

OIL ANALYSIS REPORT

VOLVO PENTA

ROBERT MINNING RCM VOLVO 1012472247 - PORT DIESEL ENGINE

Sample No: VPA046418
Oil Type: MOBIL DELVAC 1300 SUPER15W40

SAMPLE INFORMATION

Sample Number	VPA046418	VPA046785	VPA010477	VPA024537
Sample Date	11 Jun 2023	30 Mar 2022	26 Oct 2020	24 Jul 2019
Machine Hours	1360	1476	1107	1028
Oil Hours	26	105	79	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

Blue Water Marine Repair
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OIL CONDITION

Visc @ 100°C	cSt	13.6	13.9	14.5	16.8
Base Number (BN)	mg KOH/g	11.0	11.0	---	---
Oxidation (PA)	%	76	70	61	69

CONTAMINATION

Soot %	%	0.2	0.6	1	3.2
Nitration (PA)	%	46	65	73	85
Sulfation (PA)	%	61	63	61	72
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	3	4	5
Sodium	ppm	1	<1	3	8
Potassium	ppm	3	1	2	12

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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

WEAR METALS

Iron	ppm	8	6	10	24
Copper	ppm	2	3	6	10
Lead	ppm	<1	1	<1	0
Tin	ppm	<1	<1	<1	0
Aluminum	ppm	<1	2	1	1
Chromium	ppm	<1	<1	<1	2
Molybdenum	ppm	46	67	40	19
Nickel	ppm	<1	<1	<1	2
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	<1	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	<1	<1	0

ADDITIVES

Calcium	ppm	1631	1357	1592	2187
Magnesium	ppm	602	927	627	120
Zinc	ppm	995	1155	908	1109
Phosphorus	ppm	823	1061	778	921
Barium	ppm	0	0	0	0
Boron	ppm	72	89	172	79

Depot: VP151824
Unique No: 10546916
Signed: Sean Felton
Report Date: 07 Jul 2023

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GRAPHS

