



CONSTRUCTION EQUIPMENT

VOLVO L180HHL 1166 - DIESEL ENGINE



Sample No: VCP403591
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP403591	VCP406251	---	---
Sample Date	04 Dec 2023	03 Apr 2023	---	---
Machine Hours	2567	637	---	---
Oil Hours	0	637	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	ABNORMAL	---	---

ALTA EQUIPMENT COMPANY

1061 STEPKE COURT
 TRAVERSE CITY, MI
 US 49685
 Contact: KEVIN DOHM
 kevin.dohm@altaequipment.com
 T: (231)943-3700
 F: (231)943-8110



OIL CONDITION

Visc @ 100°C	cSt	13.1	▲ 11.3	---	---
Base Number (BN)	mg KOH/g	8.1	■ 5.3	---	---
Oxidation (PA)	%	79	61	---	---

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.



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.2	■ 0.1	---	---
Nitration (PA)	%	74	75	---	---
Sulfation (PA)	%	60	50	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	■ 0.5	---	---
Silicon	ppm	5	■ 25	---	---
Sodium	ppm	0	■ 2	---	---
Potassium	ppm	2	■ 1	---	---



WEAR METALS

Iron	ppm	9	■ 11	---	---
Copper	ppm	13	▲ 408	---	---
Lead	ppm	<1	■ 0	---	---
Tin	ppm	1	■ 2	---	---
Aluminum	ppm	1	■ 2	---	---
Chromium	ppm	<1	■ <1	---	---
Molybdenum	ppm	53	■ 79	---	---
Nickel	ppm	<1	■ <1	---	---
Titanium	ppm	<1	0	---	---
Silver	ppm	0	■ 0	---	---
Manganese	ppm	<1	■ 3	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	1418	■ 2003	---	---
Magnesium	ppm	704	55	---	---
Zinc	ppm	1166	■ 1142	---	---
Phosphorus	ppm	934	■ 986	---	---
Barium	ppm	11	■ 0	---	---
Boron	ppm	19	■ 55	---	---

Depot: VOLVO8501
Unique No: 10782834
Signed: Wes Davis
Report Date: 14 Dec 2023



CONSTRUCTION EQUIPMENT



GRAPHS

