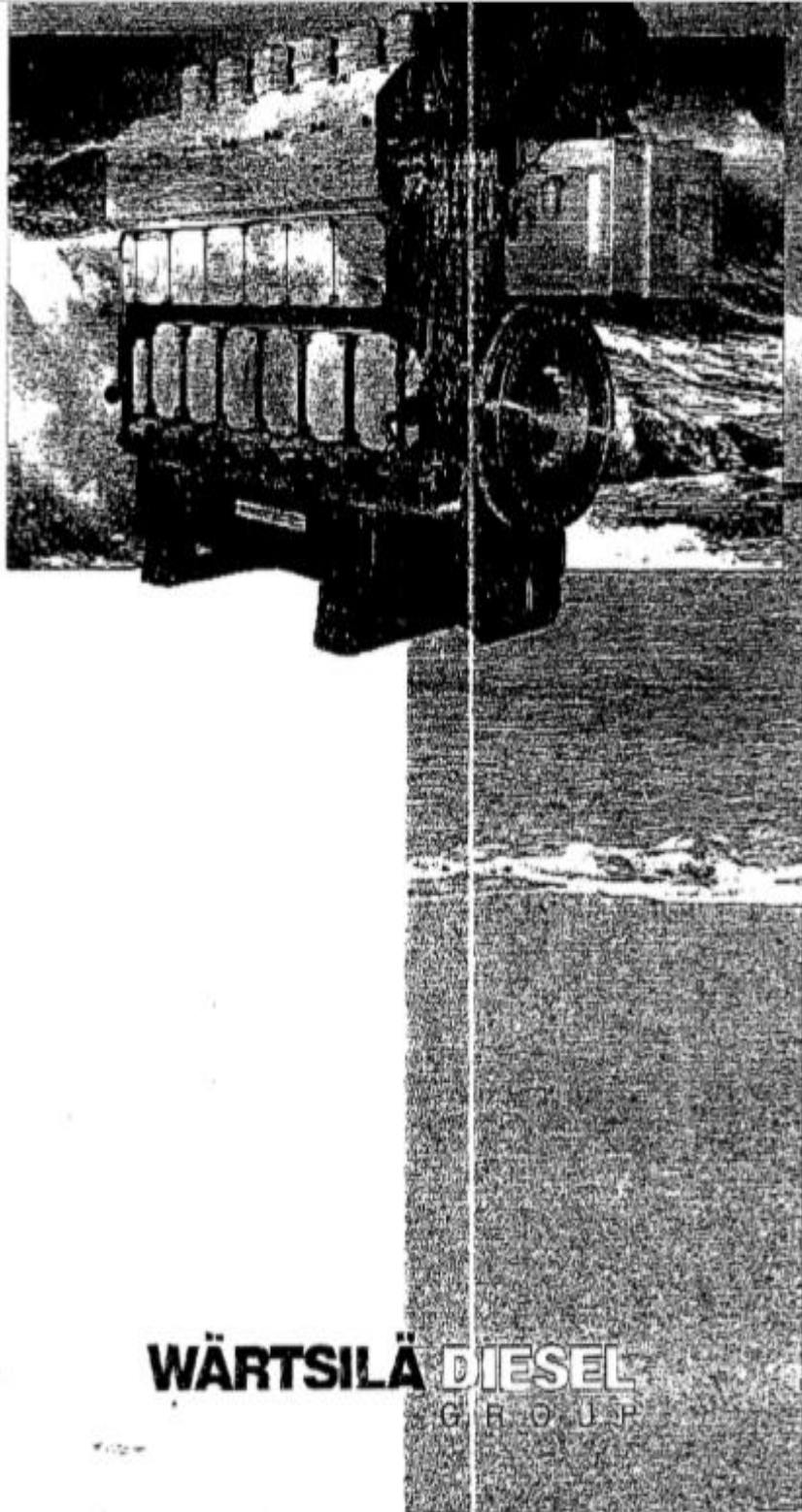


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# LAMPIRAN



**WÄRTSILÄ DIESEL**  
GROUP

# STORK-WÄRTSILÄ DIESEL

TESTREPORT

Engine nr.

23100

Client : Projects  
Application : DPP  
Type : Wärtsilä 18V38  
Classification : S.G.S. Inspection  
Year of manufacturing : 1998

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- Additional technical data page 3  
- Test results page 4 6 7 8 9  
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- Remarks page 10  
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STORK-WÄRTSILÄ DIESEL

STORK-WÄRTSILÄ  
DIESEL  
TEST REPORT

TEST REPORT 23100 (1)  
TEST REPORT 23100 (2)  
TEST REPORT 23100 (3)

STORK

**PRINCIPAL PARTICULARS**

- Cylinder diameter	: 340	mm
- Stroke	: 475	mm
- Number of cylinders	: 18	
- Output	: 11340	kW
- Speed	: 650	1/min
- Firing order	: 1A 2B 7A 6B 4A 3B 2A 2B 5A 2B 6A 7B 3A 7B 5A 4B 5A 2B	
- Rotation viewing flywh.	: clockwise	
- Engine driven pumps	: YES	
- Cooler on engine	: no	
- Moment of injection	: 12.8	s.d.o.

**VALVE CLEARANCE**

- Valve clearance inlet	: 1.0	mm
- Valve clearance outlet	: 1.0	mm

**ALARM AND SAFETY DEVICES**

Adjusted and tested according to electrical diagram : 98300T135 and 98100T147 Rev. C

**APPLIED FUEL AND LUBRICATING OIL DURING THE TEST**

- Fuel oil quality	: MCF	
- Density	: 860.20	kg/m <sup>3</sup> at 15 °C
- Viscosity	: 5.25	cSt at 40 °C
- Cetane value	: 42020	1/1kg
- Lubricating oil quality	: CD acc API SAE 40	

# STORK-WÄRTSILÄ DIESEL

20100

Load	%	100.0	110.0	85.0	60.0
Date		10-01-87	10-01-87	10-01-87	10-01-87
Time		8:11:29	9:48:17	11:27:19	11:54:48
Output	kW	11328	12432	9801	6994
M.E.P.	bar	23.3	23.8	19.9	11.7
Engine speed	rpm	801	801	801	801
<b>Ambient conditions:</b>					
Outdoor temperature	°C	-3.0	-3.0	-4.0	-3.0
Temperature air before filter	°C	27.7	26.8	29.3	33.8
Atmospheric pressure	mbar	1017	1018	1019	1019
Temperature water before aircooler	°C	38.0	37.9	37.3	36.9
Humidity	%	76.0	76.0	77.0	76.0
<b>Fuel:</b>					
Fuel consumption	kg/h	2183.48	2420.17	1876.22	1166.63
Specific (42700)	g/kWh	190.08	191.73	191.31	200.23
Specific fuel according to ISO*	g/kWh	186.16	190.32	189.74	195.14
Temperature fuel before engine	°C	33.7	33.7	33.9	33.9
Temperature fuel after engine	°C	47.8	48.4	48.9	44.7
Pressure fuel before engine	bar	5.8	5.8	4.8	5.8
Fuel rack position	mm	94.0	91.0	80.0	94.0
<b>Lubricating oil:</b>					
Temperature oil before engine	°C	63.9	63.8	62.7	62.8
Temperature oil after engine	°C	74.0	74.1	73.7	72.4
Pressure oil before engine	bar	4.8	4.8	4.7	4.7
<b>HT cooling water:</b>					
HT water temperature before engine	°C	78.1	73.7	81.0	87.8
HT water temperature after engine	°C	84.1	81.9	84.1	84.3
HT water after turbine A	°C	87.8	84.7	89.5	84.4
HT water after turbine B	°C	84.9	81.8	86.8	81.8
HT water before air cooler	°C	85.2	82.0	86.7	83.0
HT water after air cooler A	°C	84.3	81.9	85.7	84.3
HT water after air cooler B	°C	84.8	82.8	84.4	83.8
Pressure water before engine	bar	2.7	2.7	2.7	2.8
<b>LT cooling water:</b>					
Temperature before engine	°C	36.0	37.0	37.3	36.8
Temperature after aircooler A	°C	43.8	41.2	40.2	34.8
Temperature after aircooler B	°C	40.8	39.4	38.3	32.8
Pressure water on engine	bar	3.2	3.1	3.7	3.1

\*42700 kJ/kg

# STORK-WÄRTSILÄ **DIESEL**

23100

Load	%	100.0	110.0	85.0	80.0
Date		10-01-87	10-01-87	10-01-87	10-01-87
Time		8:11:29	8:48:17	11:27:19	11:54:48
Output	kW	11328	12422	9801	9294
M.E.P.	bar	23.3	25.8	19.9	17.7
Engine speed	rpm	801	801	801	801
<b>Ambient conditions:</b>					
Outdoor temperature	°C	-3.0	-3.0	-4.0	-3.0
Temperature air before filter	°C	27.7	28.5	29.3	30.8
Atmospherical pressure	mbar	1017	1018	1018	1019
Temperature water before aircooler	°C	38.0	37.0	37.2	36.9
Humidity	%	76.0	76.0	77.0	76.0
<b>Fuel:</b>					
Fuel consumption	kg/h	2180.48	2420.17	1876.22	1766.93
Specific (42700)	g/kWh	190.59	191.73	191.31	200.23
Specific fuel according to ISO <sup>1</sup>	g/kWh	186.14	190.32	186.74	196.14
Temperature fuel before engine	°C	33.7	33.7	33.9	33.9
Temperature fuel after engine	°C	47.6	48.4	48.9	46.7
Pressure fuel before engine	bar	5.0	5.5	4.9	5.8
Fuel rack position	mm	98.0	91.0	80.0	34.0
<b>Lubricating oil:</b>					
Temperature oil before engine	°C	83.0	83.8	82.7	82.8
Temperature oil after engine	°C	74.0	74.1	73.7	72.4
Pressure oil before engine	bar	4.8	4.8	4.7	4.7
<b>HT cooling water:</b>					
HT water temperature before engine	°C	76.1	73.7	81.0	87.8
HT water temperature after engine	°C	84.1	81.9	84.1	84.3
HT water after turbine A	°C	87.8	84.7	89.5	84.4
HT water after turbine B	°C	84.9	81.5	86.8	81.5
HT water before air cooler	°C	86.2	82.8	86.7	83.0
HT water after air cooler A	°C	84.3	81.9	85.7	84.3
HT water after air cooler B	°C	84.8	82.8	84.4	83.8
Pressure water before engine	bar	2.7	2.7	2.7	2.8
<b>LT cooling water:</b>					
Temperature before engine	°C	38.0	37.0	37.2	36.9
Temperature after aircooler A	°C	43.8	41.2	40.2	34.9
Temperature after aircooler B	°C	40.8	39.4	38.3	32.8
Pressure water on engine	bar	3.2	3.1	3.7	3.1

142700 kJ/kg

# STORK-WÄRTSILÄ DIESSEL

22100

Load	N	100.0	110.0	85.0	80.0
Date		10-01-87	10-01-87	10-01-87	10-01-87
Time		9:11:28	1:48:17	11:07:18	11:54:48
Output	kW	11326	12423	9851	8884
M.E.P.	bar	25.3	25.6	19.9	11.7
Engine speed	rpm	601	601	601	601
Cylinder liner temperature A :					
cy1.1A.1	°C	111	112	109	109
cy1.1A.2	°C	107	108	104	101
cy1.1A.3	°C	112	111	109	109
cy1.2A.1	°C	112	114	109	108
cy1.2A.2	°C	109	110	108	103
cy1.2A.3	°C	112	112	109	104
cy1.3A.1	°C	111	112	109	104
cy1.3A.2	°C	108	109	105	102
cy1.3A.3	°C	112	112	110	103
cy1.4A.1	°C	114	114	111	109
cy1.4A.2	°C	109	109	108	103
cy1.4A.3	°C	113	113	110	106
cy1.5A.1	°C	113	113	111	106
cy1.5A.2	°C	114	115	110	103
cy1.5A.3	°C	114	115	110	106
cy1.6A.1	°C	115	114	110	106
cy1.6A.2	°C	111	112	108	103
cy1.6A.3	°C	114	115	110	106
cy1.7A.1	°C	114	115	111	107
cy1.7A.2	°C	115	114	109	106
cy1.7A.3	°C	108	108	106	102
cy1.8A.1	°C	114	115	112	106
cy1.8A.2	°C	112	112	106	104
cy1.8A.3	°C	114	115	111	108
cy1.9A.1	°C	115	115	113	108
cy1.9A.2	°C	115	117	113	107
cy1.9A.3	°C	115	115	112	107
Average	°C	112	113	108	104



# STORK-WÄRTSILÄ DIESEL

23100

Load	%	100.0	110.0	85.0	80.0
Date		10-01-07	10-01-07	10-01-07	10-01-07
Time		8:11:29	8:46:17	11:07:18	11:54:48
Cycle	km	11328	12422	9601	9894
M.E.P.	bar	25.3	25.8	18.8	11.7
Engine speed	rpm	801	801	801	801
Cylinder liner temperature B :					
cy118 1	°C	112	111	108	108
cy118 2	°C	117	115	111	107
cy118 3	°C	111	111	107	104
cy125 1	°C	112	112	110	108
cy125 2	°C	108	108	107	108
cy125 3	°C	111	112	107	104
cy130 1	°C	111	112	108	108
cy130 2	°C	114	113	110	108
cy130 3	°C	110	110	108	103
cy140 1	°C	109	109	108	104
cy140 2	°C	117	118	113	108
cy140 3	°C	110	111	108	102
cy150 1	°C	111	111	108	104
cy150 2	°C	117	118	113	107
cy150 3	°C	112	112	108	104
cy160 1	°C	118	117	114	108
cy160 2	°C	118	118	112	108
cy160 3	°C	112	112	107	103
cy170 1	°C	110	110	107	104
cy170 2	°C	118	118	113	107
cy170 3	°C	111	111	108	103
cy180 1	°C	112	110	108	103
cy180 2	°C	118	118	111	108
cy180 3	°C	112	114	108	106
cy190 1	°C	110	111	107	103
cy190 2	°C	114	118	110	108
cy190 3	°C	112	112	107	102
Average	°C	113	112	108	105

# STORK-WÄRTSILÄ DIESEL

23100

Load	%	100.0	110.0	85.0	80.0
Date		10-01-87	10-01-87	10-01-87	10-01-87
Time		8:11:08	8:48:17	11:07:18	11:04:48
Output	kW	11336	12432	8651	8084
M.E.P.	bar	23.3	25.8	19.3	11.7
Engine speed	rpm	901	901	901	901
<b>Exhaust temperature A:</b>					
cy1 valve 1	°C	414	421	395	395
valve 2	°C	446	435	427	395
cy2 valve 1	°C	431	434	409	395
valve 2	°C	392	418	392	394
cy3 valve 1	°C	415	424	395	384
valve 2	°C	402	435	387	381
cy4 valve 1	°C	443	437	427	399
valve 2	°C	382	398	383	348
cy5 valve 1	°C	419	442	394	378
valve 2	°C	427	451	412	377
cy6 valve 1	°C	381	410	381	344
valve 2	°C	415	442	408	383
cy7 valve 1	°C	419	424	387	388
valve 2	°C	408	420	382	347
cy8 valve 1	°C	408	424	388	382
valve 2	°C	434	430	427	384
cy9 valve 1	°C	420	427	387	373
valve 2	°C	427	430	382	388
Average	°C	418	434	385	372
1 = non operation side 2 = operation side					
<b>Exhaust temperature B:</b>					
cy1 valve 1	°C	424	434	398	375
valve 2	°C	395	405	373	367
cy2 valve 1	°C	418	421	400	377
valve 2	°C	404	422	388	371
cy3 valve 1	°C	418	425	392	383
valve 2	°C	380	419	373	371
cy4 valve 1	°C	395	419	383	348
valve 2	°C	412	438	383	364
cy5 valve 1	°C	418	432	400	382
valve 2	°C	418	427	388	373
cy6 valve 1	°C	415	424	384	381
valve 2	°C	385	420	384	390
cy7 valve 1	°C	425	444	402	370
valve 2	°C	385	422	378	368
cy8 valve 1	°C	402	411	380	383
valve 2	°C	388	424	383	388
cy9 valve 1	°C	404	418	381	344
valve 2	°C	380	426	375	386
Average	°C	408	424	387	385
1 = operation side 2 = non operation side					

CRANKWEB DEPLECTIONS IN (0.01 mm)

Cylinder	1	2	3	4	5	6	7	8	9
Crank in bottom	0.00	0.20	0.30	0.00	0.00	0.00	0.00	0.00	0.00
Crank operation side	1.20	0.00	1.20	1.00	1.00	2.00	0.25	-0.50	0.25
Crank in top	2.00	0.00	2.00	1.50	0.00	1.00	1.00	-1.00	-2.00
Crank not operation side	2.00	1.00	2.00	2.00	-1.00	0.25	1.50	0.00	1.00
Crank in bottom	2.00	0.00	2.00	2.00	0.00	0.00	0.25	1.00	0.00

Measured at engine circumstances :

Lub oil temperature 30 °C  
 HT coolingwater temperature 20 °C  
 Ambient temperature 20 °C

The factory test was witnessed by :

Mr J. Sanders  
 Mr G.J. Couwet

Company :

S.O.B  
 S.W.D.

*[Handwritten signature]*  
 S.O.B  
 S.W.D.  
 S.O.B  
 S.W.D.

Date of factory test : 10-01-87

Remarks :

ISO-conditions : Ambient pressure 1000 mB  
 Air mass temp. 20 °C  
 Cooling water shower 20 °C

Measured by : W. Van  
 Data file : manual33100  
 Drawn up by : W. Van

# STORK-WÄRTSILÄ DIESEL

23100

Load	%	100.0	110.0	88.0	50.0
Date		10-01-97	10-01-97	10-01-97	10-01-97
Time		9:11:29	9:48:17	11:07:19	11:54:48
Output	kW	11328	12422	8651	5084
M.E.P.	bar	23.3	25.8	18.9	11.7
Engine speed	rpm	801	801	801	801

## Combustion pressure A side:

cyl.1	bar	185.5	198.0	187.0	118.5
cyl.2	bar	191.8	188.0	186.0	120.0
cyl.3	bar	183.8	197.5	188.0	118.5
cyl.4	bar	190.5	197.5	188.0	119.5
cyl.5	bar	185.5	194.5	183.0	118.0
cyl.6	bar	188.0	193.5	187.0	118.0
cyl.7	bar	184.0	198.5	170.0	118.0
cyl.8	bar	189.0	190.0	188.5	119.5
cyl.9	bar	185.0	189.5	183.5	118.5

Average bar 187.5 194.7 188.8 118.5

## Combustion pressure B side:

cyl.1	bar	189.0	194.0	171.8	119.0
cyl.2	bar	187.5	189.0	187.0	119.0
cyl.3	bar	188.5	194.5	184.0	119.0
cyl.4	bar	188.5	191.5	183.5	118.0
cyl.5	bar	182.5	182.5	181.0	117.5
cyl.6	bar	188.5	194.0	188.5	118.5
cyl.7	bar	188.5	193.5	187.0	121.5
cyl.8	bar	185.0	194.0	188.5	117.0
cyl.9	bar	187.0	194.0	188.0	118.5

Average bar 188.2 193.0 186.0 118.3

## Measured with:

KISTLER Type: 5507A10 Serie/No: 628930

## NOTE:

- The nominal value of maximum firing pressure is 180 bar ( at M.E.P. 24,8)  
 However the actual firing pressure measured on the indicated coast, are influenced by a number of factors such as:
- type of applied oil
  - dynamical effects in the narrow indicator channels
  - deviation of the measuring instruments( according to I.S.O. 3048 - max. 5%)

The above has been verified and approved by the Classification Societies.



PT PEMBANGKITAN JAWA BALI UNIT BISNIS JASA O&M PLTD SUPPA

PJB INTEGRATED MANAGEMENT SYSTEM

DAILY OPERATION REPORT

PERIODE : Maret 2018

No. Dokumen :

Tanggal Terbit : 28 Maret 2018

Revisi : 00

Halaman : 1 dari 2

DG No.	HMR (Hr. Mr. Rtg.)		HRS. RUN	GENERATION		Fuel Booster Reading, liters				NET SFOC liters/KWh	AUTO. FLUSHING		LEAK-OFF TANK		CLEAN LEAK-OFF Volume, liters
	Before	After		KWh	Ave. KW	Run with Gen.		Run w/o Gen.			No. of flushing	Volume, liters	Level, cm.	Volume, liters	
						HFO	LFO	HFO	LFO						
1	4747.4	4747.4	0.0	0	#DIV/0!	0.0	0	0.0	0.0	#DIV/0!	0	0	0	0	0.0
2	3868.18	3868.18	0.0	0	#DIV/0!	0.0	0	0.0	0.0	#DIV/0!	0	0	0	0	0.0
3	72496.4	72496.4	0.0	0	#DIV/0!	0.0	0	0.0	0	#DIV/0!	0	0	0	0	0.0
4	69187.8	69195.7	7.9	34,100	4,316	7,501.2	633	33.8	217	0.218	368	1656.0	180.3	1728	72.8
5	63916	63916	0.0	0	#DIV/0!	0.0	0	0.0	0.0	#DIV/0!	0	0	0	0	0.0
6	66218	66218	0.0	0	#DIV/0!	0.0	0	0.0	0.0	#DIV/0!	0	0	0	0	0.0
Total			7.9	34,100	4,316	7,501.2	633	33.8	217	0.218	368.0	1656.0	180.3	1728	72.8

BILLING METERS reading, MWh	Before	After	TOTAL HFO used w/GEN, liters	7,428.8	LFO USED for BOILER, lbs	0	Total Booster reading		
Main Transformer No. 1	371,347.917	371,363.310	TOTAL LFO used w/GEN, liter	633	FUEL STOCK	%	liters	HFO, liters	7,719
Main Transformer No. 2	445,026.240	445,042.917	HFO DENSITY, g/liter	951.0	HFO Storage Tank A	32	1,596.318	LFO, liters	633
TO PLN GRID/KRIM, MWh		32.670	HFO LHV, BTU/Kg	38,713	HFO Storage Tank B	42	2,109.917	SUPPLY FUEL, kgs	0
FROM PLN/TERIMA, MWh	4,362.732	4,363.677	LFO DENSITY, g/liter	12.00	HFO Buffer Tank - A	86	86.0	RETURN FUEL, kgs	90423
Station Use From Gen / From PLN	1,430	0.945	LFO LHV, BTU/Kg		HFO Buffer Tank - B	74	74.0	Leak-off fuel fourmeter, lbs	1772
TOTAL STATION USE, MWh		2,375	NET SFOC, grams/KWh	292.8	HFO Day Tank - A	84	84.0		
Percent Station Use, %		6.78	PLANT HEAT RATE, BTU/KWh	7,881.8	HFO Day Tank - B	77	77.0	Estimated days of usage	
PLN DISPATCH, MWh		47.20	Capacity Factor (CF), %	2.19	LFO Day tank - A	12.0	6.0	HFO*	74
ENERGY Excess/Deficit, %		(30.8)	Ave. Net MW Output for the day	1	LFO Day tank - B	0.0	0.0	LFO	

STATUS AT END OF THE DAY - 2400H						
DG SET No.	1	2	3	4	5	6
RUNNING						
STAND BY:	X	X	X	X	X	X
Priority	3	6	5	1	4	2
UM - REPAIR						
CHANGE OIL:						
Engine						
Turbo Charger						
Governor						
OUTAGE HOURS	Planned	-	24.00	24.00	-	-
	Forced	-	-	-	-	-

LUBRICATION OIL					
DG No.	Top-up Vol, liters	Dip (Consumption) liters	Used, liters	Density, g/liter	0
1	0.00	0.0	#DIV/0!	BLCC, grams/KWh	2.91
2	0.00	0.0	#DIV/0!	Stock	%
3	0.00	0.0	#DIV/0!	Maintenance tank	0
4	0.00	108.9	2.91	Storage tank - A	16
5	0.00	0.0	#DIV/0!	Storage tank - B	0
6	0.00	0.0	#DIV/0!	Drum Shell Argine	39
Total	0.0	108.9	2.91	Drum Mobil Gard	0
Actual Plant Running Hours	Today	Month to Date	Total		13.8
	0	6.05			

- Notes:
- SFOC - Specific fuel oil consumption
  - BLCC - Specific lube oil consumption
  - UM - Under maintenance
  - LHV - Low heating value
  - HMR - Hour meter reading
  - One (1) flushing = 4.5 liters
  - One (1) cm. of leak-off tank = 11.5 liters
  - One (1) cm. of dipstick = 9 liters
  - LFO Boiler fuel consumption = 150 liter
  - One (1) cm LOPX sludge sump = 25.8 lbs
  - APRH = plant running hour with generating

**Hananuddin Hasan**  
 Shift Supervisor



PT PEMBANGKITAN JAWA BALI UNIT BISNIS JASA O&M PLTD SUPPA

PJB INTEGRATED MANAGEMENT SYSTEM

DAILY OPERATION REPORT

PERIODE : 07 Juni 2018

No. Dokumen :

Tanggal Terbit : 28 Maret 2016

Revisi : 00

Halaman : 1 dari 2

DG No	HMR (Hr. Mtr. Rtg.)		HRS. RUN	GENERATION		Fuel Booster Reading, liter				NET SFOC liter/kWh	AUTO. FLUSHING		LEAK-OFF TANK		CLEAN LEAK-OFF Volume, liter
	Before	After		KWh	Ave KW	Run with Gen		Run w/o Gen			No. of flushing	Volume, liter	Level, cm	Volume, liter	
1	4734,6	4734,6	0,0	0	#DIV/0!	0,0	0	0,0	0,0	#DIV/0!	0	0	0	0	0,0
2	3864,23	3864,23	0,0	0	#DIV/0!	0,0	0	0,0	0,0	#DIV/0!	0	0	0	0	0,0
3	72470,4	72470,4	0,0	0	#DIV/0!	0,0	0	0,0	0,0	#DIV/0!	0	0	0	0	0,0
4	69185,6	69187,9	2,2	16.000	7.273	3.781,6	0	37,3	0,0	0,231	2	9	7,6	87	78,4
5	63922,6	63922,6	0,0	0	#DIV/0!	0,0	0	0,0	0,0	#DIV/0!	0	0	0	0	0,0
6	66207	66207	0,0	0	#DIV/0!	0,0	0	0,0	0,0	#DIV/0!	0	0	0	0	0,0
<b>Total</b>			<b>2,2</b>	<b>16.000</b>	<b>7.273</b>	<b>3.781,6</b>	<b>0</b>	<b>37,3</b>	<b>0</b>	<b>0,231</b>	<b>2,0</b>	<b>9,0</b>	<b>7,6</b>	<b>87</b>	<b>78,4</b>

BILLING METERS reading, MWh	Before	After	TOTAL HFO used w/GEN, liter	3701,2	LFO USED for BOILER, liter	686	Total booster reading
Main Transformer No. 1	371.007,399	371.074,968	TOTAL LFO used w/GEN, liter	0	FUEL STOCK	%	liters
Main Transformer No. 2	444.740,157	444.750,183	HFO DENSITY, g/liter	931,0	HFO Storage Tank A	35	1.733,853
TO PLN GRID/KIRIM, MWh		17,885	HFO LHV, Btu/kg	38.713	HFO Storage Tank B	6	307,652
FROM PLN/TERIMA, MWh	4.199,659	4.204,143	LFO DENSITY, g/liter	12,00	HFO Buffer Tank - A	72	72,0
Station Use From Gen. / From PLN	(1,595)	4,284	LFO LHV, Btu/kg		HFO Buffer Tank - B	56	56,0
TOTAL STATION USE, MWh		2,689	NET SFOC, gram/kWh	216,8	HFO Day Tank - A	91	91,0
Percent Station Use, %		13,26	PLANT HEAT RATE, BTU/kWh	8.341,9	HFO Day Tank - B	86	86,0
PLN DISPATCH, MWh		15,79	Capacity Factor (CF), %	1,18	LFO Day tank - A	17,0	9,5
ENERGY Excess/Deficit, %		12,1	Ave. Net MW Output for the day	1	LFO Day tank - B	0,0	0,0

STATUS AT END OF THE DAY - 240H						
DG SET No.	1	2	3	4	5	6
RUNNING						
STAND BY	X	X	X	X	X	X
Priority	3	6	5	1	4	2
UM - REPAR						
CHANGE OIL						
Engine						
Turbo Charger						
Governor						
OUTAGE HOURS	Planned	-	-	-	-	-
	Forced	-	24,00	-	-	-

LUBRICATION OIL						
DG No.	Top-up Vol. liter	Dip (Consumption) liter	Used, liter	89	910	5,07
1	0,00	0,0	#DIV/0!	SLOC, gram/kWh		5,07
2	0,00	0,0	#DIV/0!	Stock	%	liters
3	0,00	0,0	#DIV/0!	Maintenance liter	8	0,8
4	0,00	89,1	5,07	Storage tank - A	29	8,7
5	0,00	0,0	#DIV/0!	Storage tank - B	0	0,0
6	0,00	0,0	#DIV/0!	Crum Shell Aggre	0	0,0
Total	0,0	89,1	5,07	Crum Mobil Card	0	0,0
	Actual Plant Running hours	Today	Month to Date	Total	9,8	
		3,81	87,14			

- Notes:
- 1 SFOC - Specific fuel oil consumption
  - 2 SLOC - Specific lube oil consumption
  - 3 UM - Under maintenance
  - 4 LHV - Low heating value
  - 5 HMR - Hour meter reading
  - 6 One (1) flushing = 45 liter
  - 7 One (1) cm. of leak-off tank = 11,5 liter
  - 8 One (1) cm. of dipstick = 19 liter
  - 9 LFO Boiler fuel consumption = 150 liter
  - 10 One (1) cm LOFX sudge sump = 25,8 liter
  - 11 APRH = plant running hour with generating

Muh. Rumanis  
Shift Supervisor