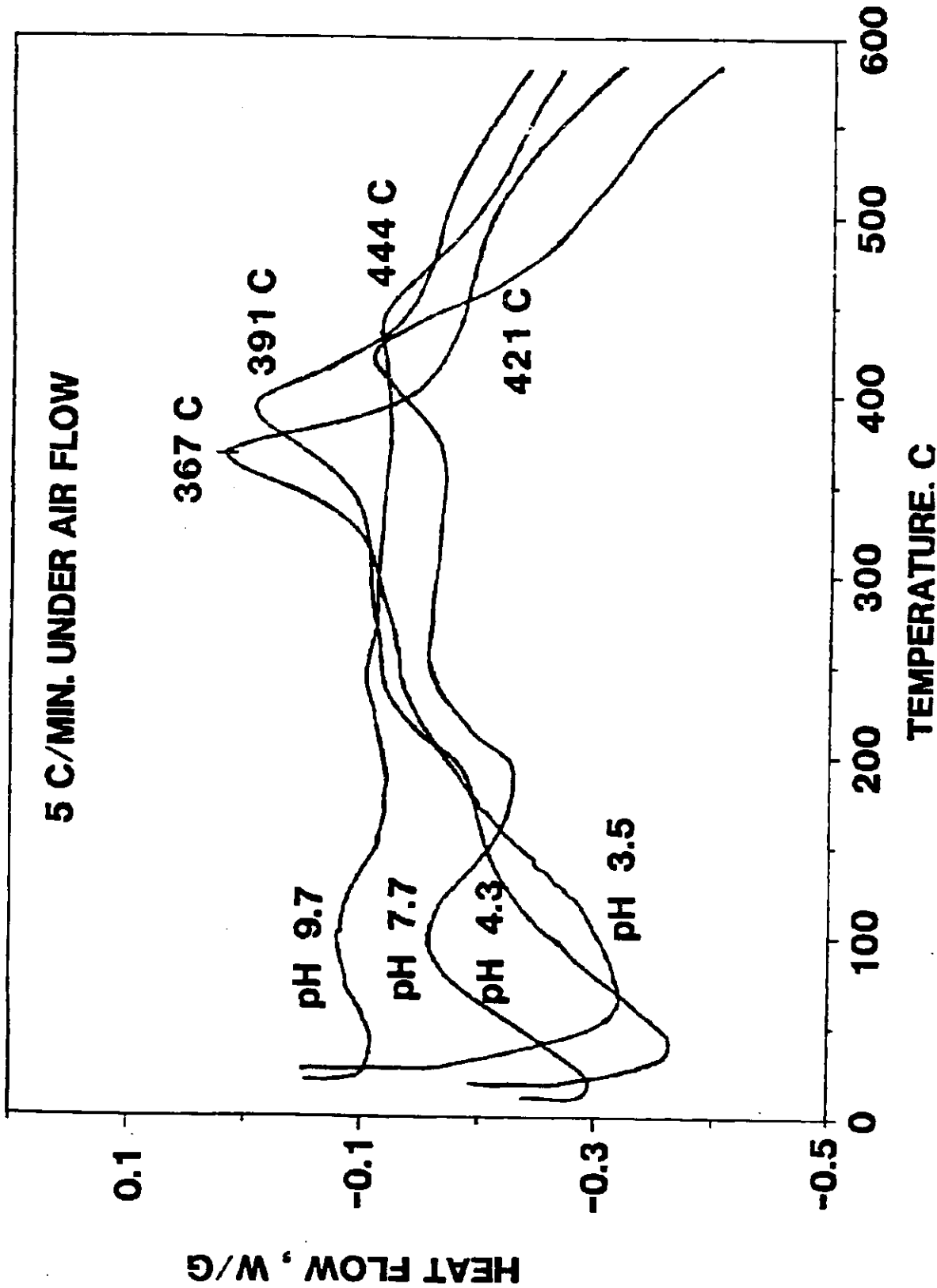


Figure 41 TGA OF pH=7.9 CATALYST 5685--69

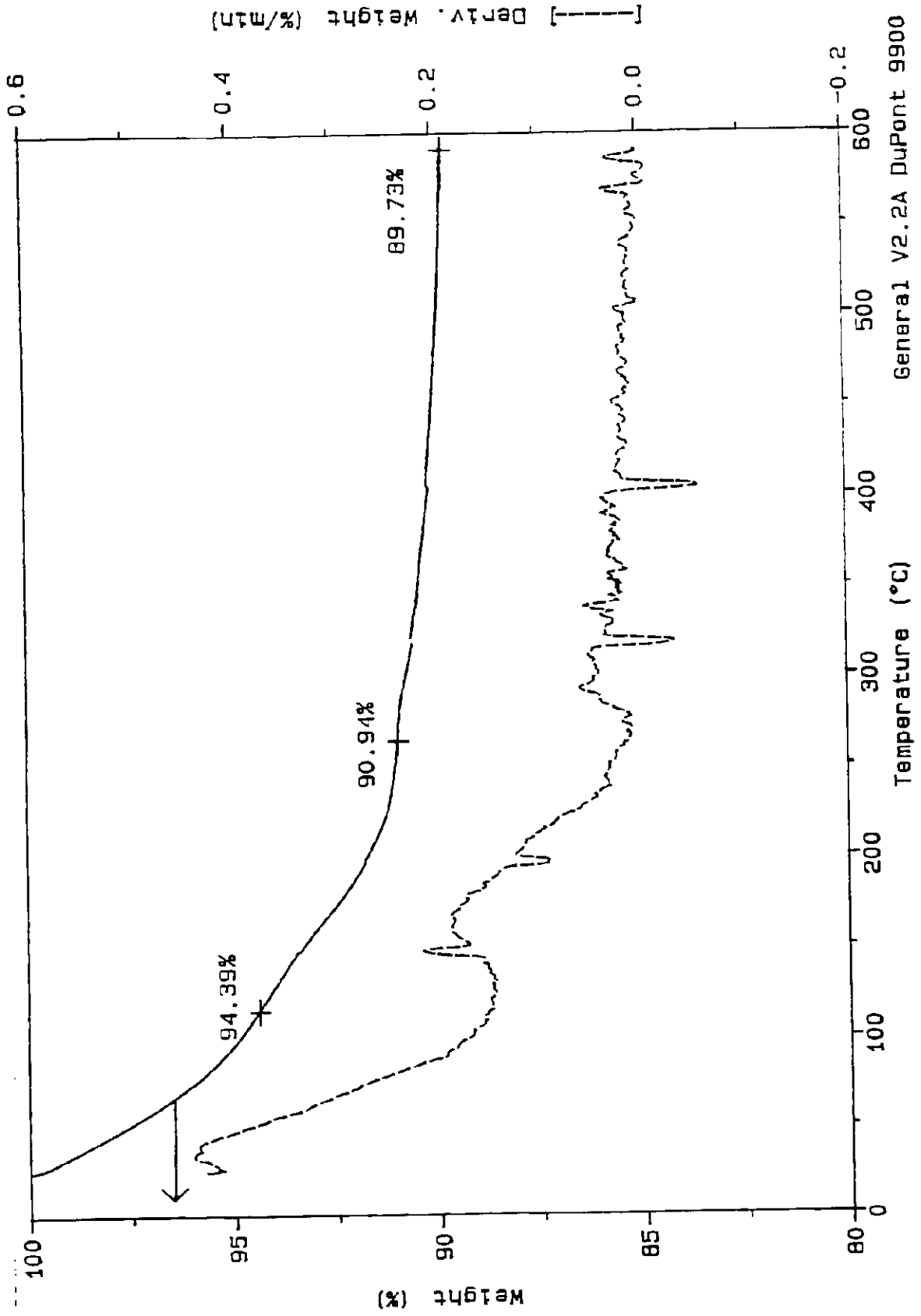


Figure 42

TGA OF PH-9.7 CATALYST 5685-75

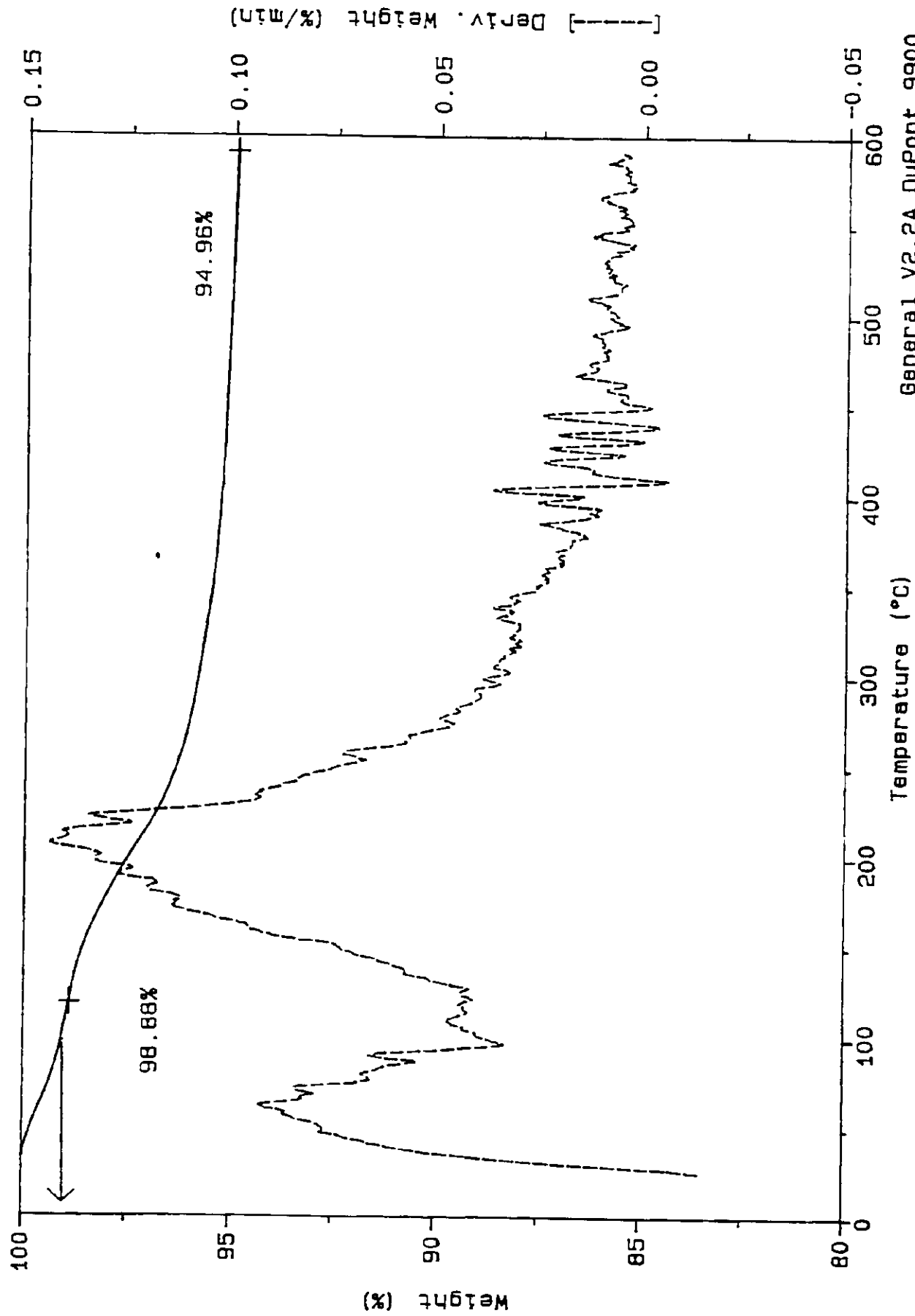


Figure 43

EFFECT OF pH OF PRECIPITATION ON TPR OF Fe/Cu CATALYSTS
CALCINED AT 380C

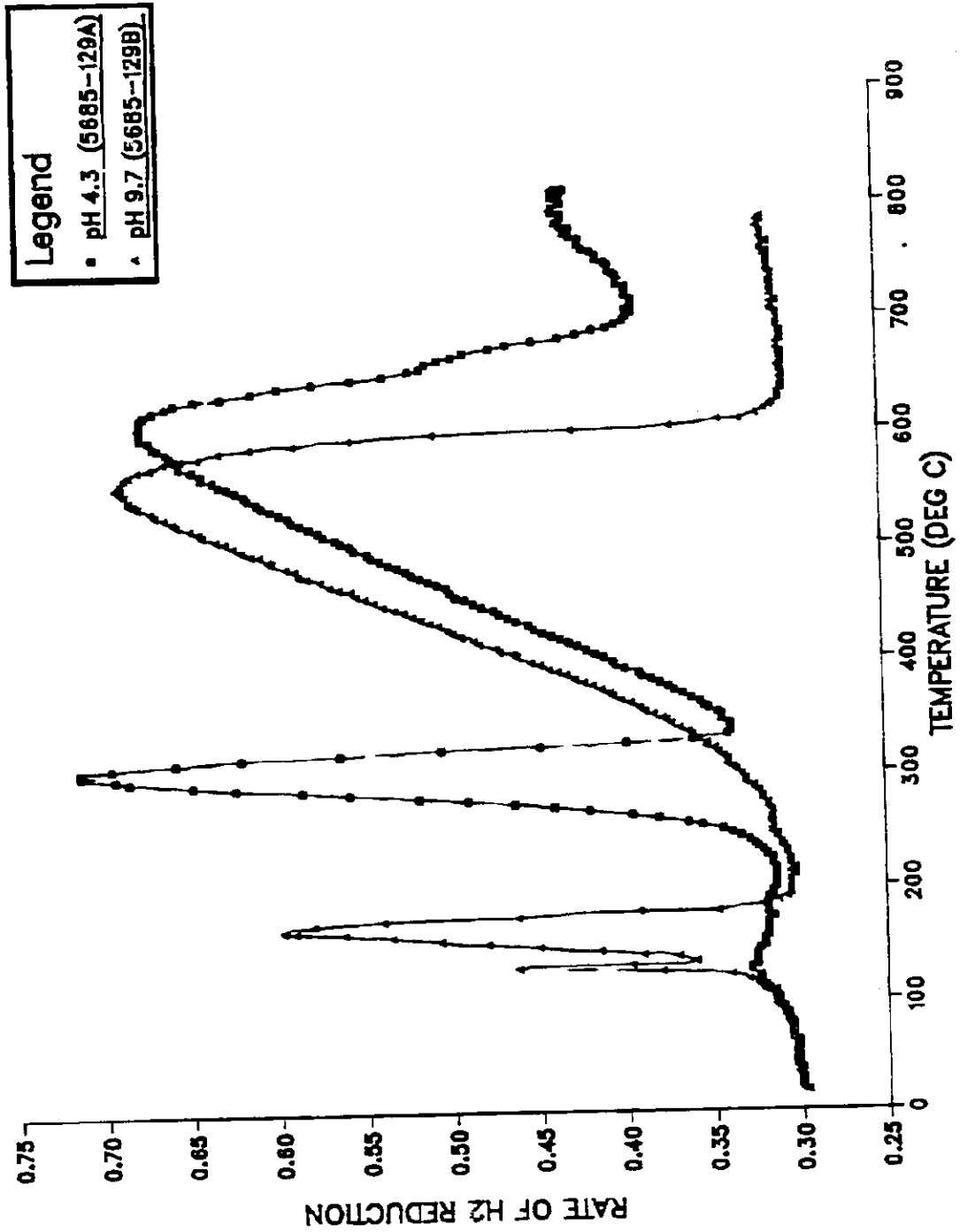
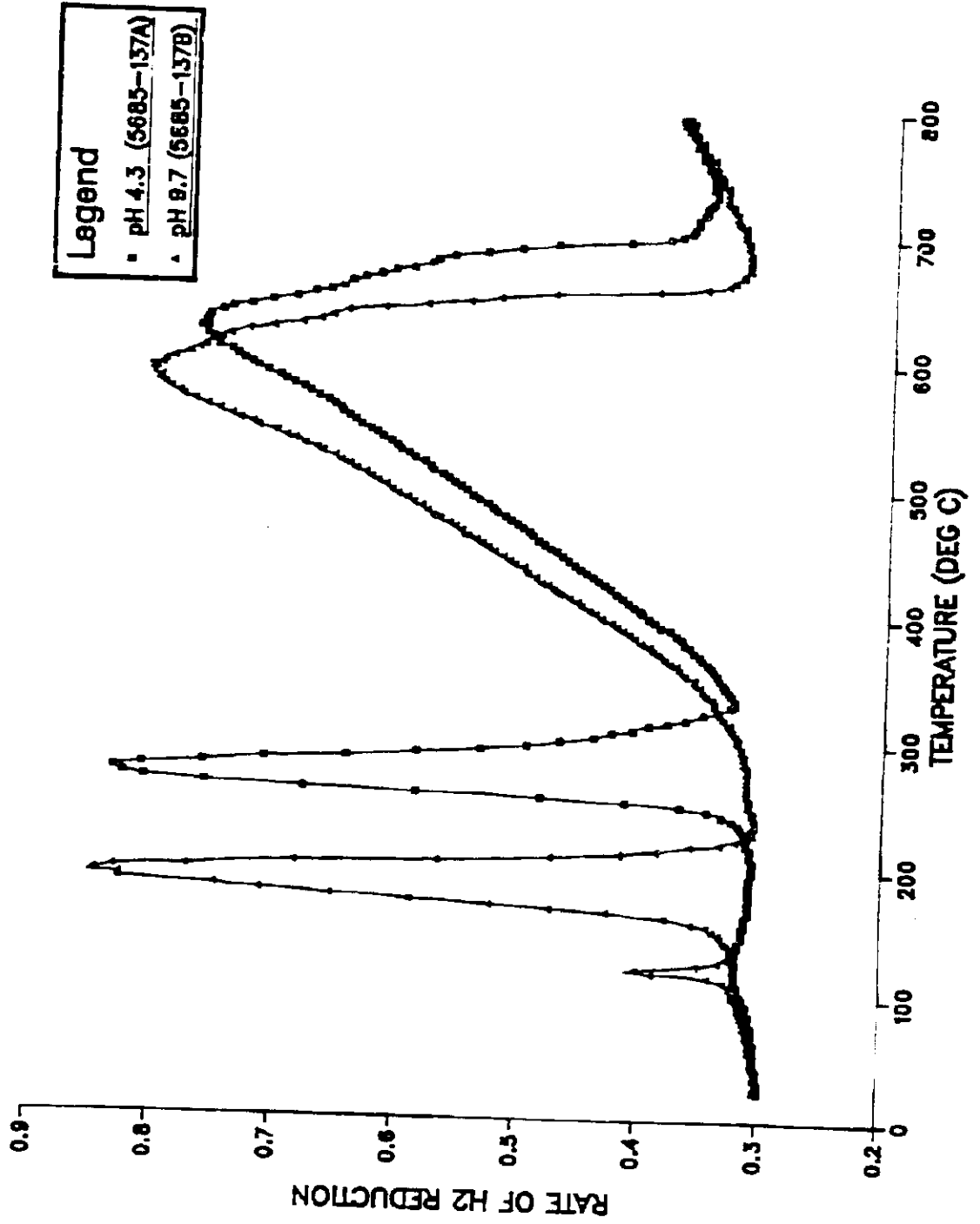


Figure 44

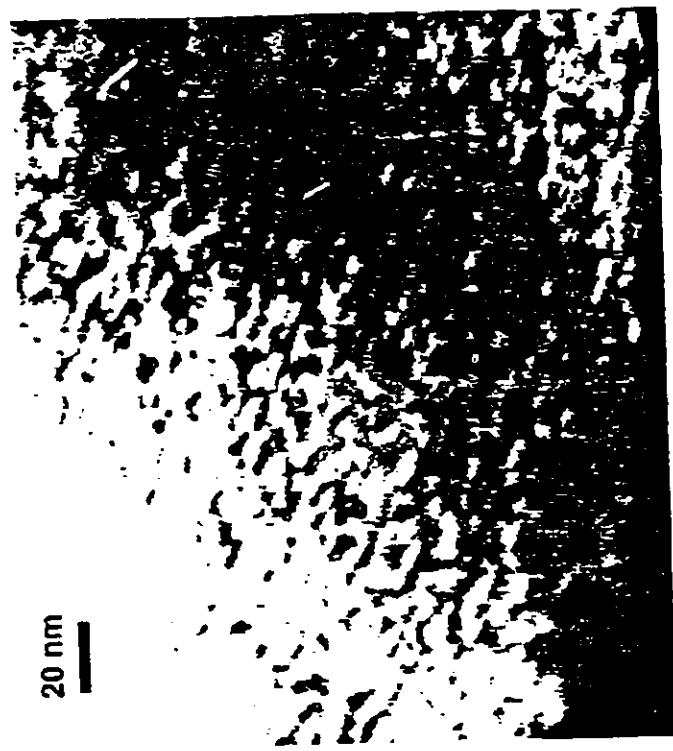
EFFECT OF pH OF PRECIPITATION ON TPR OF Fe/Cu CATALYSTS
CALCINED AT 450C



STEM MICROGRAPHS OF 100 Fe:0.5 Cu AND 100 Fe:5Cu CATALYSTS AFTER 110°C DRYING

Figure 45

Cu LEVEL EFFECT ON PRECIPITATED Fe/Cu CATALYST MORPHOLOGY (110°C DRIED)



5% Cu
100 Fe:5.0 Cu



0.5% Cu
100 Fe:0.5 Cu

Figure 46 XRD OF 100 Fe:0.5 Cu CATALYST 5685-139 AFTER 110°C DRYING

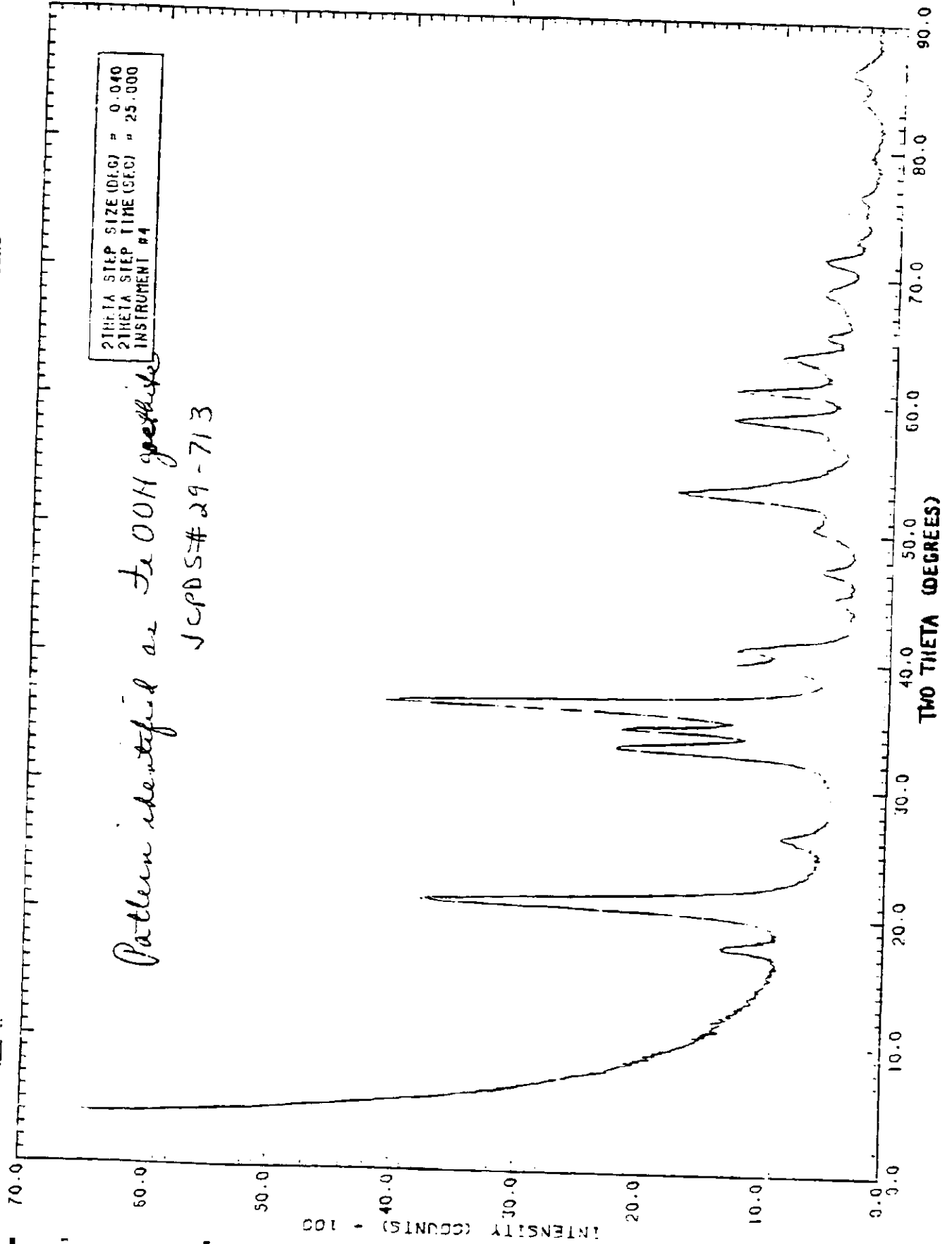


Figure 47

STEM MICROGRAPH OF 100 Fe:5 Cu CATALYST

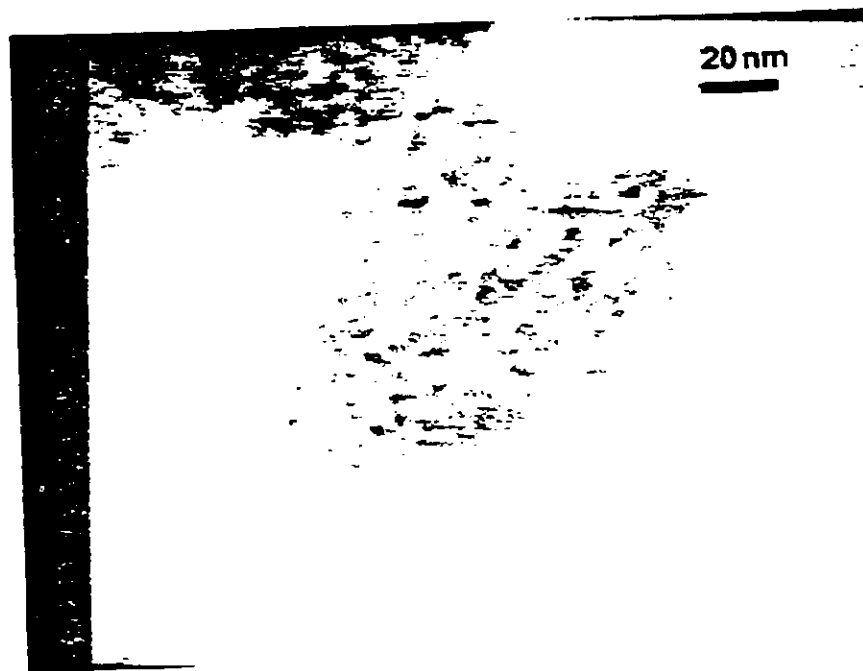


Figure 48

DSC OF 100 Fe:0.5 Cu AND 100 Fe:5 Cu CATALYSTS

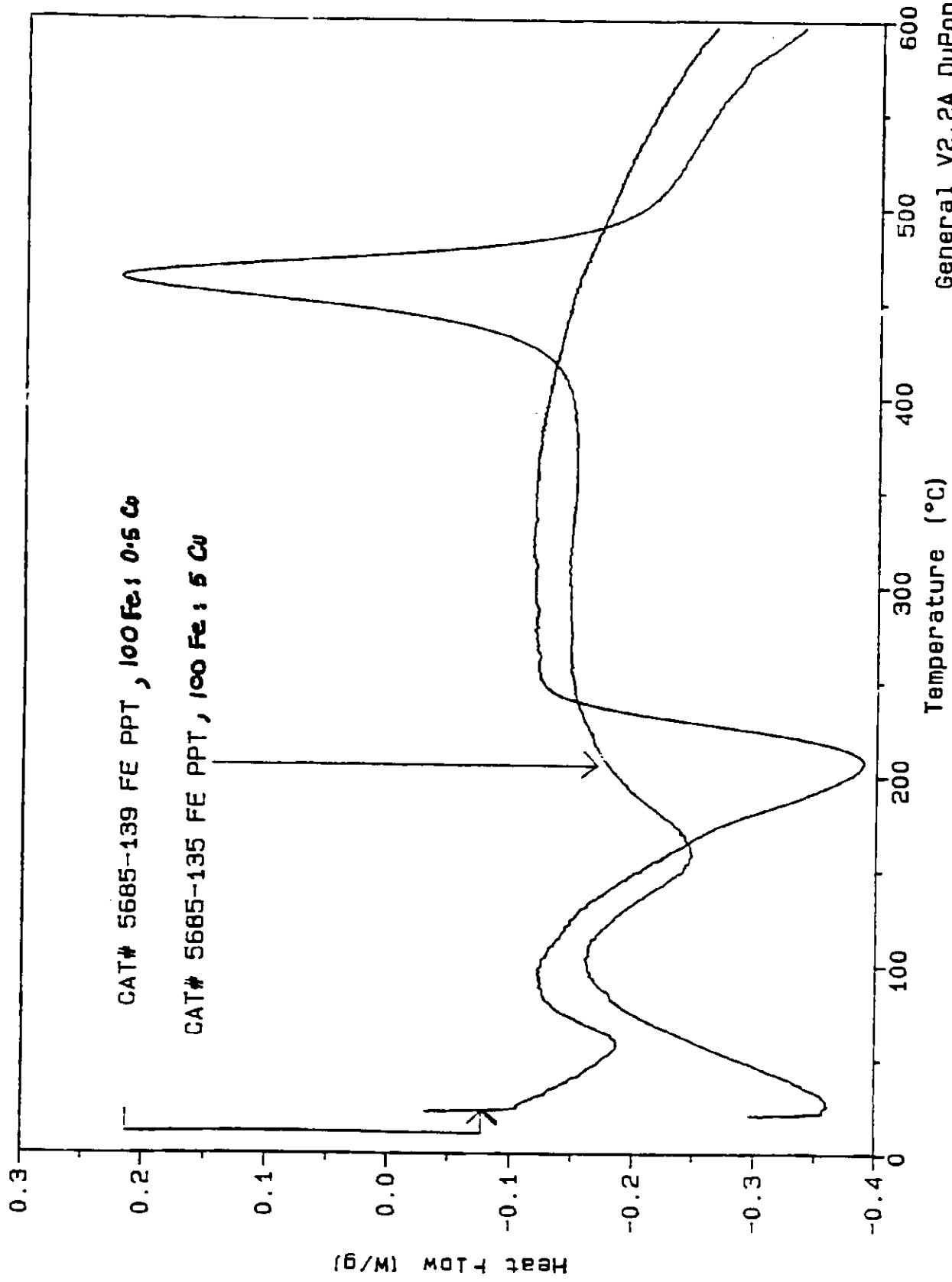


Figure 49 TGA OF 100 Fe:0.5 AND 100 Fe:5 Cu CATALYSTS

