

# HCl VENTING DURING OXY SHUTDOWN

12.4.03  
SJR

VENTED MAPU PRC-216A ONLY

PRESSURE (CONTINU) @ 125 PSIA

OXY DOWN @ 2:30 AM, 12/4/03

$$P_1 = 125 \text{ PSIA} = 140 \text{ PSIA}$$

$$\Delta P = 125$$

$$d_1 = \frac{(140)(36.7)}{(10.73)(570)} = .916$$

$$C_1 = 35.8$$

$$Q = 1100 \sqrt{(.916)(140)} C_1 \sin \left[ \frac{34.7}{35.8} \sqrt{\frac{125}{140}} \right]$$

.9200

$$Q = 12.00 \text{ } ^\circ\text{g}$$

|         | IVP % | C <sub>3</sub> | TIME   | Q <sub>±</sub> /HR | ±#     |
|---------|-------|----------------|--------|--------------------|--------|
| 2:30 AM | 56%   | 238            | 30s    | 28632              | 239    |
| 2:30:30 | 30%   | 838            | 20min  | 10056              | 3352   |
| 3:30    | 10%   | 148            | 1 HR   | 1776               | 1776   |
| 4:30    | 15%   | 277            | 1 HR   | 3324               | 3324   |
| 5:30    | 25%   | 622            | 1 HR   | 7464               | 7464   |
| 6:50    | 28%   | 752            | 1.3 HR | 9019               | 11,725 |
| 7:20    | 26%   | 665            | 30min  | 7982               | 3951   |
| 8:30    | 25%   | 622            | 1.2 HR | 7464               | 8957   |

40,828

+ .75

⇒ 10,200±

Edm - Victor T. Bell