

OIL ANALYSIS REPORT



MEYER 1013720602 - STARBOARD DIESEL ENGINE

Sample No: VPA053658
Oil Type: MOBIL DELVAC 1300 SUPER15W40

SAMPLE INFORMATION

Sample Number	VPA053658	VPA050798	VPA051971	VPA046651
Sample Date	09 May 2024	13 Feb 2024	13 Sep 2023	19 Jun 2023
Machine Hours	9798	9242	8724	8194
Oil Hours	537	500	500	582
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

VIRGINIA PILOT ASSOCIATION

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OIL CONDITION

Visc @ 100°C	cSt	12.9	12.7	12.7	12.6
Base Number (BN)	mg KOH/g	7.5	7.8	7.8	7.8
Oxidation (PA)	%	95	89	89	94

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.8	0.6	0.6	0.8
Nitration (PA)	%	81	72	73	78
Sulfation (PA)	%	75	70	68	75
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	5	4	6
Sodium	ppm	0	3	3	2
Potassium	ppm	3	2	2	4

WEAR METALS

Iron	ppm	19	14	18	19
Copper	ppm	2	1	2	2
Lead	ppm	3	1	2	3
Tin	ppm	1	<1	<1	<1
Aluminum	ppm	2	2	0	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	47	43	44	41
Nickel	ppm	<1	0	0	<1
Titanium	ppm	<1	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0

ADDITIVES

Calcium	ppm	1714	1707	1894	1718
Magnesium	ppm	499	533	594	498
Zinc	ppm	879	958	1006	924
Phosphorus	ppm	771	755	735	716
Barium	ppm	2	0	0	0
Boron	ppm	35	28	30	28

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.

Depot: VPVIRVIR
Unique No: 11022866
Signed: Sean Felton
Report Date: 14 May 2024

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VOLVO PENTA

GRAPHS

