

LAMPIRAN 1

Cuplikan catatan lapangan hasil wawancara penulis dengan masinis 3 di MV. BEA SCHULTE yang dilaksanakan pada saat penulis melaksanakan praktek laut.

Teknik : Wawancara
 Penulis/*Engine Cadet* : Ahmad Abdussalam
 Masinis 3/*Third Engineer* : Zaw Lin
 Tempat, Tanggal : *Engine Control Room*, 27 September 2016

Penulis : Selamat siang *third* (“*third*” panggilan untuk masinis 3),

Masinis 3 : Iya, selamat siang Salam.

Penulis : *Third* ketika melaksanakan pembongkaran katup gas buang pada diesel generator kondisi katup gas buangnya bias sampai bopeng seperti itu. Kenapa ya *third*?

Masinis 3 : Oiya Salam, hal itu bias di sebabkan dari banyak faktor, bisa karena ukuran celah katupnya, karena kualitas bahan bakar yang digunakan, biasa karena system pendinginanya yang kurang baik, dan masihh banyak faktor-faktor lainnya.

Penulis : Oiya *Third*, jadi kalau di kapal kita apa faktor yang menyebabkan bopeng itu? Apakah kita kurang baik dalam melakukan perawatan?

Masinis 3 : Kalau menurut observasi saya ketika overhaul kemarin itu di sebabkan karena bahan bakar yang kita gunakan kualitasnya kurang bagus, dan celah katupnya kurang pas, karena system pendinginan dan pelumasan masih bagus.

Penulis : Siap *third*, jadi apa yang harus kita lakukan agar tidak terjadi kerusakan pada katup gas buang *third*?

Masinis 3 : Kalau kerusakan pasti akan terjadi kita hanya bisa memperpanjang umur katup gas buang tersebut dengan melakukan perawatan yang teratur dan dengan langkah-langkah yang benar.

Penulis : Oiya siap *third*, terimakasih untuk ilmunya hari ini.

Masinis 3 : Oke Restu sama-sama, karena itu juga tanggung jawabmu nanti kalo sudah jadi masinis 3.



LAMPIRAN 2

Cuplikan catatan lapangan hasil wawancara penulis dengan KKM di MV. BEA SCHULTE yang dilaksanakan pada saat penulis melaksanakan praktek laut.

Teknik : Wawancara
 Penulis/*Engine Cadet* : Ahmadd Abdussalam
 KKM/*Chief Engineer* : Sokolov Vladimir
 Tempat, Tanggal : *Engine Control Room*, 12 Oktober 2016

- Penulis : Selamat siang *chief* (“*Chief*” panggilan untuk KKM).
 KKM : Iya, selamat siang Restu.
 Penulis : ketika melaksanakan pembongkaran katup gas buang pada diesel generator kondisi katup gas buangnya bisa sampai bopeng seperti itu. Kenapa ya *chief*?
 KKM : Oiya Salam, kemungkinan itu karena bahan bakar yang kita gunakan kualitasnya kurang bagus karena FO saat banker terakhir kemarin kandungan sulfurnya lebih tinggi dari FO yang sebelumnya. Karena pada tahun 2013 kemarin saat seniormu praktek disini juga pernah sampai bopeng seperti itu.
 Penulis : Jadi sebelumnya pernah sampai bopeng seperti itu juga *chief*?
 KKM : Iya saya tahun 2013 pernah disini sebagai masinis 2, dan Zaw Lin sudah disini kalau tidak salah dia sudah 9 kontrak menjadi masinis 3 disini.
 Penulis : Oiya *chief*, jadi apa yang harus kita lakukan agar kondisi katup gas buang tetap bagus?
 KKM : Yang harus dilakukan agar kondisi katup gas buang tetap bagus kita harus melakukan penyaringan yang baik pada FO yang akan kita gunakan dan juga melakukan pengecekan celah katup secara berkala setelah 2000 RH.
 Penulis : Oiya *chief* terimakasih banyak untuk ilmunya hari ini.
 KKM : Oke Salam, lain kali kalo ada yang perlu ditanyakan lagi silahkan tanyakan aja.



LAMPIRAN 3

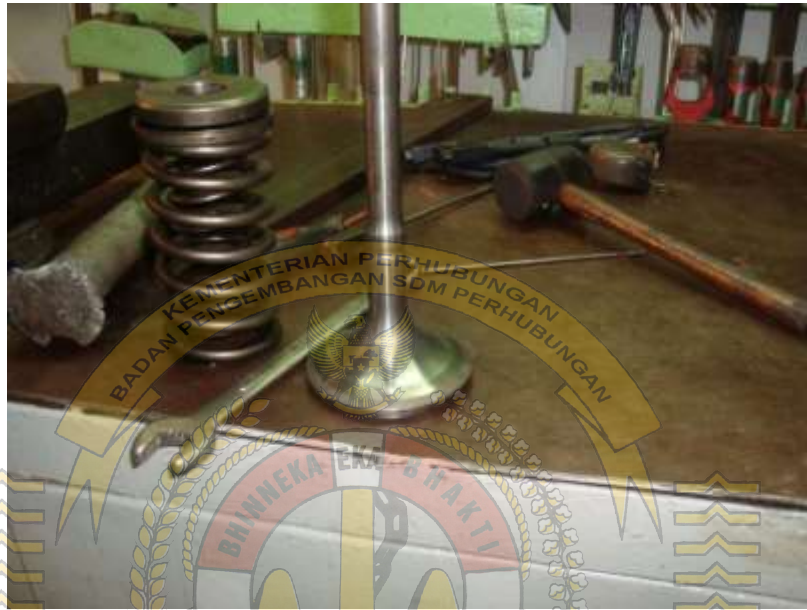
AE Performance Report Mei 2016

BERNHARD SCHULTE SHIPMANAGEMENT		Form No: TEC / 018																																																																			
AUXILIARY ENGINE PERFORMANCE REPORT																																																																					
Vessel Name:	MV. Eisa Schulte	Date:	16.05.16																																																																		
At Sea Port:	At sea	Aux. Engine No.:	2																																																																		
Engine Make:	HYUNDAI -MAN B&W	Rating (Kw)	1600																																																																		
Type / Model:	8-28032H	Rating (Kva)	2000																																																																		
Engine No.:	BA-1007-2	Voltage (V)	450																																																																		
		Ampere (A)	2566																																																																		
		Freq (Hz)	60																																																																		
		Engine RPM	726																																																																		
		Turbocharger RPM	2840																																																																		
Coolants																																																																					
Jacket Cooler	<input checked="" type="checkbox"/> FW <input type="checkbox"/> S/W	LUB Oil Cooler	<input type="checkbox"/> Jt.W <input type="checkbox"/> FW																																																																		
Air Cooler	<input checked="" type="checkbox"/> FW <input type="checkbox"/> S/W	FO Valve	<input type="checkbox"/> Jt.W <input type="checkbox"/> FW																																																																		
			<input type="checkbox"/> S/W <input type="checkbox"/> D.O																																																																		
Total running hrs of Engine	37202	Running hrs since Last Air Cooler (Air side) Cleaned	7604																																																																		
Running hrs since last Completed Overhauled	4421	Running hrs since Last Oil Renewed	4421																																																																		
Running hrs since Last Top Overhauled	4421	LO Consumption (Lit/day)	33																																																																		
Running hrs since last Turbocharger Overhauled	4347	Date Last L.O Analyzed	16.05.15																																																																		
Running hrs since last Air Cooler (S.W side) Cleaned	NA	Perf are include (%)	NA																																																																		
TEST LOAD kW	1330	A	1950																																																																		
			% LOAD 75																																																																		
FUEL OIL USED																																																																					
	<input type="checkbox"/> IFO	<input type="checkbox"/> FO	<input type="checkbox"/> DO																																																																		
	<input type="checkbox"/> MDO	<input type="checkbox"/> BLENDED																																																																			
	<input type="checkbox"/> CONSUMPTION		4.5																																																																		
			(MT/DAY)																																																																		
<table border="1"> <thead> <tr> <th>PARAMETER</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> <th>8</th> <th>9</th> <th>REMARKS</th> </tr> </thead> <tbody> <tr> <td>P. Compression</td> <td>34</td> <td>34</td> <td>36</td> <td>34</td> <td>36</td> <td>25</td> <td>34</td> <td>34</td> <td></td> <td></td> </tr> <tr> <td>P. Maximum</td> <td>111</td> <td>110</td> <td>112</td> <td>113</td> <td>110</td> <td>98</td> <td>111</td> <td>111</td> <td></td> <td></td> </tr> <tr> <td>Exhaust Gas Temperature</td> <td>245</td> <td>320</td> <td>315</td> <td>313</td> <td>322</td> <td>303</td> <td>314</td> <td>320</td> <td></td> <td></td> </tr> <tr> <td>Cooling water Outlet Temp</td> <td>26</td> <td>25</td> <td>26</td> <td>26</td> <td>25</td> <td>26</td> <td>24</td> <td>25</td> <td></td> <td></td> </tr> <tr> <td>Fuel Rack Position</td> <td>30</td> <td>29</td> <td>30</td> <td>30</td> <td>30</td> <td>30</td> <td>30</td> <td>30</td> <td></td> <td></td> </tr> </tbody> </table>				PARAMETER	1	2	3	4	5	6	7	8	9	REMARKS	P. Compression	34	34	36	34	36	25	34	34			P. Maximum	111	110	112	113	110	98	111	111			Exhaust Gas Temperature	245	320	315	313	322	303	314	320			Cooling water Outlet Temp	26	25	26	26	25	26	24	25			Fuel Rack Position	30	29	30	30	30	30	30	30		
PARAMETER	1	2	3	4	5	6	7	8	9	REMARKS																																																											
P. Compression	34	34	36	34	36	25	34	34																																																													
P. Maximum	111	110	112	113	110	98	111	111																																																													
Exhaust Gas Temperature	245	320	315	313	322	303	314	320																																																													
Cooling water Outlet Temp	26	25	26	26	25	26	24	25																																																													
Fuel Rack Position	30	29	30	30	30	30	30	30																																																													
COLOUR OF EXHAUST GAS																																																																					
	<input type="checkbox"/> INVISIBLE	<input type="checkbox"/> VISIBLE BUT ACCEPTABLE	<input type="checkbox"/> SMOKY & UNACCEPTABLE																																																																		
CONDITION OF L.O FILTERS :																																																																					
PRESSURE (kg/cm ²)		TEMPERATURES (Deg. C)																																																																			
Boost air Pressure	1.9	Exhaust Air Temperature	41																																																																		
F.O Pressure	6.5	F.O Temperature	98																																																																		
L.O Pressure	4.1	L.C Inlet Temperature	69																																																																		
Turbocharger L.O Pressure	1.7	FW Inlet Temperature	24																																																																		
FW Pressure	2.56	S.W Temperature	26																																																																		
S.W Pressure	NA	LT/HT CW Temperature	42/70																																																																		
LT/HT CW Pressure	1.4/2.9	L.C Cooler Inlet / Outlet Temperature	70/62																																																																		
Rocker Arm Oil Pressure	NA	FW Cooler Inlet / Outlet Temperature	NA																																																																		
Fuel Pump L.O Pressure	NA	T/C Gas Inlet Temperature (Group 1)	NA																																																																		
FW Cooling Oil Pressure	NA	T/C Gas Inlet Temperature (Group 2)	NA																																																																		
Fuel Valve Cooling Oil Pressure	NA	T/C Gas Outlet Temperature	330																																																																		
Atmospheric Pressure (mBar)	10.11	Engine Room Temperature	36																																																																		
Air Cooler Differential Pressure	NA	Ambient Temperature	25																																																																		
Chief Engineer's Comments:		Sokoloski Mikhail Sign																																																																			
Superintendent's Comments:		Sign																																																																			

LAMPIRAN 4
AE Performance Report Juni 2016

BERNHARD SCHULTE SHIPMANAGEMENT												Form No: TEC / 018
AUXILIARY ENGINE PERFORMANCE REPORT												
Vessel Name: Bea Schulte						Date: 16.06.16						
At/Sea Port: At sea						Aux. Engine No: 2						
Engine Maker: HYUNDAI-MAN B&W		Rating (Kw): 1600		Ampere (A): 2566								
Type / Model: 8L28/32H		Rating (Kva): 2000		Freq (Hz): 60								
Engine No: BA-1007-2		Voltage (V): 450		Engine RPM: 726		Turbocharger RPM: 2869						
Coolants		<input checked="" type="checkbox"/> FW <input type="checkbox"/> SW		<input type="checkbox"/> LUB Oiler Cooler		<input type="checkbox"/> Jlt W <input checked="" type="checkbox"/> FW <input type="checkbox"/> S.W						
Jacket Cooler		<input checked="" type="checkbox"/> FW <input type="checkbox"/> SW		<input type="checkbox"/> F.O. Valves		<input type="checkbox"/> Jlt W <input type="checkbox"/> FW <input type="checkbox"/> D.O						
Air Cooler		<input checked="" type="checkbox"/> FW <input type="checkbox"/> SW										
Total running Hrs of Engine: 37262		Running Hrs since Last Air Cooler (Air side) Cleaned: 1684						FUEL OIL USED				
Running Hrs since last Completed Overhauled: 4421		Running Hrs since Last Oil Renewed: 4421						<input checked="" type="checkbox"/> HFO <input type="checkbox"/> IFO				
Running Hrs since Last Top Overhauled: 4421		L.O Consumption (MT/day): 33						<input type="checkbox"/> FO <input type="checkbox"/> FO				
Running Hrs since Last Turbocharger Overhauled: 4147		Data Last L.O Analyzed: 16.06.15						<input type="checkbox"/> CONSUMPTION: 4.5				
Running Hrs since Last Air Cooler (S.W side) Cleaned: N/A		Pertane insoluble (%): NA						<input type="checkbox"/> (MT/DAY)				
TEST LOAD KW: 1330		A		1950		% LOAD: 83						
PARAMETER		1	2	3	4	5	6	7	8	9	REMARKS	
P. Compression	Kg/cm ²	36	37	36	36	35	36	36	36			
P. Maximum	Bar	112	111	110	112	111	108	110	112			
Exhaust Gas Temperature	Deg. C	330	320	330	325	330	330	325	325			
Cooling water Outlet Temp	Deg. C	78	74	76	77	76	74	74	75			
Fuel Rack Position	MM	32	31	32	32	32	32	32	32			
COLOUR OF EXHAUST GAS : <input checked="" type="checkbox"/> INVISIBLE <input type="checkbox"/> VISIBLE BUT ACCEPTABLE <input type="checkbox"/> SMOKY & UNACCEPTABLE												
CONDITION OF LO FILTERS :												
PRESSURE	(kg/cm ²)	TEMPERATURES						(Deg. C)				
Boost air Pressure	1.9	Boost Air Temperature						41				
F.O Pressure	5.5	F.O Temperature						98				
L.O Pressure	4.1	L.O Inlet Temperature						65				
Turbocharger L.O Pressure	1.7	F.W Inlet Temperature						75				
F.W Pressure	2.58	S.W Temperature						26				
S.W Pressure	N/A	L.H/L.C.W Temperature						43/13				
LT/HT C.W Pressure	1.4/2.9	L.O Cooler Inlet / Outlet						70/82				
Rocker Arm L.O Pressure	N/A	F.W Cooler Inlet / Outlet						N/A				
Fuel Pump L.O Pressure	N/A	T/C Gas Inlet Temperature (Group 1)						N/A				
F.W Cooling Oil Pressure	N/A	T/C Gas Inlet Temperature (Group 2)						N/A				
Fuel valve Cooling Oil Pressure	N/A	T/C Gas Outlet Temperature						32				
Atmospheric Pressure (mBar)	1011	Engine Room Temperature						35				
Air Cooler Differential Pressure	N/A	Ambient Temperature						26				
Chief Engineer's Comments												
										Sobolonski Mihai		
Superintendents Comments												
										Sign		
										Sign		

LAMPIRAN 5



Gambar : Katup dan pegas setelah perawatan

LAMPIRAN 6

MV BEA SCHULTE	
FLAG	HONG KONG
PORT OF REGISTRY & IMO NUMBER	HONG KONG // 9484558
CALL SIGN & OFFICIAL NUMBER	VRGA2 / HK-2566
RADIO ACCOUNTING AUTHORITY/Accounting code	CY03
E-MAIL ADDRESS	master@bea.schulte.bsmfleet.com
INMARSAT: SAT- FLEET (' 77) :- /Voice/Fax/Data	VOICE 764950717/ 18/ 19/ 20 // FAX 764950721//
INMARSAT FBB: Voice/Fax	Voice 870773100904; Fax 870783106713
INMARSAT C	447702593 & 447702594
MMSI	477639500
CLASS & CLASSIFICATION DESIGNATION	DNV. + 1A1 Container Carrier E0 DG-P BIS
CLASS ID NO	30592
TYPE OF VESSEL	CONTAINER SHIP
BUILD YARD & BUILD NO & BUILD DATE	DAEWOO SHIPBUILDER & MARINE ENGINEERING/ 4188 / 2010
LOA x LBP x BREADTH x DEPTH	264.32 X 251.0 X 32.2 X 21.5
GROSS TONNAGE / NETT TONNAGE	47877/ 29554
SUMMER DISPLACEMENT	76926.8
DEADWEIGHT / DEADWEIGHT DRAFT	59269.5 / 13.521
SCANTLING DRAFT / DISPLACEMENT	13.521 / 76926.8
LIGHTSHIP/ DRAFT & AIR DRAFT	17657.2MT @ 4.053 m // 59.6M
MAIN ENGINE – MAKER AND TYPE	TYPE:MAN B&W 8K90MC-C6
MAIN ENGINE POWER	MCR 36,560 kW x 104.0 RPM
DIESEL ALTERNATORS	4 SETS, HYUNDAI 8H25/33
AUXILIARY BOILER	KANGRIM COMPOSITE BOILER & SSR-3.5 BURNER
BOW THRUSTER / STERN THRUSTER	B.T:1500kW / NA
CARGO HANDLING EQUIPMENT	NIL
CAPACITY – TEU and FEU	4608 TEU / 2263 FEU
NO. OF HOLDS AND HATCHES	7 HOLDS AND 14 HATCHES
NO OF REEFER SOCKETS AND TYPE OF REEFER SOCKET	516 440 v / 60 hz/32A/3 phases/4 pole plugs plus 99 additional sockets for stowage flexibility
LOOSE LASHING GEAR MANUFACTURER	SEC
DOES THE VESSEL COMPLY WITH OHSА RULES FOR USA	YES
FUEL CAPACITY – HFO / MDO	HFO tank including sett/ser tk , LSHFO tk including sett/ser tk 6,321,9m3 / MDO incl serv tank 244,9m3
HFO AND MDO SPECIFICATION (iso designation)	HFO up to 700 CSt at 50 C and MDO (ISO-F-DMC)
FRESH WATER CAPACITY	282.4MT
BALLAST WATER CAPACITY	14537.2 m3 / 14900.8 MT
OWNING COMPANY	
REGISTERED OWNERS	NEEDLE HILL LIMITED, 2602 K WAH CENTRE, 191 Java Road, North Point HONG KONG
CHARTERER	HAMBURG SUD
LAST TECHNICAL INSPECTION / NEXT INSPECTION	New Building 25-03-2010
LAST DRYDOCK / NEXT DRYDOCK	25-03-2010/ 25-03-2015
LAST SPECIAL SURVEY / NEXT SPECIAL SURVEY	NIL / 25/03/2015
LAST PSC INSPECTION	NEW YORK / 06-03-2013
ANTI-FOULING COATING SYSTEM	Sea-CareA 'IF7 95(H): red brown
BALLAST TANK COATING SYSTEM	KCC

LAMPIRAN 7



Gambar MV. BEA SCHULTE

CREW LIST

<input checked="" type="checkbox"/>	Arrival
<input type="checkbox"/>	Departure

1. Name of Ship M/V BEA SCHULTE				2. Port of Arrival/Departure CARTAGENA			3. Date of Arrival 5-May-16	
4. Nationality of Ship HONG KONG				5. Port arrived from BUENAVENTURA				
6. No.	7. Family Name, Given, M.I.	8. Sex	9. Rank	10. Nationality	11. Date and Place of Birth	12. Date & Place of sign on	13. Seaman's Book No. & Expiry Date	14. Passport No. & Expiry Date
1	ANAB Mohammad	M	Master	Bangladesh	17.12.1968 KHULNA	27.04.2015 Callao/Peru	C/O/1707 03.11.2020	AG7222663 18.09.2018
2	LOBKOV Andrey	M	Master Trainee	Russian	10.12.1972 USSR	22.01.2015 Callao/Peru	MK0019060 PERMANENT	726279493 30.09.2023
3	TOLMACHEVSKYY Kostyantyn	M	2/Off	Ukrainian	18.05.1984 Odessa	10.12.2014 Callao/Peru	AB 506962 13.02.2018	EP651936 10.01.2023
4	JAGUNAP Zynel Subtinente	M	3/Off	Filipino	04.02.1978 Leganes, Iloilo	16.03.2015 Callao/Peru	C0238411 13.06.2019	EB1896742 11.09.2016
5	AZROI Agus Imam	M	Deck Cadet	Indonesian	18.11.1994 TEMANGGUNG	10.01.2015 Port Everglades/USA	C061830 02.06.2018	A7898582 10.04.2019
6	MERKISHIN Aleksandr	M	Ch/Eng.	Russian	03.08.1977 USSR	10.01.2015 Port Everglades/USA	MK 0159079 PERMANENT	715917066 26.08.2021
7	SOKOLOV Vladimir	M	2/Eng.	Russian	27.07.1968 USSR	21.02.2015 Port Everglades/USA	MK 0195618 PERMANENT	728529648 24.04.2024
8	LIN Zaw	M	3/Eng.	Myanmar	23.06.1980 Yangon	05.04.2015 Port Everglades/USA	59590 24.01.2018	MA064865 22.01.2018
9	ABDUSSALAM Ahmad	M	Engine Cadet	Indonesian	01.05.1994 KAB.SEMARANG	10.01.2015 Callao/Peru	C061972 12.06.2018	A8182839 14.05.2019
10	JAVIER Christian Joseph Pineda	M	El.Eng	Filipino	15.12.1982 MARIKINA	10.01.2015 Port Everglades/USA	B1238234 19.09.2017	EC0410040 25.02.2019
11	MANALO Michael Angelo	M	Bosun	Filipino	28.12.1975 SAN JOSE	04.10.2014 Pecem/Brazil	C0290091 28.07.2019	EC1791987 01.08.2019
12	CALUBAYAN Winzorr Impreso	M	A/B1	Filipino	10.02.1981 Mauban, Quezon	21.02.2015 Port Everglades/USA	B1183335 17.05.2017	EB2980585 08.07.2016
13	VERZOSA Franco Fernandez	M	A/B2	Filipino	02.05.1984 Maco Davao	10.12.2014 Callao/Peru	B1123487 17.01.2017	EB8812407 28.07.2018
14	BERNARDO Angelo Ramos	M	A/B3	Filipino	09.03.1976 Norzagaray	10.01.2015 Port Everglades/USA	C0363079 26.11.2019	EB9881379 25.12.2018
15	DELA RIARTE Ismael	M	O/S	Filipino	20.02.1981 NAGA CEBU	04.09.2014 Port Everglades/USA	B1020139 07.06.2016	EB4969139 16.03.2017
16	CABALLERO Carlo Yamas	M	Deck Trainee	Filipino	01.11.1993 CEBU CITY	10.11.2014 Callao/Peru	B1108190 14.12.2016	EB4397028 08.01.2017
17	SUMBILLO Armando Hijastro	M	Fitter	Filipino	05.06.1961 Dumingag	10.11.2014 Callao/Peru	C0063235 07.05.2018	EC1433066 17.06.2019
18	CURATIVO Jeff Albert Tulisana	M	Motorman	Filipino	27.09.1987 Manila	10.12.2014 Callao/Peru	C0052304 16.05.2018	EB7946971 22.04.2018
19	SA-ONROY Angelo Javellana	M	Wiper	Filipino	17.12.1992 Barotac	21.02.2015 Port Everglades/USA	C0045822 13.05.2018	EB2010315 02.03.2016
20	ORITO Violeto Delig	M	C/Cook	Filipino	25.02.1978 UBAY BOHOL	22.01.2015 Callao/Peru	C0309404 17.11.2019	EC2608295 03.11.2019
21	TERUEL Wilfredo Jr. Neri	M	Messman	Filipino	21.03.1982 POTOTAN	04.10.2014 Pecem/Brazil	C0106360 23.07.2018	EB8507169 26.06.2018



Capt. ANAB MOHAMMAD

5-May-16