CALCULATING THE COST OF AIR PER THOUSAND CUBIC FEET (MCF)

To get the cost of air per thousand cubic feet (MCF), use the following formula:

$$\frac{\left(\frac{\text{BHP X 0.746}}{0.90}\right)\left(\$/\text{KWH}\right)}{\left(\frac{\text{CFM X 60}}{1000}\right)}$$

0.746 KW/BHP (Kilowatts per Break Horse Power)
Average efficiency = 0.90
4.2 CFM/BHP (an average of CFM per Break Horse Power suggested from Compressor Manufacturers)

The breakdown:

$$\text{KWH (To run the Compressor)} = \frac{\text{BHP of Compressor x 0.746}}{0.90}$$

KWH X $ / KWH = Cost of running Compressor for one hour

$$\frac{\text{CFM of Compressor X 60}}{1000} = \text{MCF / Hour}$$

$$\frac{\text{Cost of running Compressor for one hour}}{\text{MCF/Hour}} = \$/\text{MCF}$$