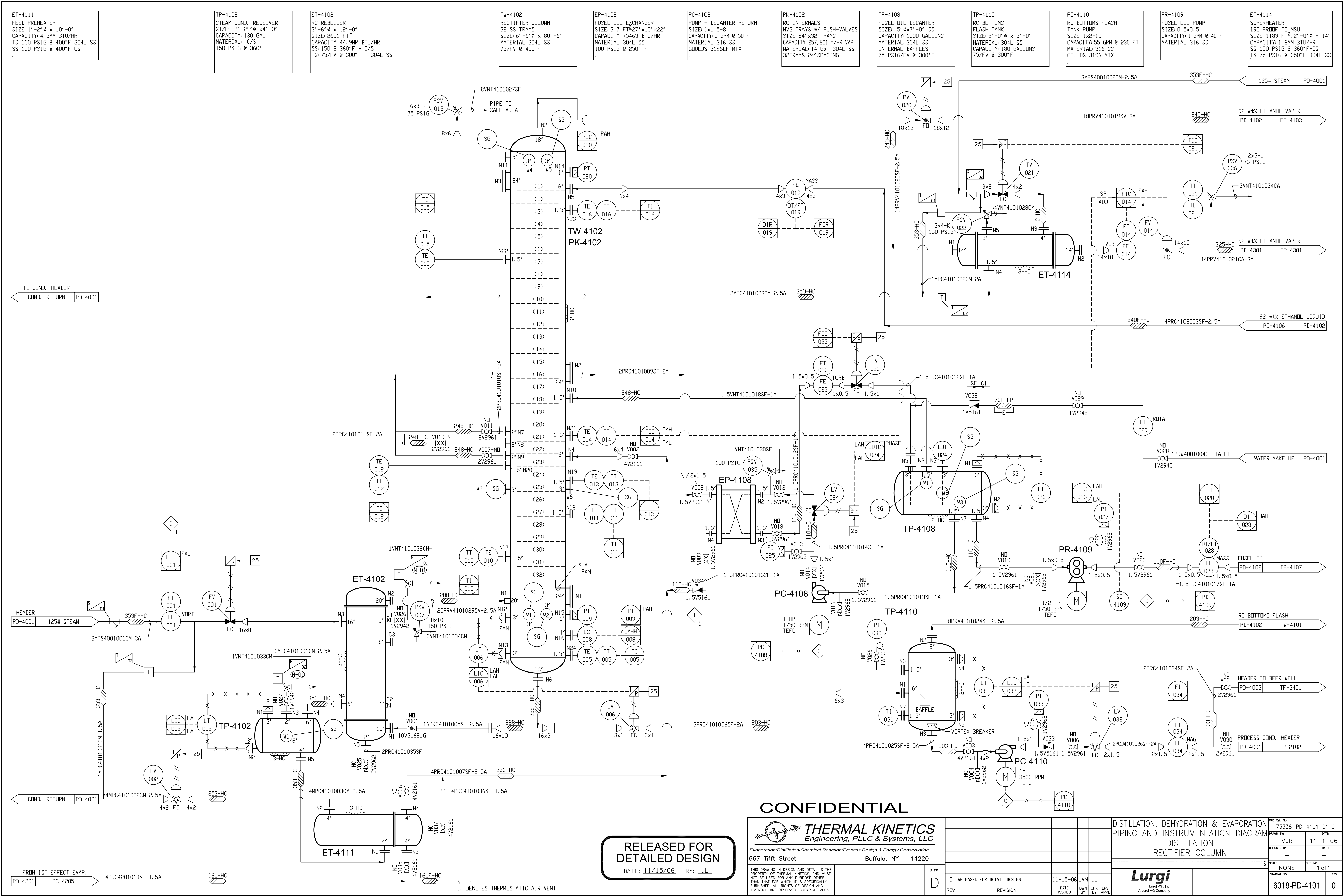




ET-4111
FEED PREHEATER
SIZE: 1'-2" Ø x 10'-0"
CAPACITY: 4.5MM BTU/HR
TS: 100 PSIG @ 400°F 304L SS
SS: 150 PSIG @ 400°F CS

TP-4102
STEAM COND. RECEIVER
SIZE: 2'-2" Ø x 4'-0"
CAPACITY: 130 GAL
MATERIAL: C/S
150 PSIG @ 360°F

ET-4102
RC REBOILER
3'-6" Ø x 12'-0"
SIZE: 2601 FT²
CAPACITY: 44.9MM BTU/HR
SS: 150 @ 360°F - C/S
TS: 75/FV @ 300°F - 304L SS

TW-4102
RECTIFIER COLUMN
32 SS TRAYS
SIZE: 3.7 FT² x 10' x 22'
CAPACITY: 75463 BTU/HR
MATERIAL: 304L SS
75/FV @ 400°F

EP-4108
FUSEL OIL EXCHANGER
SIZE: 3.7 FT² x 10' x 22'
CAPACITY: 75463 BTU/HR
MATERIAL: 304L SS
100 PSIG @ 250°F

PC-4108
PUMP - DECANTER RETURN
SIZE: 1x1.5-8
CAPACITY: 5 GPM @ 50 FT
MATERIAL: 316 SS
GOULDS 3196LF MTX

PK-4102
RC INTERNALS
MVG TRAYS w/ PUSH-VALVES
SIZE: 84' x 32 TRAYS
CAPACITY: 257,601 #/HR VAP.
MATERIAL: 14 Ga. 304L SS
32 TRAYS 24" SPACING

TP-4108
FUSEL OIL DECANTER
SIZE: 5' Ø x 7'-0" SS
CAPACITY: 1000 GALLONS
MATERIAL: 304L SS
INTERNAL BAFFLES
75 PSIG/FV @ 300°F

TP-4110
RC BOTTOMS FLASH
FLASH TANK
SIZE: 2'-0" Ø x 5'-0"
MATERIAL: 304L SS
CAPACITY: 180 GALLONS
75/FV @ 300°F

PC-4110
RC BOTTOMS FLASH
TANK PUMP
SIZE: 1x2-10
CAPACITY: 55 GPM @ 230 FT
MATERIAL: 316 SS
GOULDS 3196 MTX

PR-4109
FUSEL OIL PUMP
SIZE: 0.5x0.5
CAPACITY: 1 GPM @ 40 FT
MATERIAL: 316 SS

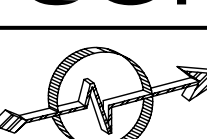
ET-4114
SUPERHEATER
190 PROOF TO MSU
SIZE: 1189 FT², 2'-0" Ø x 14'
CAPACITY: 1.8MM BTU/HR
SS: 150 PSIG @ 360°F - CS
TS: 75 PSIG @ 350°F-304L SS

FROM 1ST EFFECT EVAP.
PD-4201 PC-4205 4PRC4201013SF-1.5A 161-HC

NOTE:
1. DENOTES THERMOSTATIC AIR VENT

RELEASED FOR
DETAILED DESIGN
DATE: 11/15/06 BY: JL

CONFIDENTIAL

**THERMAL KINETICS**
Engineering, PLLC & Systems, LLC

Evaporation/Distillation/Chemical Reaction/Process Design & Energy Conservation

667 Tift Street Buffalo, NY 14220

THIS DRAWING IN DESIGN AND DETAIL IS THE PROPERTY OF THERMAL KINETICS, AND MUST NOT BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS SPECIFICALLY FURNISHED. ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED. COPYRIGHT 2006

DATE: 11-15-06

BY: JL

SIZE

D

REV

0

RELEASED FOR DETAIL DESIGN

11-15-06

LVN

JL

DATE

ISSUED

BY

CHK

BY

LPS

APPRO

DISTILLATION, DEHYDRATION & EVAPORATION
PIPING AND INSTRUMENTATION DIAGRAM
DISTILLATION
RECTIFIER COLUMN

SCALE: NONE

DWG. NO. 1 of 1

DRAWING NO. 6018-PD-4101

REV. 0

6018-PD-4101

0

73338-PD-4101-01-0

DATE: 11-1-06

CHECKED BY: MJB

DATE: 11-1-06

SCALE: NONE

DWG. NO. 1 of 1

DRAWING NO. 6018-PD-4101

REV. 0

Lurgi

Lurgi PSI, Inc.

A Lurgi AG Company

\\server\DrTDM\Docs\73338\Design\Process\73338-PD-4101-1-D.DWG, 12/5/2006 8:16:12 AM