

OIL ANALYSIS REPORT



ENCORE III (S/N 3940025045) - STARBOARD MAIN ENGINE

Sample No: VPA042628

Oil Type: PETRO CANADA DURON HP 15W40

SAMPLE INFORMATION

Sample Number	VPA042628	VPA035195	VPA026443	VPA025111
Sample Date	07 Jun 2023	28 Sep 2021	17 Jun 2021	08 Apr 2021
Machine Hours	5606	4396	4189	3989
Oil Hours	200	200	200	220
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	14.4	14.4	14.1	13.8
Base Number (BN)	mg KOH/g	9.0	9.0	---	---
Oxidation (PA)	%	53	68	63	65

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	45	56	55	56
Sulfation (PA)	%	48	58	55	58
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	3	2	5	3
Sodium	ppm	0	<1	2	4
Potassium	ppm	2	8	6	6

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	2	4	11	3
Copper	ppm	2	2	2	2
Lead	ppm	<1	<1	<1	<1
Tin	ppm	<1	0	<1	<1
Aluminum	ppm	4	<1	1	0
Chromium	ppm	1	0	<1	<1
Molybdenum	ppm	58	2	2	2
Nickel	ppm	1	0	0	<1
Titanium	ppm	<1	0	<1	0
Silver	ppm	<1	0	0	0
Manganese	ppm	<1	0	<1	<1
Vanadium	ppm	<1	0	0	0

ADDITIVES

Calcium	ppm	998	2400	1965	1963
Magnesium	ppm	935	22	18	14
Zinc	ppm	1168	1341	1122	1020
Phosphorus	ppm	948	1104	931	913
Barium	ppm	0	0	0	0
Boron	ppm	2	208	234	258

Depot: VPBAYBOS
Unique No: 10885085
Signed: Jonathan Hester
Report Date: 20 Feb 2024

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VOLVO PENTA

GRAPHS

