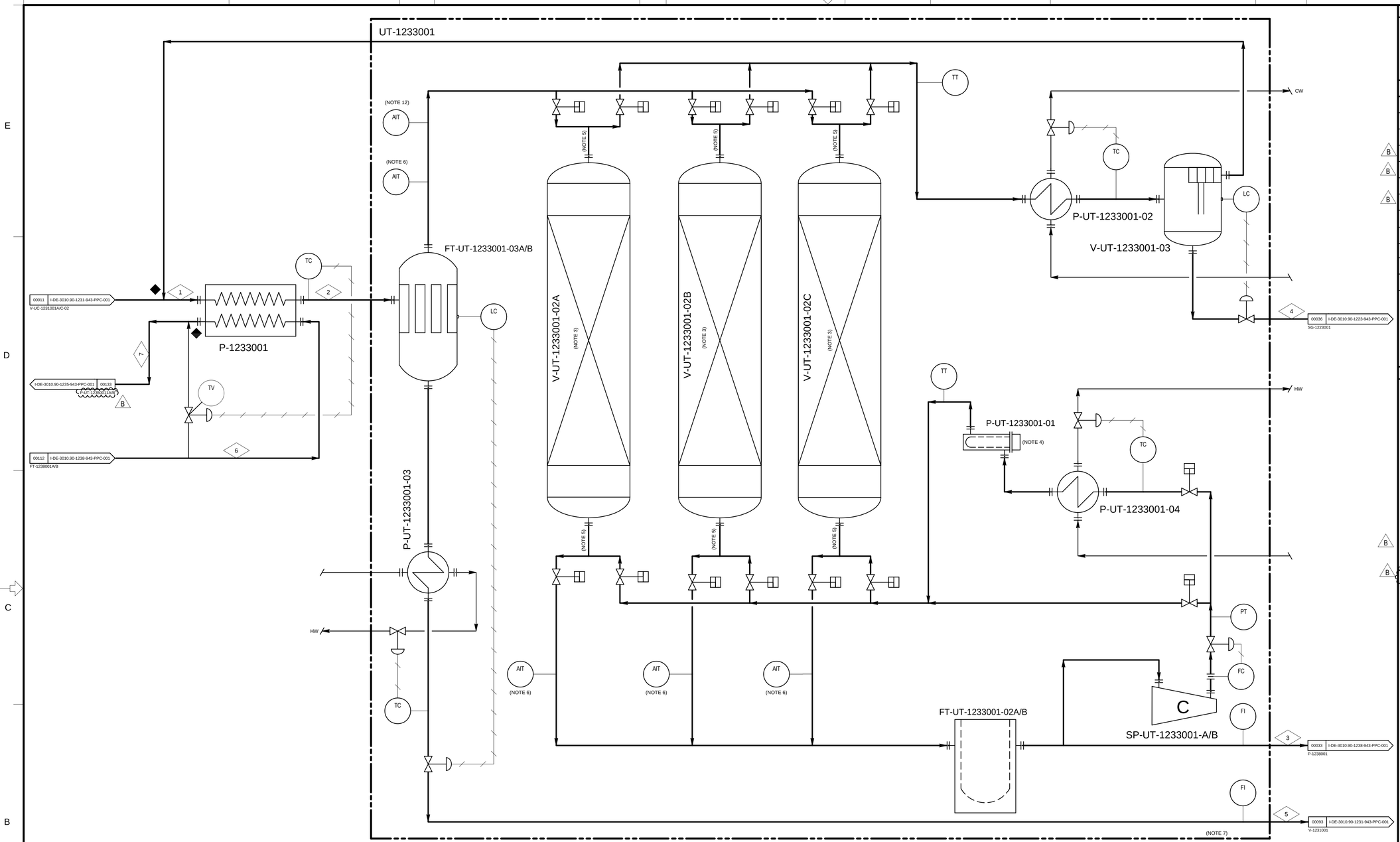

REFERENCE DOCUMENTS

I-ET-3000.00-1200-941-PPC-002 - SYMBOLS AND ABBREVIATIONS

EQUIPMENT

TAG	DESCRIPTION	TYPE	CAPACITY
FT-UT-1233001-02A/B (2 x 100.0%)	PARTICULATE FILTER	CARTRIDGE	6600000 m³/d (NOTE 9)
FT-UT-1233001-03A/B (2 x 100.0%)	GAS COALESCER FILTER	COALESCER	6600000 m³/d (NOTE 9)
B P-1233001 (1 x 100%)	GAS/GAS EXCHANGER	PRINTED CIRCUIT	4.10 E+06 W (NOTE 9)
B P-UT-1233001-01 (1 x 100%)	REGENERATION GAS HEATER	ELECTRICAL	2.28 E+06 W (NOTE 9)
P-UT-1233001-02 (1 x 100%)	REGENERATION GAS COOLER	SHELL AND TUBE	4.8 MW (NOTE 9)
B P-UT-1233001-03 (1 x 100%)	CONDENSATE COALESCER FILTER HEATER	SHELL AND TUBE	0.22 E+06 W (NOTE 9)
P-UT-1233001-04 (1 x 100%)	REGENERATION GAS PRE-HEATER	SHELL AND TUBE	0.92 E+06 W (NOTE 9)
SP-UT-1233001-A/B (2 x 100%)	REGENERATION GAS BLOWER	CENTRIFUGAL	600000 m³/d (NOTE 9)
UT-1233001 (1 x 100%)	GAS DEHYDRATION UNIT	-	6000000m³/d (NOTE 1)
V-UT-1233001-02A/C (3 x 50%)	MOLECULAR SIEVE ADSORBER	MOLECULAR SIEVE	3300000 m³/d (NOTE 9)
V-UT-1233001-03 (1 x 100%)	REGENERATION GAS SEPARATOR	VERTICAL	600000 m³/d (NOTE 9)

GENERAL NOTES

1 - GAS CAPACITY AT 20°C AND 101.3 kPa abs.

2 - THE PERFORMANCE CHARACTERISTICS OF EQUIPMENTS AND SYSTEMS AS SHOWN ON THE UPPER PART OF THIS DRAWING ARE DESIGN DATA AND MAY NOT AGREE WITH BALANCE INFORMATION HERE UNDER WHICH ARE ACTUAL EQUILIBRIUM VALUES.

3 - 2 (TWO) VESSELS OPERATING ON ADSORPTION AND 1(ONE) ON REGENERATION. THE VALVES LOCATED UPSTREAM AND DOWSTREAM THE VESSELS SHALL BE OPERATED IN ORDER TO ISOLATE THE VESSEL ON REGENERATION FROM THE INCOMING GAS.

4 - ELECTRICAL PARTS WILL BE SPARED.

5 - FLOW IN BOTH WAYS.

6 - WATER CONTENT ANALYZER.

7 - THE PROPERTIES AND FLOW RATE OF INTERNAL STREAMS WILL BE DEFINED BY PACKAGER.

8 - THE GAS DEHYDRATION UNIT SHALL OPERATE WITH ALL CASES LISTED IN THE DATA SHEET I-FD-3010.90-1233-560-PPC-001 - GAS DEHYDRATION UNIT (UT-1233001).

B 9 - THE CAPACITY SHALL BE CONFIRMED BY PACKAGER, CONSIDERING THE CASES LISTED ON I-FD-3010.90-1233-560-PPC-001 - GAS DEHYDRATION UNIT (UT-1233001).

10 - GAS FLOW RATE AT PRESSURE AND TEMPERATURE OPERATIONAL CONDITIONS.

B 11 - THE CASE SHOWN HERE UNDER IS CASE 4 (MAXIMUM OIL AND GAS) ACCORDING TO I-RL-3010.90-1200-940-PPC-002 - PROCESS SIMULATION REPORT.

12 - GAS CHROMATOGRAPH ANALYZER.

STREAMS CHARACTERISTICS COMPONENTS (% MOLAR) AND FLOW RATES		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
WATER	H_2O	0.0880	0.0880	0.0001	100.0000	2.1437	0.0001	0.0001																							
NITROGEN	N_2	0.5772	0.5772	0.5874	0.0000	0.1348	0.6100	0.6100																							
CARBON DIOXIDE	CO_2	24.9844	24.9844	25.1128	0.0000	19.7173	25.3856	25.3856																							
METHANE	C1	55.1655	55.1655	55.8668	0.0000	24.8594	57.4818	57.4818																							
ETHANE	C2	8.9069	8.9069	8.8687	0.0000	10.7830	8.7421	8.7421																							
PROPANE	C3	5.8208	5.8208	5.6444	0.0000	13.8122	5.1156	5.1156																							
i-BUTANE	i-C4	0.9227	0.9227	0.8627	0.0000	3.6183	0.6858	0.6858																							
n-BUTANE	n-C4	1.9503	1.9503	1.7957	0.0000	8.8988	1.3498	1.3498																							
i-PENTANE	i-C5	0.3877	0.3877	0.3340	0.0000	2.7955	0.1952	0.1952																							
n-PENTANE	n-C5	0.7996	0.7996	0.6763	0.0000	6.3247	0.3710	0.3710																							
HEXANE	C6	0.2399	0.2399	0.1700	0.0000	3.3665	0.0511	0.0511																							
HEPTANE	C7	0.1164	0.1164	0.0660	0.0000	2.3717	0.0106	0.0106																							
OCTANE	C8	0.0306	0.0306	0.0124	0.0000	0.8445	0.0009	0.0009																							
NONANE	C9	0.0080	0.0080	0.0021	0.0000	0.2718	0.0001	0.0001																							
DECANE	C10	0.0012	0.0012	0.0002	0.0000	0.0478	0.0000	0.0000																							
UNDECANE	C11	0.0002	0.0002	0.0000	0.0000	0.0079	0.0000	0.0000																							
DODECANE	C12	0.0000	0.0000	0.0000	0.0000	0.0011	0.0000	0.0000																							
TRIDECANE	C13	0.0000	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000																							
TETRADECANE	C14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000																							
PENTADECANE	C15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000																							
HEXADECANE	C16	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000																							
HEPTADECANE	C17	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000																							
OCTADECANE	C18	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000																							
NONADECANE	C19	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000																							
C20+	C20+	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000																							
C20+	C20+																														
C20+	C20+																														
	TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00																							
MOLAR FLOW RATE	(kmol/h)	10979.3	10979.3	9661.5	4.5	240.2	9239.5	9239.5																							
MASS FLOW RATE	(kg/h)	309239	309239	268967	81	10316	250361	250361																							
OIL VOLUMETRIC FLOW RATE	(m³/h)	0.0	18.4	0.0	0.0	10.6	0.0	0.0																							
GAS VOLUMETRIC FLOW RATE (NOTE 10)	(m³/h)	2750.2	2404.0	2203.1	0.0	137.7	2983.5	3597.1																							
WATER VOLUMETRIC FLOW RATE	(m³/h)	0.0	0.1	0.0	0.1	0.1	0.0	0.0																							
MOLECULAR MASS	(kg/kmol)	28.2	28.2	27.8	18.0	43.0	27.1	27.1																							
PRESSURE	(kPa abs)	7518.6	7469.5	7371.5	2300.0	2100.0	5346.1	5297.1																							
TEMPERATURE	(°C)	40	26	26	26	15	10	34																							
OIL DENSITY	(kg/m³)	0.0	554.5	0.0	0.0	591.3	0.0	570.3																							

REV.	DESCRIPTION	DATE	EXEC.	CHECK	APPROV.

FILE: SmartPlant P&ID / V 4.03 / I-DE-3010.90-1233-943-PPC-001.pid

CLIENT:

JOB:
PRESALT FPSOS - STANDARD MODULES

AREA:
PRODUCTION

TITLE:
PROCESS FLOW DIAGRAM
GAS DEHYDRATION SYSTEM

DESIGN	EXEC.	CHECK	APPROV.
SCALE NO SCALE	A1: 841x594mm	IN-2000-08-001	SHEET 01 of 01

DATE

No. I-DE-3010.90-1233-943-PPC-001