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| <b>DESIGN DATA</b> | <b>3-PHASE PRODUCTION SEPARATOR</b> |  |
| <b>PROJECT NO.</b> | Quantity – 14 Nos.                  |  |

**Process Design Data:**

- The 3- Phase Production Separators are sized for the following conditions:
- Gas feed flow rate: 0.6 – 9 MMSCFD.
- Oil feed flow rate of 1000-10000BBL/D
- Water feed flow rate: 300-3000 BBL/D
- Operating Pressure Min/Nor/Max : 5 / 7 / 30 barG
- Operating temperature Min/Nor/Max : - / 35 /50 degC
- Design Pressure: 95.5barG
- Design temperature : 82degC.
- Gas Density: 4.3 kg/m3.
- Oil Density: 830 kg/m3.
- Oil Viscosity: 0.012 cP.
- Water Density: 1100 kg/m3.
- Water Viscosity: 0.55 cP.
- Turndown: 10%.

**Separator Vessel Design Data:**

- Design Code: ASME SEC. VIII DIV I Ed. 2013.
- ASME Certification Mark: U Stamp.
- Inspection: One CIS Insurance Company.
- Design Pressure: 95.5 bar (g).
- Operating Pressure (Norm/Max): 5/30 bar (g).
- Hydrotest Pressure: 125 bar (g).
- MAWP ( Internal) : 95.5 bar (g).
- MAWP ( External): 1.03 bar (g).
- Design Temperature: 82 deg. C.
- Operating Temperature: 35 deg. C.
- MDMT : -19 deg.C @ 95.5 bar (g).
- Separator Vessel ID: 1524 MM.
- Overall Length: 8207 MM.
- Seam to Seam Length: 6384 MM.
- Shell Thickness: 63 MM.
- Dished End Thickness: 34 MM (Min).
- Type of Dished Ends: Hemispherical.
- PWHT: Yes.
- Separator Skid Rating : 600#.