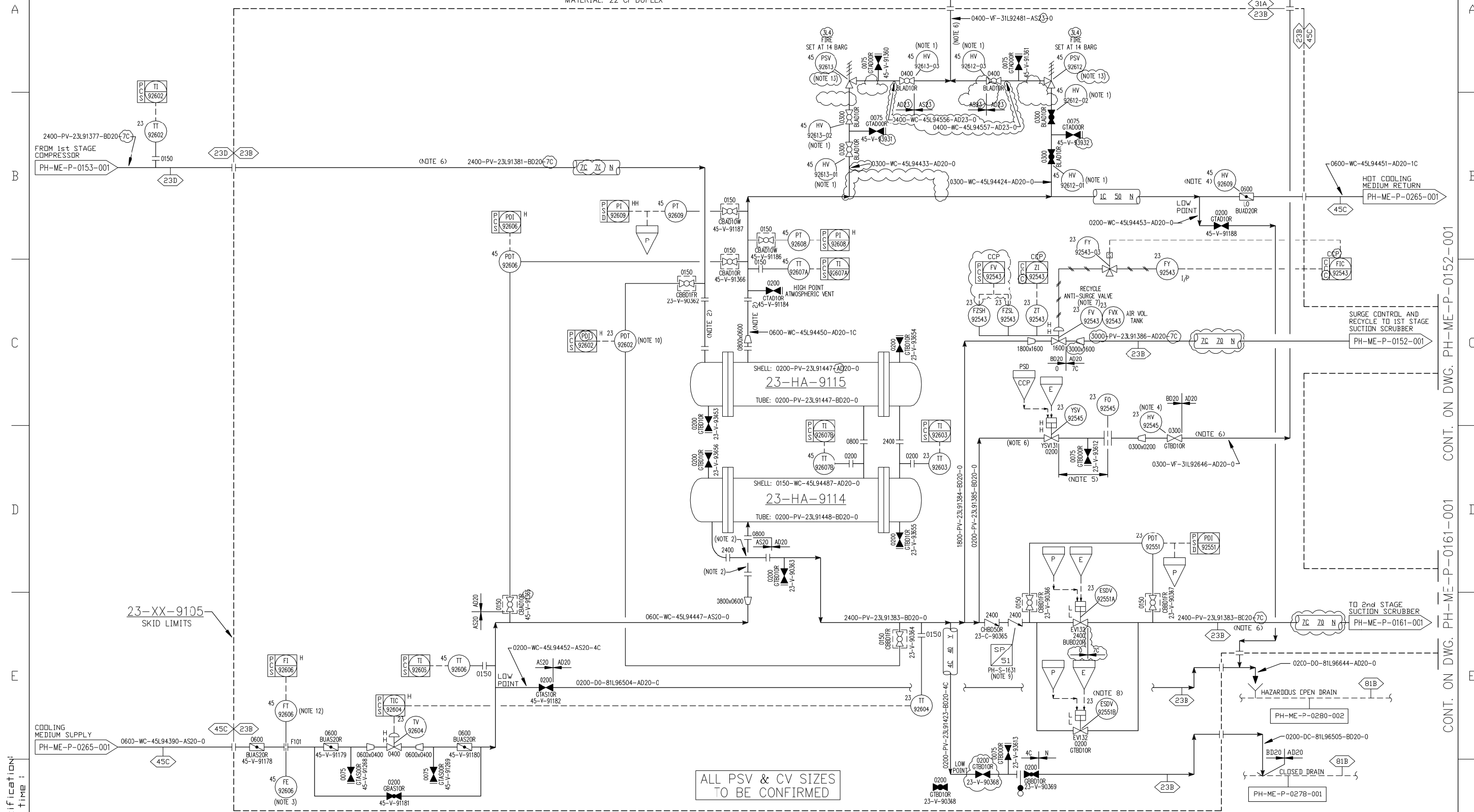


23-XX-9105
1st STAGE SUCTION/DISCHARGE COOLER SKID

23-HA-9114/9115
1st STAGE DISCHARGE COOLERS
DUTY: 15330 kW
TYPE: SHELL AND TUBE
DESIGN SHELL: 15.8 BARG/FV AT (150)°C
OPERATING SHELL: 5.0 BARG AT 20.12°C
DESIGN TUBE: 30 BARG/FULL VACUUM AT 175°C (-28°C MIN)
OPERATING TUBE: 12.0 BARG AT 119.7°C
MATERIAL: 22 Cr DUPLEX



Field for file specification
Field for date and time

- NOTES:
1. KEY INTERLOCKED VALVE.
 2. REMOVABLE MAINTENANCE SPOOL.
 3. CONDITIONING PLATE. PROVIDE STRAIGHT RUN OF 2D UPSTREAM AND 2D DOWNSTREAM.
 4. KEY LOCKED VALVE.
 5. MINIMUM 1 METER SEPARATION.
 6. DO NOT PICKET.
 7. LOCATE ANTI-SURGE VALVE AS CLOSE AS PRACTICAL TO TEE.
 8. 2" EQUALIZATION VALVE PARALLEL TO SHUTDOWN VALVE.
 9. DISSIMILAR CHECK VALVES.
 10. TRANSMITTER TO BE MOUNTED OFF SKID ON WEATHER DECK DUE TO THE ELEVATION OF THE PDT TAPS ON SKID.
 11. DELETED.
 12. TIT 0050 GATE VALVES, GTAS00R, FOR EACH OF: 45-V-92606 (TOTAL: 2 VALVES) - BU PIPING. SEE DETAIL F101 ON PH-ME-P-0160-001.
 13. FIRE CASE IS THE GOVERNING CASE (EXCEEDS TUBE RUPTURE PROTECTION REQUIREMENT).

REV	DATE	BY	DESCRIPTION	CHK	ENGR	APPR	CLIENT
2	15OCT08	JDK	RE-ISSUED FOR CONSTRUCTION	RAK	RK/PS/A		RAB
1	09MAY08	JDK	RE-ISSUED FOR CONSTRUCTION	RAK	JC/PS/A		SVS
0	01OCT07	JDK	ISSUED FOR CONSTRUCTION	JTG	JC/ES/A		SVS

Wood Group Engineering
(North Sea) Ltd.

bp

MUSTANG INTERNATIONAL, LP
HOUSTON, TEXAS

PROJECT NO. 10910

REGISTRATION CODE 133-02

DRAWING NO. PH ME P 0160 001

SCALE NONE

CONT. ON DWG. PH-ME-P-0152-001
CONT. ON DWG. PH-ME-P-0161-001