

OIL ANALYSIS REPORT



RICHMOND RICHMOND 3950006318 - STARBOARD IPS

Sample No: VPA046631
Oil Type: GEAR OIL SAE 75W90

SAMPLE INFORMATION

Sample Number	VPA046631	VPA051982	VPA046517	VPA046638
Sample Date	12 Jan 2024	25 Oct 2023	11 Aug 2023	25 Apr 2023
Machine Hours	1261	6723	6253	5657
Oil Hours	569	500	596	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

VIRGINIA PILOT ASSOCIATION

3329 SHORE DR
 VIRGINIA BEACH, VA
 US 23451
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 F:

OIL CONDITION

Visc @ 40°C	cSt	104	104	103	105
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CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	4	3	1	0
Sodium	ppm	12	10	2	1
Potassium	ppm	<1	1	1	0

WEAR METALS

PQ		13	14	13	14
Iron	ppm	25	25	22	15
Copper	ppm	7	7	6	4
Lead	ppm	0	0	0	0
Tin	ppm	<1	<1	0	0
Aluminum	ppm	2	2	<1	1
Chromium	ppm	0	<1	0	<1
Molybdenum	ppm	0	<1	<1	2
Nickel	ppm	0	<1	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	<1	0

ADDITIVES

Calcium	ppm	8	22	12	14
Magnesium	ppm	3	7	2	6
Zinc	ppm	12	37	0	11
Phosphorus	ppm	1362	1439	1323	1348
Barium	ppm	0	20	0	0
Boron	ppm	291	359	323	324

Diagnosis

No corrective action is recommended at this time. 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 condition of the oil is acceptable for the time in service.

Depot: VPVIRVIR
Unique No: 10844575
Signed: Sean Felton
Report Date: 24 Jan 2024

OIL ANALYSIS REPORT

VOLVO PENTA

GRAPHS

