



EQUIPMENT			
TAG	DESCRIPTION	TYPE	CAPACITY (NOTES 1,3)
C-UC-123101A/C (3x50%)	GAS COMPRESSION UNIT COMPRESSOR	CENTRIFUGAL	200000m ³ /d
P-UC-123101A/C-01 (3x50%)	GAS COMPRESSION UNIT 1st STAGE INLET COOLER	SHELL AND TUBE	3.23 x 10 ⁶ W
P-UC-123101A/C-02 (3x50%)	GAS COMPRESSION UNIT 1st STAGE AFTERCOOLER	SHELL AND TUBE	5.04 x 10 ⁶ W
P-UC-123101A/C-03 (3x50%)	GAS COMPRESSION UNIT 2nd STAGE COOLER	SHELL AND TUBE	4.86 x 10 ⁶ W
P-UC-123101A/C-04 (3x50%)	GAS COMPRESSION UNIT DISCHARGE COOLER	SHELL AND TUBE	6.66 x 10 ⁶ W
V-123101 (1x100%)	SAFETY GAS K.O.DRUM	VERTICAL	600000m ³ /d
V-UC-123101A/C-01 (3x50%)	1st STAGE INLET GAS K.O.DRUM	VERTICAL	200000m ³ /d
V-UC-123101A/C-02 (3x50%)	1st STAGE DISCHARGE GAS K.O.DRUM	VERTICAL	200000m ³ /d
V-UC-123101A/C-03 (3x50%)	2nd STAGE DISCHARGE GAS K.O.DRUM	VERTICAL	200000m ³ /d
UC-123101A/C (3x50%)	GAS COMPRESSION UNIT	-	200000m ³ /d
LP-122303 (1x100%)	GAS PIPELINE PIG LAUNCHER	-	-

- GENERAL NOTES**
- THE PERFORMANCE CHARACTERISTICS OF EQUIPMENTS AND SYSTEMS, AS SHOWN ON THE UPPER PART OF THIS DRAWING, ARE DESIGN DATA AND MAY NOT AGREE WITH THE BALANCE INFORMATION HEREUNDER WHICH ARE ACTUAL EQUILIBRIUM VALUES.
 - TP VANE TYPE MIST ELIMINATOR.
 - GAS CAPACITY AT 20°C AND 101.3 kPa abs.
 - THIS FLOW SHOWS WATER PRESENT ONLY IN THE LIQUID PHASE. THIS VALUE MUST BE CORRECTED TO SEA WATER DENSITY EQUAL AT 1030 kg/m³.
 - OIL VOLUMETRIC FLOW RATE AND OIL DENSITY ARE THE ACTUAL VALUES IN DRY BASIS.
 - GAS FLOW RATE AT PRESSURE AND TEMPERATURE OPERATION CONDITIONS.
 - CHARACTERISTICS OF C12+ FRACTION:
 - FROM 4-RJS-367: PM=631; *API=15.284
 - FROM 3-RJS-360A: PM=635.4; *API=13.020

REV.	DESCRIPTION	DATE	EXEC.	CHECK	APPROV.
C	REVISED WHERE INDICATED BY UTC. FOR QUOTATION.	06AUG01	SOLANGE	ZARATTINI	ZARATTINI
B	GENERAL REVISION DUE TO CONSISTENCY VERIFICATION	09FEB01	EBP	NICODEMOS	NICODEMOS
A	WHERE INDICATED-APPROVED BY E&P-BC	08JAN01	EBP	NICODEMOS	NICODEMOS
0	ORIGINAL	17NOV00	CENPES	R. BORGES	NICODEMOS

STREAM CHARACTERISTICS COMPOSITION (% MOLAL) 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 ₂ O	4.47	4.47	5.00	5.00	0.89	0.89	0.89	0.29	0.29	0.29	0.13	0.13	0.13	0.13	0	0	0	55.89	55.89	95.87	95.87	95.87	0.13							
NITROGEN N ₂	0.44	0.44	0.43	0.43	0.46	0.46	0.46	0.46	0.46	0.46	0.47	0.47	0.47	0.47	0	0	0	0.01	0.01	0.00	0.00	0.00	0.47							
CARBON DIOXIDE CO ₂	4.08	4.08	4.04	4.04	4.23	4.23	4.23	4.27	4.27	4.27	2.00	2.00	2.00	2.00	0	0	0	0.49	0.49	0.02	0.02	0.02	2.00							
METHANE C1	82.81	82.81	82.00	82.00	85.71	85.71	85.71	86.59	86.59	86.59	88.84	88.84	88.84	88.84	0	0	0	4.11	4.11	0.13	0.13	0.13	88.84							
ETHANE C2	4.02	4.02	3.99	3.99	4.17	4.17	4.17	4.20	4.20	4.20	4.31	4.31	4.31	4.31	0	0	0	0.98	0.98	0.03	0.03	0.03	4.31							
PROPANE C3	1.44	1.44	1.44	1.44	1.50	1.50	1.50	1.50	1.50	1.50	1.54	1.54	1.54	1.54	0	0	0	1.08	1.08	0.04	0.04	0.04	1.54							
I-BUTANE I-C4	0.39	0.39	0.40	0.40	0.41	0.41	0.41	0.41	0.41	0.41	0.42	0.42	0.42	0.42	0	0	0	0.65	0.65	0.02	0.02	0.02	0.42							
N-BUTANE N-C4	0.97	0.97	0.98	0.98	1.02	1.02	1.02	1.01	1.01	1.01	1.03	1.03	1.03	1.03	0	0	0	2.23	2.23	0.09	0.09	0.09	1.03							
I-PENTANE I-C5	0.29	0.29	0.30	0.30	0.31	0.31	0.31	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0	0	0	1.48	1.48	0.06	0.06	0.06	0.30							
N-PENTANE N-C5	0.37	0.37	0.39	0.39	0.40	0.40	0.40	0.38	0.38	0.38	0.39	0.39	0.39	0.39	0	0	0	2.40	2.40	0.10	0.10	0.10	0.39							
HEXANE C6	0.27	0.27	0.32	0.32	0.32	0.32	0.32	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0	0	0	4.86	4.86	0.24	0.24	0.24	0.27							
HEPTANE C7	0.25	0.25	0.36	0.36	0.34	0.34	0.34	0.23	0.23	0.23	0.22	0.22	0.22	0.22	0	0	0	11.19	11.19	0.75	0.75	0.75	0.22							
OCTANE C8	0.13	0.13	0.24	0.24	0.19	0.19	0.19	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0	0	0	10.75	10.75	1.23	1.23	1.23	0.07							
NONANE C9	0.04	0.04	0.07	0.07	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0	0	0	2.99	2.99	0.74	0.74	0.74	0.01							
DECANE C10	0.02	0.02	0.03	0.03	0.01	0.01	0.01	0	0	0	0	0	0	0	0	0	0	0.74	0.74	0.44	0.44	0.44	0.04							
UNDECANE C11	0.01	0.01	0.01	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0.15	0.15	0.23	0.23	0.23	0.04							
C12+ (NOTE 7) 4-RJS-367 C12+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
C12+ (NOTE 7) 3-RJS-360A C12+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100							
MOLAR FLOW RATE (kgmol/h)	7124.93	7124.93	7198.80	7198.80	6887.10	6887.10	6887.10	6813.10	6813.10	6813.10	6639.00	6639.00	6639.00	6639.00	3315.10	0	0	74.00	74.00	311.70	311.70	311.70	6639.00							
MASS FLOW RATE (kg/h)	141403.86	141403.86	145032.00	145032.00	138234.00	138234.00	138234.00	134606.00	134606.00	134606.00	127080.00	127080.00	127080.00	127080.00	63462.00	0	0	3628.00	3628.00	6798.00	6798.00	6798.00	127080.00							
OIL VOLUMETRIC FLOW RATE (NOTE 6) (m ³ /h)	0	0	2.08	2.08	0	0	0	4.46	4.46	4.46	0	0	0	0	0	0	0	4.46	4.28	2.08	2.03	2.03	0							
GAS VOLUMETRIC FLOW RATE (NOTE 6) (m ³ /h)	23946	23946	23756	22130	9532	7084	7084	3432	2388	2426	1198	718	718	361	0	0	0	8.04	8.04	18.40	18.40	18.40	2426							
WATER VOLUMETRIC FLOW RATE (NOTE 4) (m ³ /h)	0	0	0.80	0.80	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0	0	0	0.75	0.75	5.42	5.42	5.42	0							
MOLECULAR WEIGHT (kg/kmol)	19.85	19.85	20.15	20.15	20.07	20.07	20.07	19.76	19.76	19.76	19.14	19.14	19.14	19.14	19.14	0	0	48.99	50.01	21.81	21.81	21.81	19.14							
PRESSURE (kPa abs)	866.00	866.00	866.00	797.00	797.00	797.00	2363.00	2363.00	2363.00	6443.00	6293.00	19711.00	19641.00	19641.00	19584.00	0	0	2363.00	2363.00	797.00	797.00	797.00	6293.00							
TEMPERATURE (°C)	80.37	80.37	76.40	40.00	40.00	137.20	37.50	37.50	133.60	37.50	39.50	155.50	37.50	37.50	38.50	0	0	37.50	36.40	40.00	39.50	39.50	39.50							
OIL DENSITY (kg/m ³)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						

PETROBRAS **CENPES**

CLIENT OR USER: **E & P BC**

JOB OR PROJECT: **ALBACORA LESTE FIELD DEVELOPMENT**

AREA OR UNIT: **FPSO UNIT - P-50**

TITLE: **Figura 3.2.3-g DIAGRAMA DE FLUXO DE PROCESSO SISTEMA DE COMPRESSÃO DE GÁS**

DESIGN: CENPES DRAWN: EBP CHECK: R. BORGES APPROVAL: NICODEMOS

SCALE: NO SCALE SIZE A1: 841x594mm GC: 600430 SHEET 01 of 01

DATE: 17NOV00 No. **I-DE-3010.62-11231-943-PPC-001**