

# OIL ANALYSIS REPORT

# VOLVO PENTA

## MCNEIL VOLVO PENTA 7011440511 - PORT DIESEL ENGINE

Sample No: VPA036759

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

### SAMPLE INFORMATION

Sample Number	VPA036759	VPA033450	---	---
Sample Date	08 Sep 2023	28 Mar 2022	---	---
Machine Hours	276	677	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Not Changd	---	---
Sample Status	ABNORMAL	ABNORMAL	---	---

### OIL CONDITION

Visc @ 100°C	cSt	▲ 12.5	▲ 12.1	---	---
Base Number (BN)	mg KOH/g	■ 6.9	■ 10.5	---	---
Oxidation (PA)	%	■ 64	■ 65	---	---

### CONTAMINATION

Soot %	%	■ 0.5	■ 0.5	---	---
Nitration (PA)	%	■ 65	■ 64	---	---
Sulfation (PA)	%	■ 56	■ 61	---	---
Glycol	%	■ NEG	■ NEG	---	---
Fuel	%	▲ 5.4	▲ 4.0	---	---
Silicon	ppm	■ 5	■ 5	---	---
Sodium	ppm	■ 2	■ 0	---	---
Potassium	ppm	■ 7	■ 2	---	---

### WEAR METALS

Iron	ppm	■ 12	■ 10	---	---
Copper	ppm	■ 37	■ 38	---	---
Lead	ppm	■ 1	■ <1	---	---
Tin	ppm	■ 1	■ <1	---	---
Aluminum	ppm	■ 0	■ <1	---	---
Chromium	ppm	■ <1	■ <1	---	---
Molybdenum	ppm	■ 6	■ 61	---	---
Nickel	ppm	■ 1	■ 0	---	---
Titanium	ppm	■ 0	■ 0	---	---
Silver	ppm	■ 0	■ <1	---	---
Manganese	ppm	■ <1	■ <1	---	---
Vanadium	ppm	■ 0	■ 0	---	---

### ADDITIVES

Calcium	ppm	■ 2050	■ 1131	---	---
Magnesium	ppm	■ 125	■ 939	---	---
Zinc	ppm	■ 1209	■ 1284	---	---
Phosphorus	ppm	■ 1011	■ 1101	---	---
Barium	ppm	■ 0	■ 0	---	---
Boron	ppm	■ 95	■ 6	---	---

**FULL KEEL MARINE SERVICES**  
314 LEGION AVE  
ANNAPOLIS, MD  
US 21401  
Contact: Service Manager  
FULLKEELMARINESERIVES@GMAIL.COM  
T: (410)507-3542  
F:

### Diagnosis

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Depot: VP1298996  
Unique No: 10646591  
Signed: Jonathan Hester  
Report Date: 18 Sep 2023

# OIL ANALYSIS REPORT



## GRAPHS

