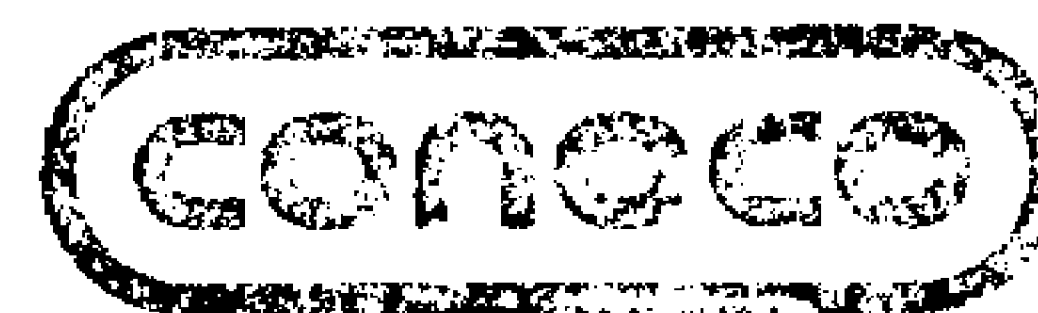




FMW

A

Interoffice Communication

To : A. F. Gallagher

From : James Barton

Date : October 21, 1974

Subject : Residual VCM in Bagged Resin VS Storage Time

1250 pounds of tail peaked 5385 resin recovered at 170°F and 17" Hg vacuum was weathered in the warehouse under normal warehouse ventilation conditions for 48 hours. During this 48 hour period three sets of samples were taken; one initially, and one each at 24 hours and 48 hours.

The initial bagged resin had an average residual VCM content of 644 ppm. At the end of 24 hours this content had dropped to an average of 152 ppm. At the end of the 48 hours the average was 166 ppm. The 24 hour and the 48 hour readings are basically the same; within the analytical tests accuracy.

The following is a summary of all the bagged resin vs storage time data accumulated to date.

VCM, ppm	5446 ⁽¹⁾	5385 ⁽²⁾	5446 ⁽³⁾	5385 ⁽⁴⁾
Initial	810	328	62	644
Final	24	48	10	166
Storage Time (hours)	138	145	48	48

¹ Standard 5446 resin weathered in a ventilated shelter. The readings are VCM levels in the atmosphere inside the shelter and were taken with an OVA meter. (Graph #1)

² 5385 resin tail peaked to (157°F) and weathered inside a storage shelter. The shelter was purged to the surrounding atmosphere every 24 hrs. These readings are VCM levels in the atmosphere inside the shelter and were taken with an OVA meter (Graph #2)

³ This 5446 resin is our normal steam stripped resin. The resin was weathered in the warehouse under normal warehouse ventilation conditions. The concentration readings are actual residual VCM run by GC analysis. (Graph #3)

⁴ Our normal tail peaked 5385 resin recovered at 170°F and 17" Hg vacuum. The resin was weathered in the warehouse under normal warehouse ventilation conditions. The concentration readings are actual residual VCM run by GC analysis. (Graph #4)

VAB.0001042609

Attached graphs #1, #2, #3, and #4 show that the largest amount of weathering occurs the first 24 hours after bagging. This happens whether the resin is tail peaked or steam stripped. The initial concentration will, however, effect the amount of VCM in the warehouse atmosphere. Ventilation of the warehouse should be based on the amount of less than 24 hour old product stored.

Attached graphs #3 and #4 represent the types of material currently being produced at the Aberdeen plant, steam stripped and tail peaked (170°F). Assuming this one sample is typical of the one present production, steam stripped resin will be the only type that can be shipped without some period of weathering using a standard of 100 ppm residual VCM in the final product. The laboratory is currently running residual VCM by GC analysis on the finished resin shipped to the customers. The laboratory program will varify which type of resin steam stripped or tail peaked will meet the 100 ppm standard.

No further work will be done on the bagged resin vs storage time project until further data is received from the current laboratory program.



James Barton
Process Engineer

cw

cc: EMS, GWP, RWS, DFJ, LHB, JES, FJS, DSC, WRS, FMW

GRAPH #1.

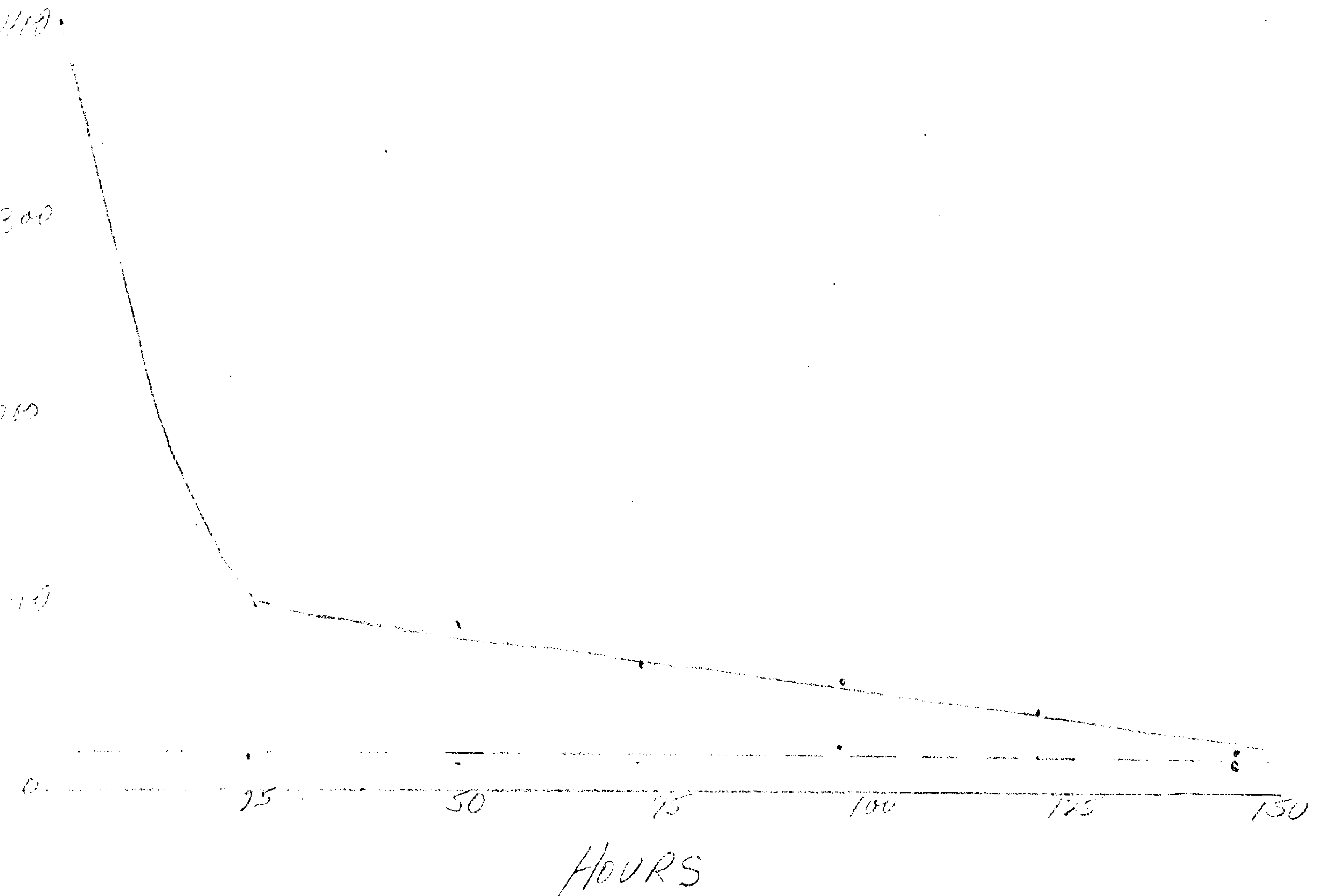
5446 BLEND 58801

—— SHELTER PPM VCM

--- BACKGROUND PPM VCM

VENTILATION = NORMAL WAREHOUSE

10M
PM



JEB

10/24/74

10M
PPM

A

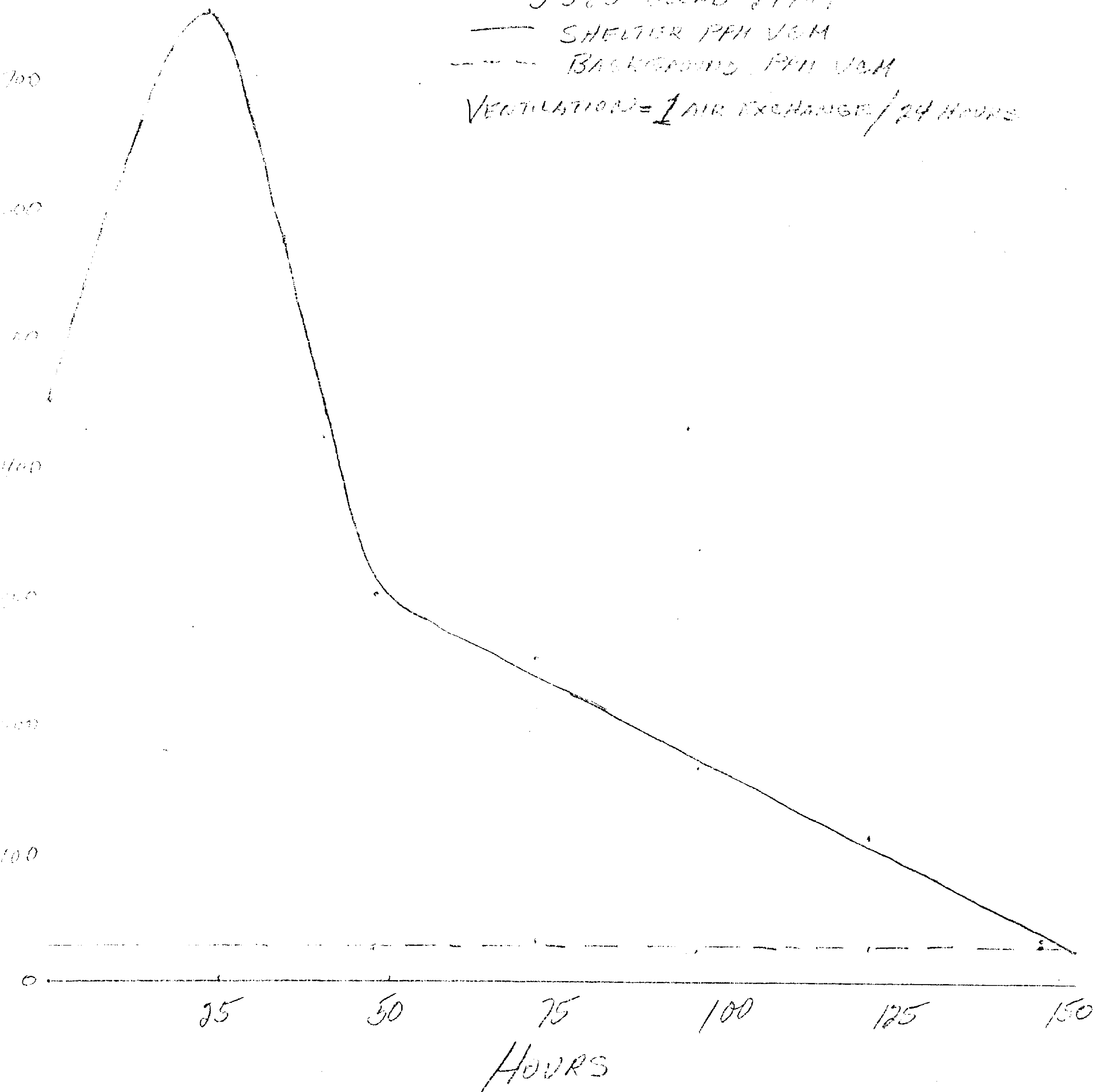
GRAPH #2

5385 BLEND 31749

— SHELTER PPH VCM

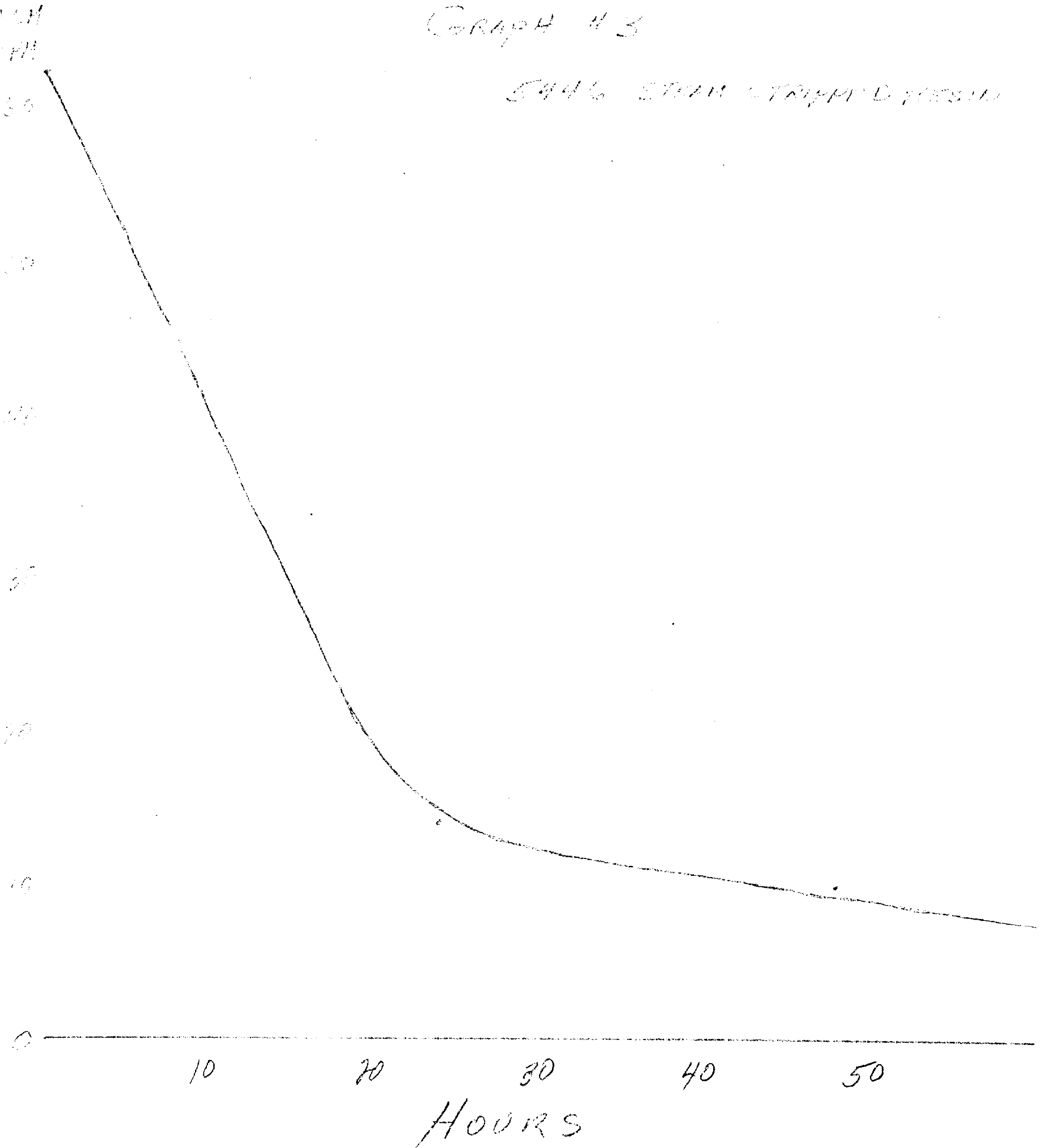
- - - BACKGROUND PPH VCM

VENTILATION = 1 AIR EXCHANGE / 24 HOURS



GRAPH #3

5446 STEAM STRIPPED RESID

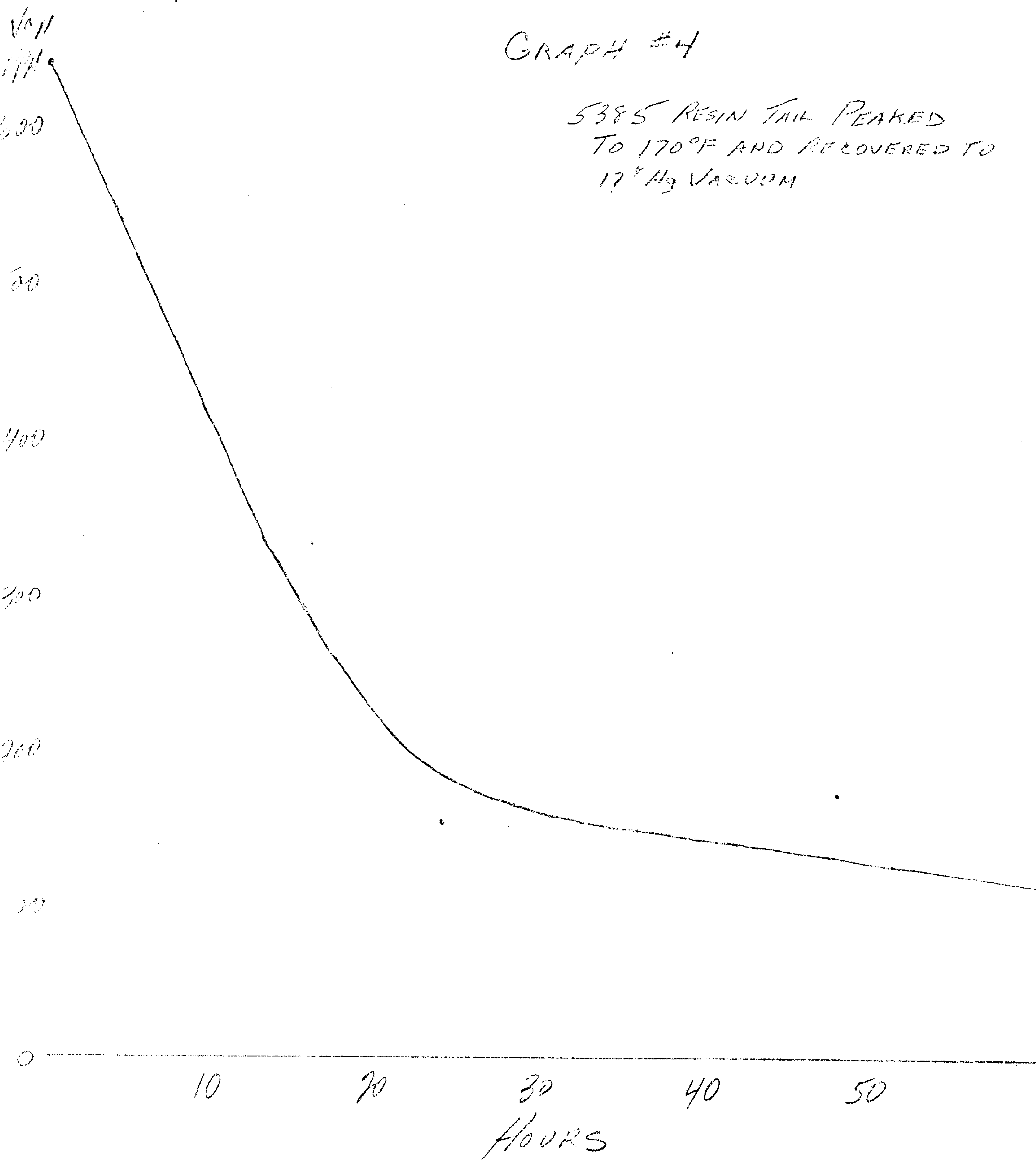


JVB

10/24/74

GRAPH #4

5385 RESIN TAIL PEAKED
TO 170°F AND RECOVERED TO
17" Hg VACUUM



JEB

10/24/74