

VOLVO PENTA A383615 - STARBOARD DIESEL ENGINE

Sample No: VPA038871

Oil Type: DIESEL ENGINE OIL SAE 40

SAMPLE INFORMATION

Sample Number	VPA038871	VPA024063	VPA013411	---
Sample Date	08 Jun 2021	13 Nov 2019	11 Dec 2017	---
Machine Hours	0	214	130	---
Oil Hours	0	0	0	---
Oil Changed	N/A	Changed	N/A	---
Sample Status	NORMAL	NORMAL	NORMAL	---

Marine Maintenance Of

7803 McElvey Rd
 PANAMA CITY BEACH, FL
 US 32408
 Contact: Jody Kennedy
 jody@marinemaint.com
 T:
 F:

OIL CONDITION

Visc @ 100°C	cSt	14.4	13.6	13.81	---
Oxidation (PA)	%	68	57	40	---

CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	0.1	0.1	0	---
Nitration (PA)	%	47	53	42	---
Sulfation (PA)	%	59	51	39	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	4	7	8	---
Sodium	ppm	2	2	3	---
Potassium	ppm	7	0	<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 condition of the oil is acceptable for the time in service.

WEAR METALS

Iron	ppm	5	12	12	---
Copper	ppm	<1	3	5	---
Lead	ppm	<1	<1	1	---
Tin	ppm	<1	0	<1	---
Aluminum	ppm	1	3	2	---
Chromium	ppm	<1	<1	<1	---
Molybdenum	ppm	10	57	51	---
Nickel	ppm	<1	<1	<1	---
Titanium	ppm	<1	0	0	---
Silver	ppm	<1	0	0	---
Manganese	ppm	<1	<1	<1	---
Vanadium	ppm	<1	0	0	---

ADDITIVES

Calcium	ppm	1989	988	1092	---
Magnesium	ppm	166	867	748	---
Zinc	ppm	1238	1035	942	---
Phosphorus	ppm	1003	965	917	---
Barium	ppm	0	0	0	---
Boron	ppm	205	6	26	---

Depot: VP313024
Unique No: 9538469
Signed: Don Baldrige
Report Date: 10 Jun 2021

GRAPHS

