

OIL ANALYSIS REPORT



A344844 - PORT DIESEL ENGINE

Sample No: VPA026994

Oil Type: SHELL ROTELLA T6 5W40

SAMPLE INFORMATION

Sample Number	VPA026994	VPA040313	VPA040287	VPA024284
Sample Date	13 Apr 2024	23 Oct 2022	23 Oct 2021	13 Oct 2020
Machine Hours	860	742	661	591
Oil Hours	118	151	71	49
Oil Changed	Changed	Changed	Not Changd	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	15.0	14.8	14.9	15.3
Base Number (BN)	mg KOH/g	9.7	9.1	---	---
Oxidation (PA)	%	71	68	63	68

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.6	0.5	0.2	0.3
Nitration (PA)	%	77	77	61	62
Sulfation (PA)	%	57	56	52	58
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	8	5	4	5
Sodium	ppm	7	3	4	3
Potassium	ppm	1	2	<1	1

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	28	22	11	17
Copper	ppm	13	12	6	8
Lead	ppm	3	2	1	2
Tin	ppm	2	1	<1	<1
Aluminum	ppm	3	2	1	1
Chromium	ppm	2	<1	<1	<1
Molybdenum	ppm	81	38	38	16
Nickel	ppm	4	2	<1	2
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	<1	0	0	<1
Manganese	ppm	2	<1	<1	<1
Vanadium	ppm	<1	0	0	0

ADDITIVES

Calcium	ppm	1236	1489	1387	2016
Magnesium	ppm	1406	649	651	296
Zinc	ppm	1708	1221	1138	1195
Phosphorus	ppm	1576	1005	984	1055
Barium	ppm	0	0	0	0
Boron	ppm	70	116	120	180

Depot: VPKENCHI
Unique No: 10982781
Signed: Don Baldrige
Report Date: 22 Apr 2024

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VOLVO PENTA

GRAPHS

