

OIL ANALYSIS REPORT



MEYER 1013926395 - STARBOARD DIESEL ENGINE

Sample No: VPA051975
Oil Type: MOBIL DELVAC 1300 SUPER15W40

SAMPLE INFORMATION

Sample Number	VPA051975	VPA037814	VPA039582	VPA028082
Sample Date	25 Oct 2023	25 Apr 2023	24 Jan 2023	31 Oct 2022
Machine Hours	706	5657	5167	4645
Oil Hours	500	500	512	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

VIRGINIA PILOT ASSOCIATION

3329 SHORE DR
 VIRGINIA BEACH, VA
 US 23451
 Contact: RYAN BRYANT
 bryant_j@vapilotassn.com
 T: (757)692-3439
 F:

OIL CONDITION

Visc @ 100°C	cSt	12.9	12.7	12.8	12.8
Base Number (BN)	mg KOH/g	7.9	8.2	8.5	8.8
Oxidation (PA)	%	100	91	94	100

CONTAMINATION

Soot %	%	0.3	0.4	0.3	0.4
Nitration (PA)	%	80	70	78	82
Sulfation (PA)	%	75	71	71	78
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	15	6	6	6
Sodium	ppm	4	3	0	2
Potassium	ppm	8	0	1	0

WEAR METALS

Iron	ppm	19	13	13	19
Copper	ppm	51	<1	<1	1
Lead	ppm	2	0	2	2
Tin	ppm	4	<1	<1	<1
Aluminum	ppm	6	2	<1	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	49	42	42	39
Nickel	ppm	<1	0	0	0
Titanium	ppm	<1	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	1	1	<1	<1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	1721	1623	1686	1747
Magnesium	ppm	566	498	482	511
Zinc	ppm	968	882	893	881
Phosphorus	ppm	808	696	721	719
Barium	ppm	19	0	1	0
Boron	ppm	35	33	40	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: 10716171
Signed: Sean Felton
Report Date: 01 Nov 2023

OIL ANALYSIS REPORT

VOLVO PENTA

GRAPHS

