


REFERENCE DOCUMENTS									
ET SYMBOLS AND ABBREVIATIONS.									
EQUIPMENT									
TAG		DESCRIPTION		TYPE		CAPACITY			
B-533101A/E (5x25%)		PRODUCED WATER PUMP		CENTRIFUGAL		260 m³/h			
B-533601A/B-O1A/B (4x100%)		SLOP VESSEL PUMP		(NOTE 11)		60 m³/h			
B-533602A/B (2x100%)		OPEN DRAIN CASSION OIL PUMP CLASSIFIED AREA		VERTICAL		10 m³/h			
B-533603A/B (2x100%)		OPEN DRAIN CASSION OIL PUMP NON-CLASSIFIED AREA		VERTICAL		10 m³/h			
CI-533101A/B (2x50%)		PRODUCTION SEPARATOR HYDROCYCLONE		-		12500 m³/d			
CI-533102A/B (2x50%)		OIL DEHYDRATOR HYDROCYCLONE		-		4000 m³/d			
FL-533101A/B (2x50%)		GAS FLOTATION UNIT		VERTICAL		12500 m³/d			
TD-533601 (1x100%)		OPEN DRAIN CAISSON CLASSIFIED AREA		CYLINDRICAL		40 m³			
V-533601A/B (2x100%)		SLOP VESSEL		HORIZONTAL		32 m³			
TD-533602 (1x100%)		OPEN DRAIN CAISSON NON CLASSIFIED AREA		CYLINDRICAL		40 m³			
CANCELLED									
B-FL-533101A/B-O1A/B (4x50%)		PRODUCED WATER RECIRCULATION PUMP		CENTRIFUGAL		(NOTE 8)			
E-FL-533101A/B (2x50%)		FLOTATOR EDUCTOR		-		(NOTE 8)			
FT-533601A/B (2x100%)		OPEN DRAIN FILTER CLASSIFIED AREA		BASKET, SIMPLEX		600 m³/h			
FT-533602A/B (2x100%)		OPEN DRAIN FILTER NON-CLASSIFIED AREA		BASKET, SIMPLEX		72 m³/h			
P-533601 (1x100%)		OIL DEHYDRATED COOLER		SHELL AND TUBES		0.614x10⁵			
P-533601 (1x100%)		SKIMMED COOLER OIL		SHELL AND TUBES		0.582x10⁵			
FT-533604A/B (2x100%)		OPEN DRAIN FILTER CLASSIFIED AREA		BASKET, TUBES SIMPLEX		120 m³/h			
V-533602 (1x100%)		SLOP VESSEL FOR SPIDER DECK		HORIZONTAL		2.6 m³			
B-533608A/B (2x100%)		SLOP VESSEL FOR SPIDER DECK PUMP		PNEUMATIC		10 m³/h			
GENERAL NOTES									
1 - NORMALLY WITHOUT FLOW. EVENTUAL LIQUID FLOW IS NOT INCLUDED ON THE MASS BALANCE.									
2 - PERFORMANCE CHARACTERISTICS OF EQUIPMENT AND SYSTEMS ARE DESIGN DATA AND MAY NOT AGREE WITH THE MASS BALANCE.									
3 - FLOW RATES AND SIZING FOR THESE LINES BY THE CONTRACTOR.									
4 - CANCELLED.									
5 - GAS INJECTION SIZING FOR FLOTATION UNIT WILL BE DEFINED BY VENDOR.									
6 - CANCELLED.									
7 - THE NOMINAL CAPACITY OF OILY WATER SYSTEM IS 12500 m³/d.									
8 - THE CAPACITY OF THESE EQUIPMENTS SHALL BE DEFINED BY DETAILING DESIGN.									
9 - CANCELLED.									
10 - MAXIMUM FLOW. NORMAL FLOW = 60 m³/h.									
11 - PROGRESSIVE CAVITY TYPE PUMPS.									
12 - THE HYDROCYCLONES INLET FLOWRATES ARE BASED ON PRODUCED WATER STREAM (6) SHOWN IN PROCESS FLOW DIAGRAM I-DE-3010.63-1223-943-PPC-602 (MAXIMUM WATER).									
13 - THE VALUES OF THE MASS BALANCE SHALL BE CONFIRMED/UPDATED BY DETAILING DESIGN.									
D		RELEASED BY PETROBRAS. REVISED WHERE INDICATED (ADP-UTC-319).			21NOV02		SOLANGE	ZARATTINI	ZARATTINI
C		REVISED WHERE INDICATED BY UTC. PETROBRAS COMMENTS INCLUDED			05JUN02		SOLANGE	ZARATTINI	ZARATTINI
B		REVISION DUE TO CONSISTENCY VERIFICATION			10DEC01		EBP	MAURO	MAURO
A		GENERAL REVISION - APPROVED BY UN-RIO			23NOV01		EBP	MAURO	MAURO
0		ORIGINAL			30OCT01		EBP	MAURO	MAURO
REV.		DESCRIPTION			DATE		EXEC.	CHECK	APPROV.
THE DATA, OR PART THEREOF ARE PETROBRAS PROPERTY AND THUS MUST NOT BE USED IN ANY WAY WITHOUT PERMISSION									
I-DE-3010.63-5330-943-PPC-601_D.P/D									
 PETRÓLEO BRASILEIRO S.A. PETROBRAS					CENPES				
CLIENT OR USER									
UN-RIO / ATP-MLS									
JOB OR PROJECT									
MARLIM SUL FIELD DEVELOPMENT									
AREA OR UNIT									
UNIT P-51									
TITLE									
UTILITY FLOW DIAGRAM									
PRODUCED WATER AND DRAINAGE									
DESIGN		CENPES		DRAWN		EBP		CHECK	
SCALE		NO SCALE		SIZE		A1: 841x594mm		CC	
DATE		30OCT01		No.		I-DE-3010.63-5330-943-PPC-601		SHEET	
								01 of 01	
								APPROVAL	
								MAURO	