## 30" Sweet Satellite Test Separator Package

#40454

### Principal Vessel Connections:

- Score Projects 30" X 8'0" 720psi 3-Phase Vertical Separator
- MAWP 720psi @ 130F, MDMT -20F @ 720psi
- 100% RT cat. A,B,C welds
- Corrosion Allowance 1/8", RT-2, no PWHT, sweet service
- ABSA Approved design and registered in Ab, BC & Sask
- Built to ASME "U" stamp certification
  - o 3" 300# Inlet c/w 3" elbow diverter
  - o 3" 300# Gas outlet
  - o 2" 300# Drain
  - o 2 2"npt Liquid outlets
  - o 2 2"npt LC Connections
  - 2"npt PSV connection
  - 2"npt HLSD connection
  - 2 2"npt Inspection connections
  - 4 ¾"npt LG connections
  - o ¾"npt TI connection
  - o ¾"npt PI connection
  - o Internal float shield
  - o Lifting lugs, grounding lug
  - o 6" x 9#/ cu. Ft. Demister pad
- Mercer 9100 1"x1"npt "c" orifice PSV set @ 4700kPa
- WIKA transparent sight glass w/ WIKA valves & 3/4" isolation valves
  - WLG-20-16T-1C w/ WLG-110-1N valves
- WGI ½"npt 0-1000psi dual scale, liquid filled, 4" pressure indicator
- WGI ½"npt 0-250F dual scale, 3" temperature indicator w/ ¾"npt thermowell

#### Inlet Piping and ESD Valve:

- (4) 3" 300# RF Flange at skid edge for 4 well inlet header with option to increase to 6 well header unit
  - o c/w ¾"npt x ½"npt WGI needle valve & WGI ½"npt 0-1000psi dual scale, liquid filled, 4" pressure indicator
- Each inlet from 4 well header includes valve options to either join 2" 300# test separator inlet or 4" 300# group line (test separator bypass)
- 4" 300# Test separator bypass heads to group line w/ option to 6" pig launcher/receiver (includes SS basket). Pig launcher/receiver has 3" 300# RF ball valve for bypass option. Group line outlet, 4" 300# RF flange at skid edge
- 2" 300# Test separator inlet includes;
- (2) WKM 2" 300# RF FP manual ball valve
  - o Floater, cs body cs ball/stem
  - o 1 Inlet ESD, 1 bypass ESD
- \* Pig launcher/receiver will be built to CSA-Z662 code

## Sales Gas Process:

- Canalta 2" 600# dual chamber meter run new
  - AGA 2000 Ed., A216 WCB, left hand
  - Orifice plate 2" x 1/8", 1.000, 316
  - OAL − 48"
  - Upstream: 600#RF, Downstream: 600#RF
  - Contour flow conditioner: Pin, 0.75 beta
- Spool piece (10 1/8" face to face) for future back pressure control valve
- Sales gas process joins 2<sup>nd</sup> phase liquid process line and heads to 4" group outlet

#### Liquid Process:

- Worchester 2"npt level control valve w/ Flowserve series 75 electric actuator
  - o c/w limit switch
- Statiflo 2" 300# Motionless Mixer
- Nuflo turbine meter
  - o ASSY FM, 1-1/2"x2", EZ-N, STD Flow meter assembly
  - o 3.41 to 40.88 m3/hr (15 to 180 USGPM)
  - o Flow meter pickup
  - o c/w Alta 2" 300# y-strainer & proving taps
- 2<sup>nd</sup> phase liquid process tied to sales gas process line and heads to 4" group outlet

## Support Skid:

- 11' x 20' (3/16" checker plate) floor
- W10@22# Main frame and center rail
- W6@15# Load barring members
- C6 Floor supports
- 3/8" Vessel base plate
- Floor sump piped to edge w/ 2"npt ball valve
- Includes 3" x ¼ FB perimeter containment
- 4 x Lift lugs (Includes MPI)
- Containment ramps at doors
- Includes all structural supports
- P.Eng stamped drawing for Alberta
- 3" Poly-urethane spray foam insulation under checker plate

## **Building**:

- 11' x 20' x 10' Gable style self-framing building
- 22Ga pre-painted steel exterior (tan walls & roof; Metro brown doors & trim)
- R12 Walls, R20 roof, 6-mil vapor barrier c/w 24Ga white fluted aluminum lining
- (2) 3' x 7' Door w/window & panic hardware, 18"x20" IWG, check chain, threshold and canopy
- (4) 38" x 36" Double glazed sliding window w/ screen
- (2) 12" x 12" vent w/ slider
- 20' Ridge vent c/w chain operator and bird screen
- Continuous base flashing and 22 gauge pipe cutout flashings
- Eaves trough, ice rakes & down spouts
- (3) Interior tie rods w/ uprights
- P.Eng stamped drawings for Alberta

## Valves:

- 2 WKM 4" 300# FP ball valve, cs body std trim
- 6 WKM 3" 300# FP ball valve, cs body std trim
- 10 WKM 2" 300# FP ball valve, cs body std trim
- 1 WKM 2" 300# FP DB&B ball valve, cs body std trim
- 1 WKM 2"npt 2000# RP ball valve, cs body std trim
- 2 WKM 1"npt 3000# RP ball valve, cs body std trim
- 3 WKM ¾"npt 3000# RP ball valve, cs body std trim
- 3 WKM ½"npt 3000# RP ball valve, cs body std trim
- 3 Wheatley 2" 300# FP swing check valve, wcc body std trim
  1 Plainsman ½"npt MxF in-line ball check valve, cs body ss ball & seat
- 4 WGI ¾"mnpt x ½"fnpt SB&B needle valve, cs body ss trim
- 1 WGI ½"npt 10,000# needle valve, cs body cs body ss trim

# Piping Information and Notes:

- Process piping as per ASME B31.3 specifications
- Welded pipe: 2" SA106B Sch 80 w/ 300# valves
- Welded pipe: (3" & 4") SA106B Sch STD w/ 300# valves
- Threaded pipe: SA106B Sch 80 with 3000# valves
- Flanges: SA105N
- Welded fittings: SA234-WPB
- Threaded fittings: SA105N, 2000#
- All instruments vented individually off skid to atmosphere
- All necessary valves, gauges, fittings and pipe included.
- Piping to skid edge c/w individual connections
- Piping and instrument tubing securely supported
- Package is readied or dismantled only to the extent required for shipping

## **Quality Control/Testing:**

- Hydro tested to 1.5 times working pressure
- ABSA registered QC program, AQP#21172
- 10% X-ray, 10% MPI all O'lets, No PWHT
- All instrumentation pneumatic tested and function tested

### **Painting:**

- SSPC SP6 Sandblasting
- Painted with Cloverdale grey phenolic primer and Cloverdale industrial enamel in TKS light grey