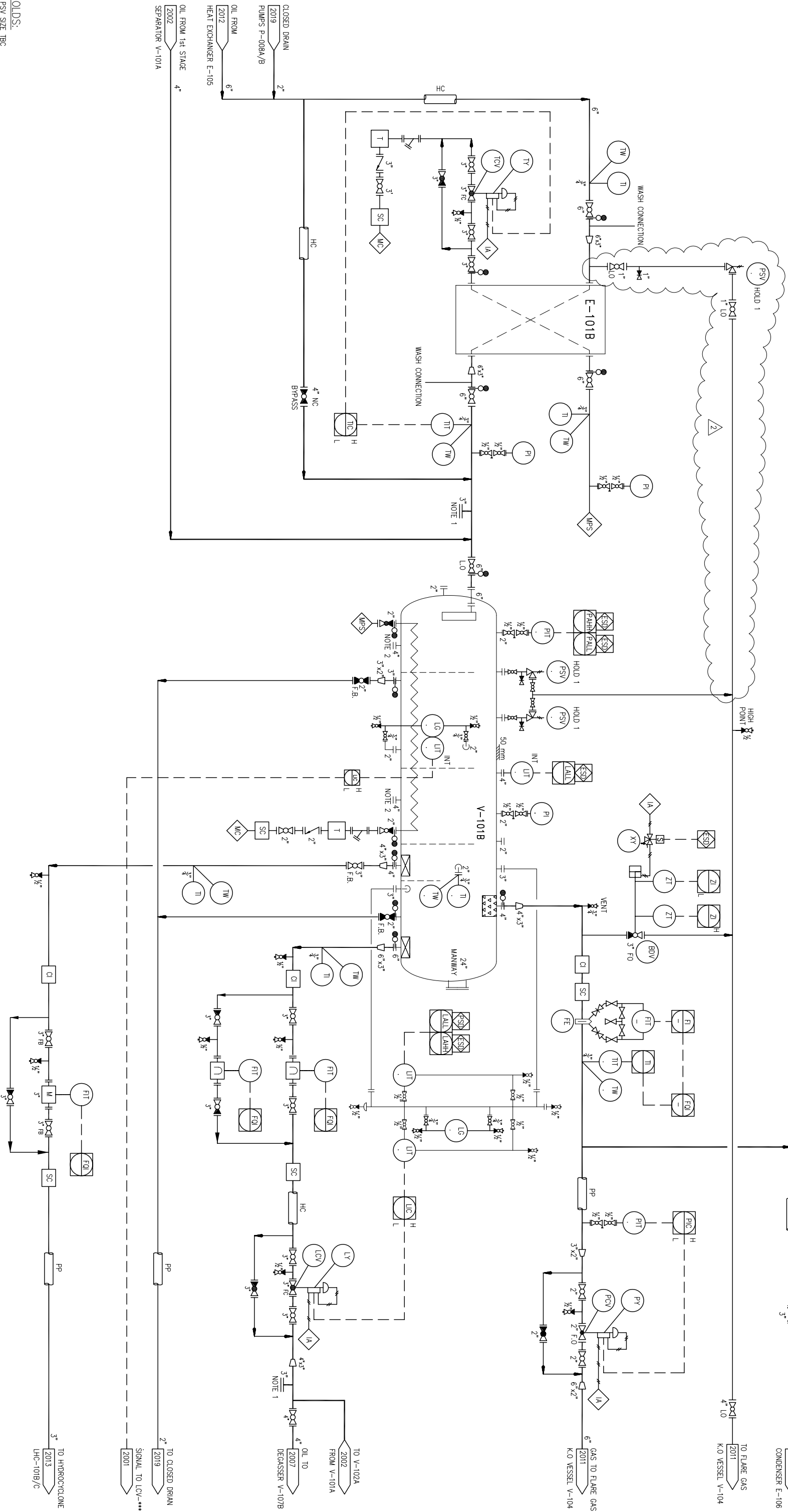


ITEM No: E-101B
 UNIT: CRUDE HEATER
 SIZE/DUTY: 508mm OD x 1125mm I/D / 2812 kW
 SET PRESS./TEMP: 13 barg / 220°C
 CR. PRESS./TEMP: 11 barg / 184°C SATURATED STEAM
 INSULATION: 50mm
 TRIM: C.S. SHELL 316L ST/SIL PLATE

V-101B
 1st STAGE SEPARATOR
 SIZE/DUTY: 1981mm OD x 6058mm IAH/IAH
 SET PRESS./TEMP: 13 barg / 170°C
 CR. PRESS./TEMP: 10 barg / 140°C
 INSULATION: 50mm
 TRIM: C.S. SHELL 316L ST/SIL PLATE
 CARBON STEEL - INTERNALLY COATED



HOLDS:
 1. PSV SIZE TBC

NOTES:
 1. FOR FUTURE CONNECTION OF PETROBRAS HYDROCYCLONE SEPARATOR PACKAGE
 2. FOR FUTURE ADDITION OF SAND SETTLING SYSTEM

PRODUCTS AND TECHNOLOGY DEVELOPED IN U.S.A., OR BY CITIZENS OF THE U.S.A. ARE DEEMED TO BE OF U.S. ORIGIN AND THEREBY SUBJECT TO U.S. EXPORT CONTROL LAWS. THE EXPORT OR RE-EXPORT OF U.S. ORIGIN TECHNOLOGY BY ANY MEANS, INCLUDING DATA TRANSFER, IS PROHIBITED EXCEPT IN ACCORDANCE WITH U.S. LAW AND POWERWELL SERVICES POLICY.

NO.	REVISION	DATE	BY	CHK.	APPV.	DATE	BY	CHK.	APPV.	DATE	BY	CHK.	APPV.	DATE	BY	CHK.	APPV.	DATE	BY	CHK.	APPV.	
1	INITIAL ISSUE																					
2	REVISED AS INDICATED																					

DATE	BY	DATE	BY	DATE	BY
25 July 2006	K. Ward	4 Aug 2006	N. Wornton	4 Aug 2006	F. Shilbeck
4 Aug 2006	A. Davis	4 Aug 2006	F. Shilbeck	4 Aug 2006	F. Shilbeck

PROJECT NO.	PROJECT	SCALE	DWG. NO.	REV. NO.
06-PE0003A	PETROJARUL SIRI	NONE	06-PE0003A-5-2006	2

PowerWell TESTING™

PIPING AND INSTRUMENTATION DIAGRAM
 CRUDE HEATERS/1st STAGE SEPARATOR TRAIN 'B'
 OIL PROCESSING FACILITY