



**APPLICATION DEFINITION SHEET - THREE PHASE SYSTEM**

Company Name

Date

**Fill in Table 1 or 2 depending upon best description of your process maximum rate and the corresponding secondary parameter. For example: Maximum liquid and what is the gas rate at that maximum liquid rate, etc.**

Flow cases as Oil/Water Rate/Gas

<b>TABLE 1</b>		Oil	Water Rate	Gas	Press &Temp
	Standard units	Barrels/day	Barrels/day	mmscfd	psi / deg F
	Other units				
	Normal rates, case 1				
	Normal rates, case 2				
	Normal rates, case 3				
	Max liquid & corresponding gas				
	Min liquid & corresponding gas				
	Max gas & corresponding liquid				
	Min gas & corresponding liquid				
	<b>Maximum Instantaneous Rates</b>				

Flow cases as Liquid/Water Cut/Gas

<b>TABLE 2</b>		Liquid	Water Cut	Gas	Press &Temp
	Standard units	Barrels/day	Barrels/day	mmscfd	psi / deg F
	Other units				
	Normal rates, case 1				
	Normal rates, case 2				
	Normal rates, case 3				
	Max liquid & corresponding gas				
	Min liquid & corresponding gas				
	Max gas & corresponding liquid				
	Min gas & corresponding liquid				
	Maximum Instantaneous Rates				

Other Process Variables (always fill in)

<b>TABLE 3</b>		Case1	Case 2	Case 3
Water Salinity	Weight %			
Water Density @ Fluid Temp & Pressure	Kg/m <sup>3</sup>			
Oil Density @ Fluid Temp & Pressure	Kg/m <sup>3</sup>			
Oil Viscosity @ Fluid Temp & Pressure	Cp			
	@ psi (g)			
	@ deg F			
Gas Density @ Fluid Temp & Pressure	kg/m <sup>3</sup>			
Gas Molecular Weight	kg/kmol			
Sand Production	g/m <sup>3</sup> liquid			
H2S Content				

**CONFIGURATION INFORMATION:**

Check the appropriate answer where various options are described; **Bold** is standard option.

- 1.) Input/Output Pipe Sizes:  **2"**,  3",  4",  6",  Schedule 40,  **Schedule 80**,  
 Other \_\_\_\_\_
- 2.) Separator Materials Requirements:  **316 Stainless Steel**,  Other \_\_\_\_\_
- 3.) Mounting Skid Materials:  **Painted Black Iron**,  Stainless,  Other \_\_\_\_\_
- 4.) Safety Valves:  None,  **2xFlange Rating**,  Other \_\_\_\_\_
- 5.) Flange Ratings and Type:  150,  **300**,  600,  900 lb ANSI  1500 lb ANSI  
 **Raised Face**,  RTJ,  Other \_\_\_\_\_
- 6.) Special Valve or Actuator Requirements? If so, please describe (no electric actuators):  
 \_\_\_\_\_
- 7.) Manual Sample Port:  **1/2" with Pitot Tube and Valve**,  Other \_\_\_\_\_
- 8.) Electronics Enclosures:  **Explosion Proof Class 1, Groups C & D**,
- 9.) Manual Shut in Valves:  Input  Output  Both
- 10.) Emergency Shut Down Valve  Yes If Yes Please Provide Details on a separate sheet
- 11.) Power Supply:  **120VAC 60 Hz**,  120VAC 50 Hz,  220VAC 50 Hz,  24VDC
- 12.) Communications Options:  **Mod Bus RTU**
- 13.) What Type of Terrain does the pipe from the well go across?  
 Flat,  Hills,  Other \_\_\_\_\_
- 14.) Production Recovery Techniques:  Water Injection,  Miscible Injection,  Gas Lift,  
 Other \_\_\_\_\_
- Type of Pump:  Pump Jack,  Submersible,  Natural Lift,  
 More than one of the following? \_\_\_\_\_
- 15.) Is Slugging of the Production Fluids seen?:  Yes,  No  
 If yes, explain Extent of Slugging: \_\_\_\_\_
- 16.) Are the Instantaneous Rates larger than the rates stated in the prior sheet.?  
 If so, describe the worst cases on a separate sheet