



PVT TEMPLATE **EMERAUDE SOFTWARE**

Client: _____
Well: _____
Zone: _____

1. FLUID TYPE (Please Tick either one)

- Dry gas
- Hydrocarbon
- Pure CO2
- Pure N2
- Saturated Oil (bubble point fluid)
- Condensate (dew point fluid)
- Water

Reservoir Parameters
_____ cf/bbl Solution Gas-Oil Ratio (Rs@Pb)

2. WATER PROPERTIES

_____ Salinity (total dissolved solids in ppm)

Thermal properties
Standard heat capacity (Cpw)
_____ Btu/(lbm.degree F)
Thermal conductivity
_____ W/(m.degree C)

Correlations

_____	Rsw
_____	Bw
_____	cw
_____	MuW

Rsw [cf/bbl] vs P [psia] at _____ degree F

T	P	Rsw
degree F	psia	cf/bbl

Bw vs P [psia] at _____ degree F

T	P	Bw
degree F	psia	

Muw [cp] vs T [degree F]

T	Muw
degree F	cp

Rhow [g/cc] vs P [psia] at _____ degree F

T	P	Rhow
degree F	psia	g/cc

3. GAS PROPERTIES

_____ Specific Gravity

Thermal properties
Standard heat capacity (Cpg)
_____ Btu/(lbm.degree F)
Thermal conductivity
_____ W/(m.degree C)

Correlations

_____	Z factor
_____	Mug
_____	Bg

Z vs P [psia] at _____ degree F

T	P	Z
degree F	psia	

Bg vs P [psia] at _____ degree F

T	P	Bg
degree F	psia	

Mug [cp] vs P [psia] at _____ degree F

T	P	Mug
degree F	psia	cp

Rhog [g/cc] vs P [psia] at _____ degree F

T	P	Rhog
degree F	psia	g/cc

4. OIL PROPERTIES
 sp.gr. Gravity

Thermal properties

 Standard heat capacity (Cpo)
 Btu/(lbm.degree F)

 Thermal conductivity
 W/(m.degree C)

Correlations

 Pb
 Rs
 Bo
 co
 Muo

Pb[psia] vs T [degree F]

T	Pb
degree F	Psia

Rs [cf/bbl] vs P [psia] at _____ degree F

T	P	Rs
degree F	psia	cf/bbl

Rhoo [g/cc] vs P [psia] at _____ degree F

T	P	Rhoo
degree F	psia	g/cc

Bo vs P [psia] at _____ degree F

T	P	Bo
degree F	psia	

Muo [co] vs T [degree F]

T	P	Muo
degree F	psia	cp

5. CONDENSATE PROPERTIES
Separator inputs

		gas gravity
	cf/bbl	GOR sep
	psia	pressure
	degree F	temperature

	psia	Dewpoint pressure
	degree F	Dewpoint temperature
	sp.gr	Liquid Gravity

Tank inputs

		Gas gravity
	cf/bbl	GOR tank

Non Hydrocarbon

	mole %	H2S
	mole %	CO2
	mole %	N2

Thermal properties

Standard heat capacity	
Gas	<input type="text"/> Btu/(lbm.degree F) Oil <input type="text"/> Btu/(lbm.degree F)
Conductivity	
Gas	<input type="text"/> W/(m.degree C) Gas <input type="text"/> W/(m.degree C)

Bo vs P [psia] at _____ degree F

T	P	Bo
degree F	psia	

Muo [cp] vs T [degree F]

T	P	Muo
degree F	psia	cp

Rho0 [g/cc] vs P [psia] at _____ degree F

T	P	Rho0
degree F	psia	g/cc

CGR_Prod [bbl/MMscf] vs P [psia] at _____ degree F

T	P	CGR_Prod
degree F	psia	bbl/MMscf

Rhog [g/cc] vs P [psia] at _____ degree F

T	P	Rhog
degree F	psia	g/cc

Bg vs P [psia] at _____ degree F

T	P	Bg
degree F	psia	

Mug [cp] vs P [psia] at _____ degree F

T	P	Mug
degree F	psia	cp