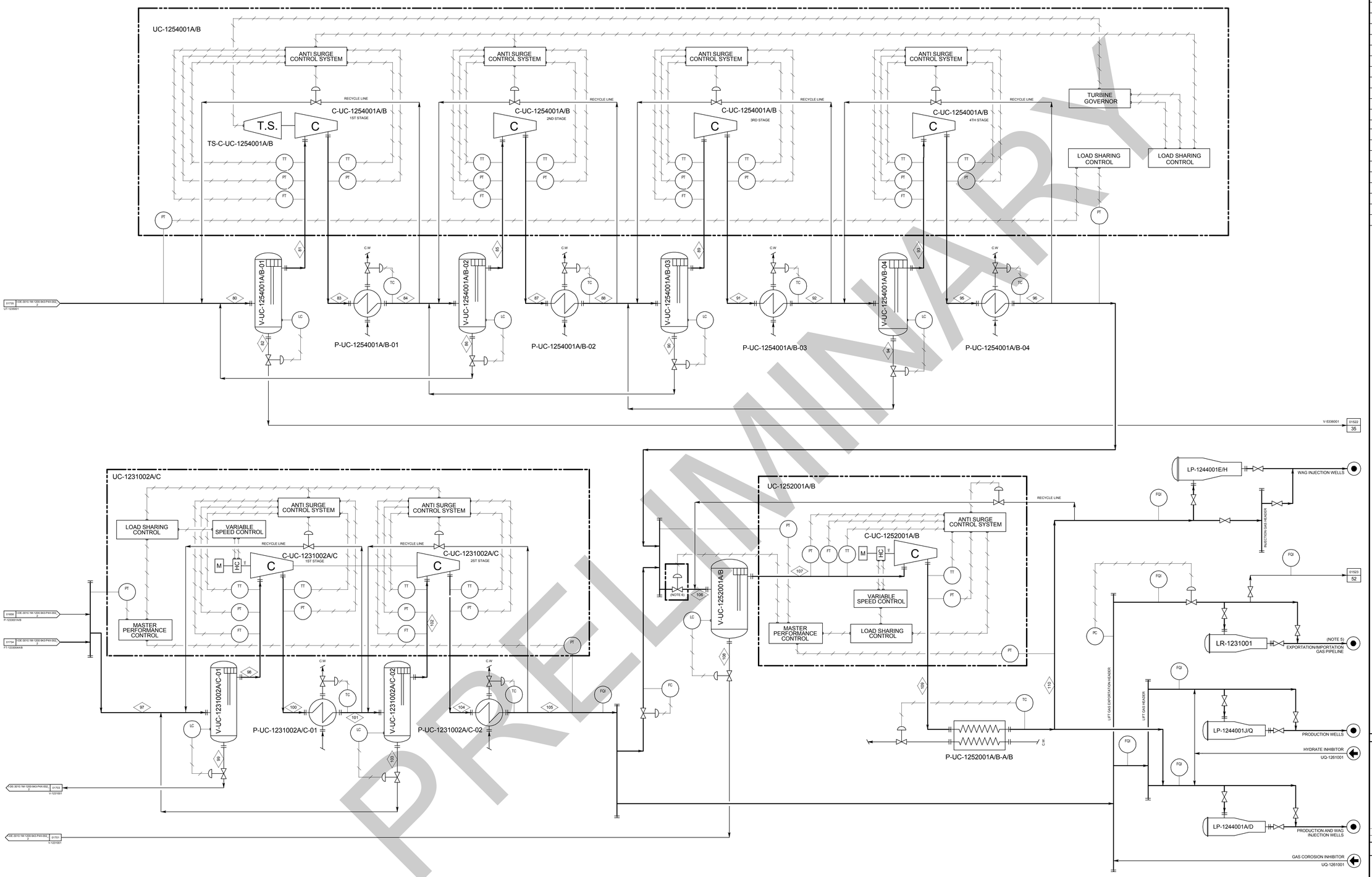

PRELIMINARY

REFERENCE DOCUMENTS

I-ET-3000.00-0000-940-P4X-002 - SYMBOLS FOR PRODUCTION UNITS DESIGN

EQUIPMENT

TAG	DESCRIPTION	TYPE	CAPACITY
C-UC-1231002A/C (3 x 50%)	EXPORTATION GAS COMPRESSOR	Centrifugal	3000000 m³/d
C-UC-1252001A/B (2 x 100%)	INJECTION GAS COMPRESSOR	Centrifugal	6000000 m³/d
C-UC-1254001A/B (2 x 100%)	CO2 COMPRESSOR	Centrifugal	3000000 m³/d
LP-1244001A/Q (15 x 100%)	LIFT GAS - PIG LAUNCHER	Pig Launcher	-
LR-1231001 (1 x 100%)	GAS PIPELINE PIG LAUNCHER / RECEIVER	Pig Receiver	-
P-UC-1231002A/C-01 (3 x 50%)	EXPORTATION GAS COMPRESSION 1ST STAGE DISCHARGE COOLER	Shell and Tube	5.87E+06 W
P-UC-1231002A/C-02 (3 x 50%)	EXPORTATION GAS COMPRESSION 2ND STAGE DISCHARGE COOLER	Shell and Tube	2.83E+06 W
P-UC-1252001A/B-A/B (4 x 50%)	INJECTION GAS COMPRESSION DISCHARGE COOLER	Printed Circuit	4.92E+06 W
P-UC-1254001A/B-01 (2 x 100%)	CO2 COMPRESSION - 1ST STAGE DISCHARGE COOLER	Shell and Tube	9.4E+06 W
P-UC-1254001A/B-02 (2 x 100%)	CO2 COMPRESSION - 2ND STAGE DISCHARGE COOLER	Shell and Tube	8.7E+06 W
P-UC-1254001A/B-03 (2 x 100%)	CO2 COMPRESSION - 3RD STAGE DISCHARGE COOLER	Shell and Tube	9.5E+06 W
P-UC-1254001A/B-04 (2 x 100%)	CO2 COMPRESSION - 4TH STAGE DISCHARGE COOLER	Shell and Tube	7.75E+06 W
TS-C-UC-1254001A/B (2 x 100%)	GAS TURBINE FOR CO2 COMPRESSION		-
UC-1231002A/C (3 x 50%)	EXPORTATION GAS COMPRESSION UNIT		3000000 m³/d
UC-1252001A/B (2 x 100%)	INJECTION GAS COMPRESSION UNIT		6000000 m³/d
UC-1254001A/B (2 x 100%)	CO2 COMPRESSION UNIT		3000000 m³/d
V-UC-1231002A/C-01 (3 x 50%)	EXPORTATION GAS COMPRESSOR 1ST STAGE SUCTION SCRUBBER	Vertical	3000000 m³/dday
V-UC-1231002A/C-02 (3 x 50%)	EXPORTATION GAS COMPRESSOR 2ND STAGE SUCTION SCRUBBER	Vertical	3000000 m³/dday
V-UC-1252001A/B (2 x 100%)	INJECTION GAS COMPRESSION SUCTION SCRUBBER	Vertical	6000000 m³/d
V-UC-1254001A/B-01 (2 x 100%)	CO2 COMPRESSION 1ST STAGE SUCTION SCRUBBER	Vertical	3000000 m³/d
V-UC-1254001A/B-02 (2 x 100%)	CO2 COMPRESSION 2ND STAGE SUCTION SCRUBBER	Vertical	3000000 m³/d
V-UC-1254001A/B-03 (2 x 100%)	CO2 COMPRESSION 3RD STAGE SUCTION SCRUBBER	Vertical	3000000 m³/d
V-UC-1254001A/B-04 (2 x 100%)	CO2 COMPRESSION 4TH STAGE SUCTION SCRUBBER	Vertical	3000000 m³/d

GENERAL NOTES

1 - LIQUID CAPACITIES ARE AT STANDARD CONDITIONS OF 15.6ºC AND 101.3 kPa abs.

2 - GAS CAPACITIES ARE AT STANDARD CONDITIONS OF 15.6ºC AND 101.3 kPa abs.

3 - CONDENSATE WOULD BE EXPECTED THROUGH CO2 REMOVAL MEMBRANES. THE CONDENSATION AND FLOW RATE OF THIS STREAM SHALL BE CONFIRMED BY PACKEDER.

4 - FLOW RATE AT PRESSURE AND TEMPERATURE OPERATIONAL CONDITIONS.

5 - FLOW IN BOTH WAYS.

6 - THROTTLE VALVE UTILIZATION SHALL BE CONFIRMED LATER.

REV.	DESCRIPTION	DATE	EXEC.	CHECK	APPROV.
0	ORIGINAL ISSUE		LEANDRO	LARISSA	RENATO

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FORM OWNED TO PETROBRAS N-381 REV. L.

FILE: SmartPlant P&ID / V 4.03 / I-DE-3010.1M-1200-943-P4X-002_3_0.pid

STREAM N.		80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112
OIL VOLUMETRIC FLOW RATE	(NOTE 4) (m³/h)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		283.0		0.0	0.0																	
GAS VOLUMETRIC FLOW RATE	(NOTE 4) (m³/h)	23237.3	25524.8	0.0	8934.1	6272.9	6433.5	0.0	2747.6	1752.4	1766.2	0.0	1020.9	609.4	611.1	0.0	445.1		2029.3	2046.6	0.0	989.1	586.5	587.8	0.0	446.3	354.2	283.0	283.2	0.0	236.0	196.2									
WATER VOLUMETRIC FLOW RATE	(NOTE 4) (m³/h)																																	
MOLECULAR MASS	(kg/kmol)	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	23.3	23.3	39.0	23.3	23.3	23.3	23.3	23.3	23.3	23.3	31.8	31.8	31.8	31.8	31.8	31.8
PRESSURE	(kPa abs)	448.0	408.0	408.0	1690.0	1620.0	1580.0	1580.0	5200.0	5130.0	5090.0	5090.0	11800.0	11730.0	11690.0	11690.0	25110.0	25040.0	4860.0	4820.0	4820.0	12970.0	12900.0	12860.0	12860.0	25070.0	25000.0	25040.0	25000.0	25000.0	25000.0	55070.0	55000.0	
TEMPERATURE	(ºC)	36	36	36	174	40	40	40	163	40	40	40	126	40	40	40	114	40	44	44	44	125	40	40	40	88	40	40	40	40	40	95	40	
HYDROGEN SULFIDE (H2S)	(ppmmol)	894.8081	894.8081	894.8095	894.8081	894.8081	894.8081	894.8080	894.8081	894.8081	894.8081	894.8095	894.8081	894.8081	894.8081	894.8081	895.2965	894.8081	894.8081	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	894.8081	894.8081	894.8023	894.8081	894.8081	
CARBON DIOXIDE (CO2)	(%mol)	55.9762	55.9762	55.9765	55.9762	55.9762	55.9762	55.9762	55.9762	55.9762	55.9762	55.9797	55.9762	55.9762	55.9762	56.0057	55.9762	55.9762	3.0113	3.0113	2.0260	3.0113	3.0113	3.0113	3.0119	3.0113	3.0113	55.9762	55.9762	55.9762	55.9758	55.9762	55.9762	
NOTES:																																		

CLIENT:	SRGE
JOB:	REFERENCE BASIC DESIGN
AREA:	BÚZIOS
TITLE:	PIPING AND INSTRUMENT DIAGRAM PROCESS PLANT OVERVIEW
DESIGN: ESUP	DISC.: FERNANDAR.TGP
CHECK:	APPROV:
SCALE: NO SCALE	DRAWING: 10010556398.0010
SHEET: 03 of 03	
DATE:	No. I-DE-3010.1M-1200-943-P4X-002

PETROBRAS — DP&T-SRGE

A2 1189mm X 841mm