

Honeywell

OCTOBER 23, 1974

CONOCO PLASTICS
SADDLEBROOK, NEW JERSEY

ATTN: MR. LEON VERNON
GENERAL MANAGER
CONOCO PLASTICS

DEAR MR. VERNON:

VARIOUS CONOCO LOCATIONS HAVE RECENTLY PURCHASED HONEYWELL CHROMATOGRAPHS SPECIFICALLY APPLIED TO MONITOR THE AMBIENT AIR FOR VINYL CHLORIDE.

THESE HIGH SPEED UNITS EMPLOY A FLAME IONIZATION DETECTOR AND LOGICAL ALARM SYSTEM TO MEASURE VINYL CHLORIDE AT A FULL SCALE RANGE OF 0-1PPM. OF COURSE LARGER RANGES SUCH AS 0-10PPM OR 0-25PPM ARE ALSO ATTAINABLE ON THE SAME CHROMATOGRAPH.

THE ACCURACY OF THIS MEASUREMENT DEPENDS HEAVILY ON THE CALIBRATION SAMPLE GAS AND THE PURITY OF THE CARRIER AND FUEL GASES.

GIVEN NORMAL "ZERO GASES" WHICH SPECIFY 0.3PPM TO 0.5PPM TOTAL HYDROCARBONS INCLUDED IN THE GAS, THE HONEYWELL MODEL 1000 CHROMATOGRAPH MEETS THE ACCURACY AND PRECISION REQUIREMENTS AS SET FORTH BY THE CURRENT OSHA STANDARD.

OSHA SPECIFICALLY SETS FORTH THE FOLLOWING TOLERANCES WITH A CONFIDENCE LEVEL OF 95%:

- (A) AT A CONCENTRATION OF 0.25 TO 0.5PPM $\pm$ 50%
- (B) AT A CONCENTRATION OF 0.5 TO 1.0PPM $\pm$ 35%, AND
- (C) AT A CONCENTRATION OF OVER 1.0PPM $\pm$ 25%.

THE HONEYWELL CHROMATOGRAPHS AS THEY ARE CURRENTLY SUPPLIED TO CONOCO SIGNIFICANTLY EXCEED THE PRECISION AND ACCURACY REQUIRED BY OSHA STANDARDS. THE FOLLOWING ACCURACY STATEMENT MAY BE APPLIED TO OUR ANALYZERS WITH A 95% CONFIDENCE LEVEL OVER 480 SAMPLES IN AN 8 HR. PERIOD:

- (A) AT CONCENTRATIONS OF 0.25 TO 0.5PPM $\pm$ 25%
- (B) AT CONCENTRATIONS OF 0.5 TO 1.0PPM $\pm$ 10%
- (C) AT CONCENTRATIONS OF OVER 1.0PPM $\pm$ 5%

PLEASE REMEMBER THAT THE GREATEST CONTRIBUTION TO INACCURACY IN ANY ANALYZER IS THE CALIBRATION STANDARD ITSELF, WHICH MAY HAVE UP TO 0.3PPM UNKNOWN HYDROCARBONS IN IT AND STILL MEET "ZERO GAS" LABELING.

VERY TRULY YOURS,



E. MANNO
GENERAL MANAGER
HONEYWELL
PROCESS ANALYZER CENTER

EM:PO

VVC 000008945

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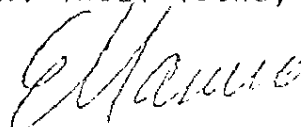
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