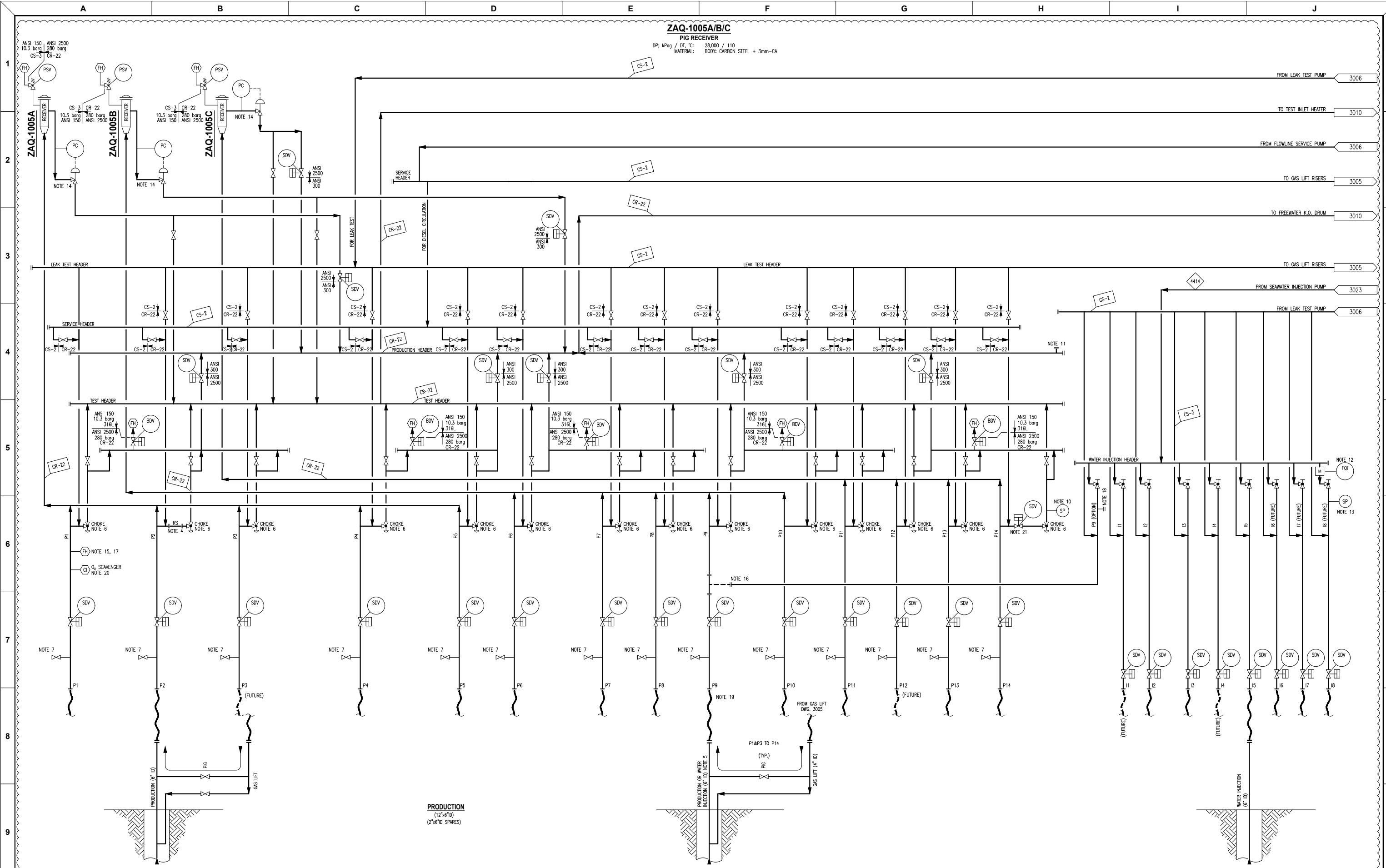


ZAQ-1005A/B/C
PIG RECEIVER
 DP: kPag / DT, °C: 28,000 / 110
 MATERIAL: BODY: CARBON STEEL + 3mm-CA



- NOTES:**
- FROM TOP OF THE RISERS TO FREE WATER KO DRUM/TEST SEPARATOR IS DUPLEX STAINLESS (22CR).
 - PRODUCTION CHOKES ARE REMOTE OPERATED.
 - DELETED.
 - A SPOOL PIECE IS PROVIDED FOR EACH WELL FOR FUTURE INSTALLATION SLUG CONTROL VALVE, MULTIPHASE FLOW METER (TYPICAL FOR ALL PRODUCTION RISERS).
 - INITIAL CONNECTION TO PRODUCTION RISER FUTURE CONNECTION TO WATER INJECTION RISER.
 - TEMPERATURE TRANSMITTER TO BE PROVIDED UPSTREAM AND PRESSURE AND TEMPERATURE TRANSMITTER TO BE PROVIDED DOWNSTREAM OF EACH CHOKE.
 - DELETED.
 - DELETED.
 - DELETED.

- HOLDS:**
- TYPICAL FOR ALL PRODUCTION CHOKE VALVE OUTLET TIE-IN TO PRODUCTION/TEST HEADERS.
 - FOR HYDROSTATIC TEST HOSE OR N2 KICK-OFF VIA HOSE.
 - TYPICAL FOR ALL WATER INJECTION HEADER TO CHOKE VALVE INLET.
 - TYPICAL FOR ALL WATER INJECTION RISERS.
 - PRESSURE CONTROL VALVES FOR PIG SURGE AND SLUG CONTROL.
 - MANUAL DEPRESSURIZATION, TYPICAL FOR ALL PRODUCTION RISERS.
 - CONNECTION TO (P) RISER VIA SWING JOINT.
 - PRODUCTION RISER DEPRESSURIZING TO BE WITHIN 3 HOURS.
 - DEGASATED SEAWATER FOR RISER FILLING (TYPICAL FOR ALL WATER INJECTION WELLS).
 - FACILITY IS PROVIDED FOR CONVERSION OF P9 PRODUCTION WELL TO WATER INJECTION.
 - OXYGEN SCAVENGER INJECTION TO PRODUCTION LINES, TYPICAL FOR ALL PRODUCTION RISERS.
 - TYPICAL FOR ALL PRODUCTION CHOKE VALVE INLET.

ISSUED FOR CONSTRUCTION
 25 AUGUST 2015

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REV	DATE	REVISION DESCRIPTION	ORIG	CHKD	LDE	EM
0	25AUG15	IFC	VPN	LAL	SVK	TXM
C1	13APR15	REVISED - IFD	VPN	SAH	SVK	TXM
C	19JAN15	IFR	VPN	SAH	SVK	TXM
B4	04NOV14	IFR	VPN	KN	MY	TXM

Schahin **MODEC**

Drawn by: V. NUESTRO
 Designed by: S. ANAND
 Date: 03 NOVEMBER 2014
 Scale: NONE

MODEC DOC FILE: 0428-MI20-90DP-3004-01-0.dwg

PETROBRAS

PROJECT: FPSO Cidade de Campos dos Goytacazes MV29

TITLE: **PROCESS / UTILITY FLOW DIAGRAM**
SUBSEA, RISER AND MANIFOLD
SHEET 1

MODEC DOCUMENT NUMBER: **0428-MI20-90DP-3004** REV: **0**