

OIL ANALYSIS REPORT



NEWT MARINE ZF 20360342 - INBOARD - STARBOARD GEARBOX

Sample No: VPA051812
Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA051812	VPA051778	VPA05798341	VPA038811
Sample Date	01 Mar 2024	29 Aug 2023	08 Mar 2023	13 Jul 2022
Machine Hours	5828	4811	3812	2939
Oil Hours	1011	980	873	1052
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL

NEWT MARINE
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 DUBUQUE, IA
 US 52001
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 T:
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OIL CONDITION

Visc @ 40°C	cSt	70.0	68.7	69.2	67.4
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CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	4	5	5	6
Sodium	ppm	2	1	2	2
Potassium	ppm	<1	0	0	0

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

WEAR METALS

PQ		14	15	10	19
Iron	ppm	8	12	10	14
Copper	ppm	10	12	10	15
Lead	ppm	<1	<1	0	2
Tin	ppm	<1	<1	0	<1
Aluminum	ppm	<1	0	<1	<1
Chromium	ppm	0	0	0	<1
Molybdenum	ppm	60	64	61	62
Nickel	ppm	<1	<1	<1	2
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	<1	0	0

ADDITIVES

Calcium	ppm	996	1086	1047	1106
Magnesium	ppm	936	1011	924	909
Zinc	ppm	1245	1271	1234	1168
Phosphorus	ppm	1097	1076	1053	1042
Barium	ppm	0	0	0	0
Boron	ppm	<1	<1	4	12

Depot: VP99298099
Unique No: 10916702
Signed: Don Baldrige
Report Date: 12 Mar 2024

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VOLVO PENTA

GRAPHS

