



RVI Inspection Report

HD 4 'Hendrik Petronella'

SWD 6SW280 Main Engine



Inspection Details

Menu Directed	6cil4kl
Make & Type	SWD_6SW280
Serial Number	13171
Inspector	S. ROOS
Vessel	HD 4
Position in engine room	MAIN ENGINE
Date	17 12 2018
Time	07:34:45

Contact Details

RDA Shiptech

Wispel 47
9204 BA Drachten
The Netherlands

T 0031 512 795284
E info@shiptech.nl
W www.shiptech.nl

Disclaimer

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Inspection Summary			
<input type="checkbox"/> Attention	<input type="checkbox"/> No Flagged Images	<input type="checkbox"/> Action required	
	Inspection Points	Images	Flagged Images
<input checked="" type="checkbox"/> Cylinder 1	23	75	0
<input checked="" type="checkbox"/> Cylinder 2	23	57	0
<input type="checkbox"/> Cylinder 3	23	0	0
<input type="checkbox"/> Cylinder 4	23	0	0
<input type="checkbox"/> Cylinder 5	23	0	0
<input type="checkbox"/> Cylinder 6	23	0	0



RVI Inspection Conclusion

Remarks: Cylinders no. 1 and 2 were inspected in order to (1) establish whether the observed valve seat recession (VSR) during the previous inspection (20 September 2018) is progressive and (2) to determine whether any internal visual changes have occurred since the engine began running on a different type of lubricant (20 September 2018). This report uses the common SWD cylinder numbering (with cylinder 1 being the farthest from the turbo). Cylinder 1 corresponds with cylinder 6 in the previous report and cylinder 2 corresponds with cylinder 5.

Findings:

1. The seat recession of the intake valve in cylinder 1 is not progressive (the overall picture is the same for both inspections).
2. Exhaust valve 2 of cylinder head 1 appeared to have split. The head was changed out immediately by the crew and the valve had indeed split.
3. The engine appeared to be cleaner under the valve covers.
4. Apart from the damage to cylinder head no. 1, nothing was excessively dirty, damaged, or worn. In general, the situation remained unchanged when compared to the previous inspection.

Advice:

1. Regularly check the valve action in order to promptly discover any new instances of valve seat recession, etc.
2. Inspect the engine again after a longer interval (e.g. after 6 to 12 months) in order to establish if there have been any changes as a result of switching to a different lubricant.



Figure 1. HD 4 moored in Den Helder (previous inspection).

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Figure 2. RVI inspection system onboard HD 4.

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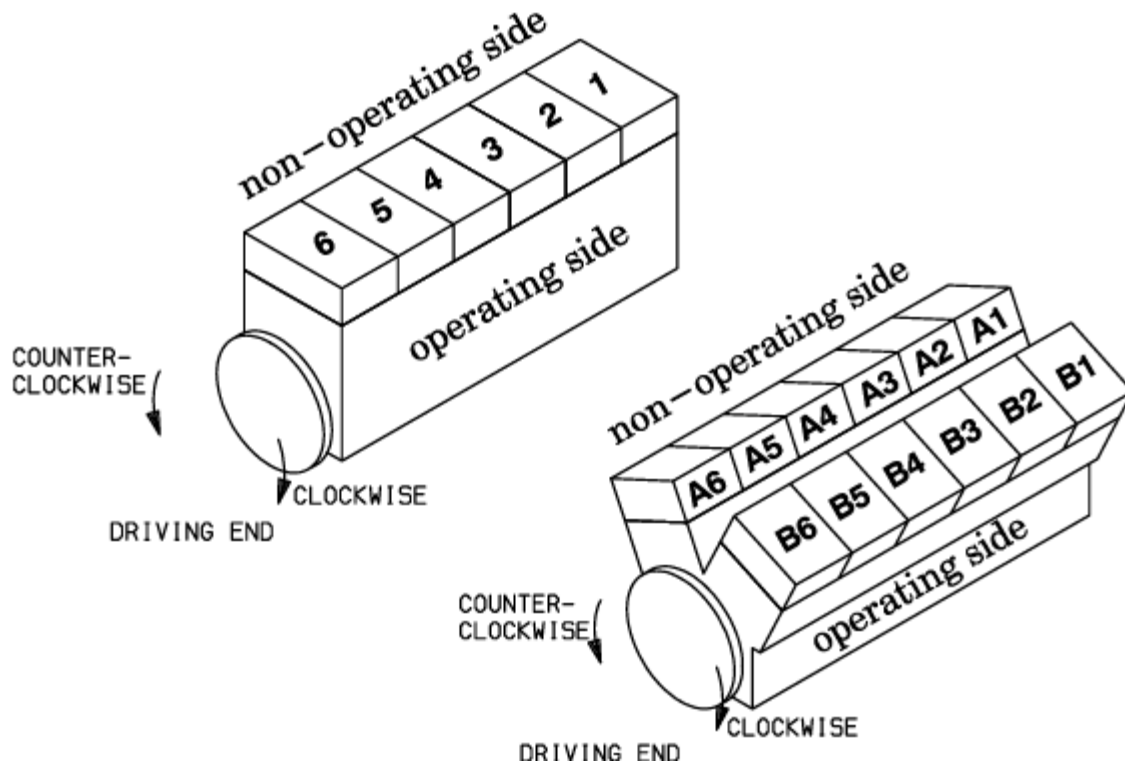


Figure 3 – cylinder count SWD 280.



Cylinder No.	Cylinder 6
Group	Head
Part	Inlet valve 1
Position	Guide
Comments	Some fouling is visible.



Cylinder_1_Head_Inlet_valve_1_Left002.BMP

Cylinder No.	Cylinder 1
Group	Head
Part	Inlet valve 1
Position	Guide
Comments	Some fouling is visible. Less oil leakage along the valve guide compared to previous inspection (20-09-2018)



Cylinder No.	Cylinder 6
Group	Head
Part	Inlet valve 1
Position	Guide
Comments	Some fouling is visible.



Cylinder No.	Cylinder 1
Group	Head
Part	Inlet valve 2
Position	Guide
Comments	Some fouling is visible. Less oil leakage along the valve guide. Less fouling compared to previous inspection (20-09-2018)



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