



Program Version	Creation Date	Program Author	Country	Calculator	ROM Version
1.00	7/25/2001	Miguel Angel CAPORALINI HERK			1.18
Program Title					
<b>Density Gas-Liquid Mixture, Erosional Velocity, Ascensional Velocity, Hidrostatic Column Pressure, Pressure Drop &amp; Flow Reservoir Pressure of Gas inside the Well</b>					
Library Number			Checksum (CRC)	Bytes	
<b>L906.lib – GasWellProd</b>			<b># 24C4h</b>	<b>8951,5</b>	

I'm writing this program in UsrRPL Language and after create a Library (L906.lib - GasWellProd), wich allow calculate as follow :

### Very Important :

- a) If no exist Data, you must input first it, with [0] Option.
- b) Else, you can use [1], [2] or [3] Options.

### Step by Step :

For: NEW, MODIFY, PURGE, GO

- 0. New Known Data
  - 1. Modify Known Data
  - 2. Purge Known Data
  - 3. To Program
- ☐ 0. English System (Units)
    - ☐ 0. Density G/L Mixture
    - ☐ 1. Erosional Gas Velocity
    - ☐ 2. Ascensional Gas Velocity
    - ☐ 3. Hidrostatic Column Pressure
    - ☐ 4. Pressure Drop
    - ☐ 5. Flow Reservoir Pressure
  - ☐ 1. Metric System (Units)
    - ☐ 0. Density G/L Mixture
    - ☐ 1. Erosional Gas Velocity
    - ☐ 2. Ascensional Gas Velocity
    - ☐ 3. Hidrostatic Column Pressure
    - ☐ 4. Pressure Drop
    - ☐ 5. Flow Reservoir Pressure

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Description of Known Data:

Sg = Liquid Specific Gravity (H<sub>2</sub>O=1)  
 Gr = Gas-Liquid Relation (cf/bbl)  
 Id = Internal Pipe Diameter (inches)  
 T = Absolute Gas Flowing Temperature (°R= °F+460)  
 S = Gas Specific Gravity (air=1.0)  
 Z = Gas Compressibility Factor  
 C = Empiric Constant for Pipe (L80-Cr13 = 250; N-80 = 160; Steel Reinforced or Reinforced Plastic C=140;  
Note : For convention, you can use C=100.  
 L = Column [Pipe] Height (feet)  
 Op = Operating Pressure (psi)  
 Ap = Atmospheric Pressure (psi)  
 Tp = Well Head Pressure (psi)  
 Gf = Gas Flow Rate (cf/day)

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**Special Mention : Thanks to ... Engineer Omar BARRERAS for you great contribution.**

For any questions, please contact me :

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