

Owner

MOSSGAS



Reg.No. 55/82883/87

Manager

Soekor



Reg.No. 65/88287/87

Project Manager



Reg.No. 83/12991/87

MOSSGAS PROJECT

SPECIFICATION/DOCUMENT NUMBER

ODS-D100-PR-PK-1704

SPECIFICATION/DOCUMENT TITLE

PROCESS DATA SHEET FOR

DRAWING SEAWATER LIFT PUMPS

PR-1704 A/B

MICROFILMED

SOEKOR
DOCUMENTATION CENTRE
MASTER COPY

REV.	DATE	DESCRIPTION	BY	CHK.	LEAD ENG.	PROJ ENG.	OWNER APPROVAL
D2	7/6/88	UPDATED FOR DESIGN	PS	PS	PS	PS	PS
D1	8/1/88	UPDATED FOR DESIGN	IW	PMM	PS	PS	PS
D0	29/12/87	APPROVED FOR DESIGN.	PS	PS	PS	PS	PS
B	30/11/87	ISSUE FOR PH COMMENT / ATTEND.	IW	PMM	PS	PS	PS
A	28/10/87	ISSUE FOR LOC / PH INFORMATION.	IW	PMM	PS	PS	PS
REV.	DATE	DESCRIPTION	BY	CHK.	LEAD ENG.	PROJ ENG.	OWNER APPROVAL
REVISIONS							
ODS APPROVAL							
OWNER APPROVAL							

OFFSHORE DESIGN SERVICES

No. Required:	TWO	No. Running:	ONE	No. Standby:	ONE
Pump Type: SUBMERSIBLE MULTISTAGE CENTRIFUGAL Driver Type: ELECTRIC MOTOR SUBMERSIBLE Driver Sizing for End of Curve: YES/NO: 3.5% SEAWATER					
Each Pump to be Sized for 100% of the Specified Duty					
SI UNITS		DUTY			
Case	Normal				RATED
Fluid Pumped	SEAWATER				SEAWATER
Temperature T	°C				10 TO 18
Specific Gravity G	-				1.022
Viscosity μ	mPas				1.2
Vapour Pressure P	kPa				2.1
Height Flow	kg/s				(AT 18°C)
Volume Flow Q	m³/h				1021.2
Percent of Normal	%				360
DISCHARGE CONDITIONS		USGPM = lbs/h / (S.G. x 500)			
End of Line Pressure	KPa				480 (AT 18°C)
Static Head	kPa				589
Orifice ΔP	kPa				
Control Valve ΔP	kPa				
Exchanger ΔP	kPa				
Filter	kPa				100
Line Loss	kPa				52
Discharge Pressure	KPa				1221
SUCTION CONDITIONS		bar = m x S.G. / 10.2076			
Source Pressure	KPa				psl = ft x S.G. / 2.309
Static Head	KPa				150
Line Loss ΔP	KPa				-
Suction Pressure	KPa				150
PUMP DIFFERENTIAL		ft = psl x 2.309 / S.G.			
Pressure	kPa				1071
Head	m				107.0
NPSH					
Suction Pressure	kPa				251.3
Vapour Pressure	kPa				2.1
Net Pressure	kPa				249.2
Actual NPSH	m				24.9
Safety Margin	m				1.0
NPSH Available	m				23.9
POWER		Hyd. HP = USGPM x psl / 1715			
Hydraulic Power	KW				107.0
Est. Pump Efficiency	%				71.5
Est. Absorbed Power	KW				151.7
Est. Shut-Off Pressure	KPa				
Corrosive Compounds: 3.5% SALT					

Flow Diagram of Pump Circuit Attached.

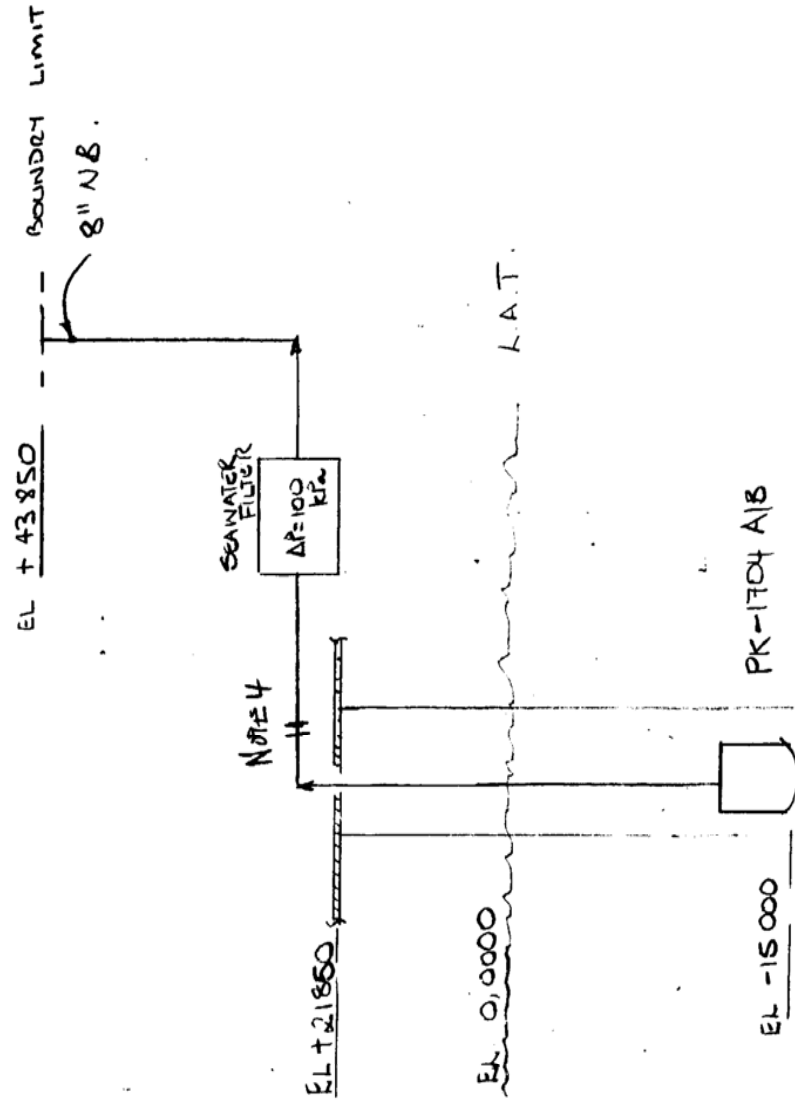
REV	BY	CHK'D	APPR.	DATE	CLIENT	PROJECT	PROJECT NO.
A	IN	PNM	PNM	4/11/87	MOSSGAS	MOSSGAS	D100
B	IN	PNM	PNM	30/11/87	AREA	FA FLAT FORTH	DOC. NO. ODS-D100-PR-PK-1704 REV A
DO				24/12/87	SYSTEM	DRILLING SEAWATER LIFT	PAGE 2 OF 3
D1	IN	PNM	PNM	8/11/88	EQUIPMENT	DRILLING SEAWATER LIFT PUMPS	
PROCESS DATA SHEET FOR PUMPS							



MARK	SIZE	SERVICE
N1	8"	PUMP RISER CONNECTION
N2	2"	SWACK POSING OF SODIUM HYPOCHLORITE (TUNDRISH)
N3	2"	(NOW PART OF CALSSON)
N4	1 1/2"	SODIUM HYPOCHLORITE POSING (WITH SPRAY RIGS)
N5	1"	VENT VALVE (SEE NOTE 5)

NOTE

6. END OF LINE PRESSURE IS BASED ON 3M DRILLING PRESSURE REQUIREMENT AT ELEVATION + 43850.



NOTES.

1. DISCHARGE PRESSURE ON CELLAR DECK.
Paisch = 952 kPa.g
2. PUMP SHUTOFF HEAD 1003 kPa.g
(at cellar deck) 65 m³/h.
3. MINIMUM CONTINUOUS FLOW 8",
4. DISCHARGE NOZZLE - 8",
5. TO BE SUPPLIED BY PUMP SUPPLIER

XXXXXXXXXX

REV	BY	CHK'D	APPR.	DATE	CLIENT	PROJECT	AREA	SYSTEM	EQUIPMENT NAME	PROJECT NO.	DOC. NO.	REV
A	IN	PMM	PM	4/1/87	MUSSAS	MOSSGAS	FA PLAT FORK	DRILLING MUD AND CEMENT	DRILLING SEAWATER LIFT	0100	005-0100-1	1704
B	IN	PMM	PM	30/11/87								
D0	IN	PM	PM	29/12/87								
D1	IN	PMM	PM	5/1/88								
D2	IN	PM	PM	8/6/88								



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