



REFERENCE DOCUMENTS

ET SYMBOLS AND ABBREVIATIONS.

EQUIPMENT

TAG	DESCRIPTION	TYPE	CAPACITY
B-533601A/B (2X100%)	SLOP VESSEL PUMP	SCREW	30 m ³ /h
B-533602A/B (2X100%)	OPEN DRAIN/PRODUCED WATER TANKS OIL PUMP	HORIZONTAL ROTARY PUMP	10 m ³ /h
CANCELLED	--	--	--
CANCELLED	--	--	--
B-533103 (1X100%)	PRODUCED WATER TANK WATER PUMP	CENTRIFUGAL	30 m ³ /h
CI-533101A/B (2X50%)	PRODUCTION SEPARATOR HYDROCYCLONE	--	6800 m ³ /d
CI-527101 (2X100%)	CARGO TANKS SEA WATER WASHING HYDROCYCLONE	--	1200 m ³ /d
FL-533101A/B (2X50%)	GAS FLOTATION UNIT	VERTICAL	8000 m ³ /d
TQ-533101 (1X100%)	PRODUCED WATER TANK	STRUCTURAL	353 m ³
V-533601A/B (2X100%)	SLOP VESSEL	HORIZONTAL	15 m ³ (NOTE 13)
TQ-533601 (1X100%)	OPEN DRAIN TANK	STRUCTURAL	353 m ³
FT-527101 (1X100%)	OILY WATER FILTER	MULTIMEDIA	50 m ³ /h
CI-533103A/B (2X50%)	OIL DEHYDRATOR HYDROCYCLONE	--	2650 m ³ /d
B-533101A/E (5X25%)	PRODUCED WATER PUMP	CENTRIFUGAL	180 m ³ /h
CI-533102 (1X100%)	TEST SEPARATOR HYDROCYCLONE	--	2300 m ³ /d
B-FL-533101A-01A/B (2X100%)	PRODUCED WATER RECIRCULATION PUMP	CENTRIFUGAL	(NOTE 5)
B-FL-533101B-01A/B (2X100%)	PRODUCED WATER RECIRCULATION PUMP	CENTRIFUGAL	(NOTE 5)
E-FL-533101A/B (2X100%)	EDUCTOR	--	(NOTE 5)
TQ-533606A/B (2X50%)	HC OPEN DRAIN TANK	HORIZONTAL	1 m ³ (NOTE 13)
B-533603A/B (2X100%)	HC OPEN DRAIN TANK OIL PUMP	SCREW	3 m ³ /h

GENERAL NOTES

- NORMALLY WITHOUT FLOW. EVENTUAL LIQUID FLOW IS NOT INCLUDED ON THE MASS BALANCE.
- PERFORMANCE CHARACTERISTICS OF EQUIPMENT AND SYSTEMS ARE DESIGN DATA AND MAY NOT AGREE WITH THE MASS BALANCE.
- CANCELLED.
- TO BE DEFINED BY DETAILING DESIGN FIRE WATER DELUGE, RAIN AND WASHING MUST BE CONSIDERED.
- GAS INJECTION SIZING FOR FLOTATION UNIT WILL BE DEFINED BY VENDOR.
- BOTH PUMPS WILL OPERATE SIMULTANEOUSLY DURING OIL DEHYDRATOR DRAINAGE.
- CANCELLED.
- CANCELLED.
- THE COOLER SHALL BE DEFINED BY CONTRACTOR.
- DROP LINE SHALL BE FORSSEN.
- CANCELLED.
- CANCELLED.
- EFFECTIVE CAPACITY FOR EACH CHAMBER.
- THIS ANALYZER SHALL ONLY ALARM HIGH OIL CONTENT. NO REMOTE ACTION OF OPENING AND CLOSING OF THE VALVES SHALL BE PROVIDED. THIS OPERATION SHALL BE MANUAL, BY OPERATION PERSONNEL.
- LINE TO BE USED FOR CLEANING OF THE VESSELS.
- THIS TANK SHALL BE INSTALLED AT THE MAIN DECK, AT PORTSIDE OF THE SHIP.
- CLOSED DRAINAGE OF ONE SLOP VESSEL SHALL BE DONE THROUGH THE PUMPS B-533601A/B TO THE OTHER SLOP VESSEL.
- CANCELLED.

REV.	DESCRIPTION	DATE	EXEC.	CHECK	APPROV.
D	REVISED WHERE INDICATED, BY UTC. PETROBRAS COMMENTS INCLUDED. FOR QUOTATION.	06DEC01	SOLANGE	ZARATTINI	ZARATTINI
C	GENERAL REVISION BY UTC, FOR QUOTATION.	06AUG01	SOLANGE	ZARATTINI	ZARATTINI
B	GENERAL REVISION DUE TO CONSISTENCY VERIFICATION	09FEB01	MIRAGAYA	NICODEMOS	NICODEMOS
A	WHERE INDICATED/ APPROVED BY E&P-BC	05JAN01	MIRAGAYA	NICODEMOS	NICODEMOS
0	ORIGINAL	16NOV00	MIRAGAYA	R.BORGES	NICODEMOS

THE DATA OR PART THEREOF ARE PETROBRAS PROPERTY AND THIS MUST NOT BE USED IN ANY WAY WITHOUT PERMISSION

dgnspec

PETROBRAS **PETROLEO BRASILEIRO S.A. PETROBRAS** **CENPES**

CLIENT OR USER **E & P BACIA DE CAMPOS**

JOB OR PROJECT **ALBACORA LESTE FIELD DEVELOPMENT**

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

TITLE **Figura 3.2.3-e DIAGRAMA DE FLUXO DE UTILIDADES DRENAGEM E AGUA PRODUZIDA**

DESIGN	CENPES	DRAWN	EBP	CHECK	R. BORGES	APPROVAL	NICODEMOS
SCALE	NO SCALE	SIZE	A1: 841x594mm	GC	600430	SHEET	01 of 01
DATE	16NOV00	No.	I-DE-3010.62-15330-943-PPC-001				

STANDARDIZED FORM BY E&P-26-0001 - FIGURE A2Z

STREAM N.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PRESSURE (kPa abs)	781	167	111	785	490	111	683	487	111	167	186	167	132	111
TEMPERATURE (°C)	75	75	75	30	30	30	105	105	105	80	105	75-105	80	75-90
OIL VOLUMETRIC FLOW RATE (m ³ /h)	0.7	0.13	0.57	0.07	0.01	0.06	0.17	-	0.17	0.13	0.01	0.12	30 (NOTE 6)	0.12
WATER VOLUMETRIC FLOW RATE (m ³ /h)	666	666	6.0	49.93	49.44	0.49	170	166.6	34	660	660	6.0	-	6.0
OIL DENSITY (kg/m ³)	850	-	900	900	900	825	-	825	-	850	850	835	-	850
WATER DENSITY (kg/m ³)	1030	1030	1030	1045	1045	1045	1020	1020	1020	1030	1040	1030	-	1030
OIL VISCOSITY (cP)	10	-	10	40	-	40	7.0	-	7.0	-	10	10	-	10
WATER VISCOSITY (cP)	0.4	0.4	0.4	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.7	0.4	-	0.4