

OIL ANALYSIS REPORT



KNUDSON VOLVO PENTA 7011449657 - STARBOARD DIESEL ENGINE

Sample No: VPA050914

Oil Type: DIESEL ENGINE OIL SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA050914	VPA050920	VPA047199	VPA048375
Sample Date	19 Jun 2024	12 Feb 2024	27 Sep 2023	13 Jul 2022
Machine Hours	895	735	678	448
Oil Hours	0	0	0	0
Oil Changed	Not Changd	N/A	N/A	N/A
Sample Status	NORMAL	NORMAL	NORMAL	ATTENTION

SUNCOAST DIESEL MARINE

6341 PORTER ROAD, SUITE 6
SARASOTA, FL
US 34240
Contact: SERVICE MANAGER
info@suncoastdmi.com
T: (941)342-0033
F:

OIL CONDITION

Visc @ 100°C	cSt	12.1	12.5	14.0	11.9
Base Number (BN)	mg KOH/g	9.0	8.4	9.8	10.8
Oxidation (PA)	%	58	59	57	128

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.5	0.4	0.2	0.7
Nitration (PA)	%	62	56	51	164
Sulfation (PA)	%	55	53	52	99
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	6	4	6
Sodium	ppm	1	0	15	<1
Potassium	ppm	2	2	17	0

WEAR METALS

Iron	ppm	7	3	8	9
Copper	ppm	43	20	4	36
Lead	ppm	<1	1	<1	1
Tin	ppm	1	<1	<1	<1
Aluminum	ppm	2	1	2	1
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	62	80	61	62
Nickel	ppm	1	<1	0	0
Titanium	ppm	0	<1	0	0
Silver	ppm	<1	<1	0	<1
Manganese	ppm	<1	<1	1	<1
Vanadium	ppm	<1	<1	0	0

ADDITIVES

Calcium	ppm	1103	1316	1223	1099
Magnesium	ppm	1028	1262	958	864
Zinc	ppm	1383	1645	1319	1243
Phosphorus	ppm	1136	1336	1058	1020
Barium	ppm	0	0	0	4
Boron	ppm	3	2	7	0

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: VP705283
Unique No: 11101148
Signed: Jonathan Hester
Report Date: 28 Jun 2024

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VOLVO PENTA

GRAPHS

