



# CONSTRUCTION EQUIPMENT

## SW-25852-2 MAVERICK VOLVO EC380E 3 102 14 - DIESEL ENGINE



**Sample No:** VCP443482  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SW-25852-2 MAVERICK



### SAMPLE INFORMATION

Sample Number	VCP443482	VCP400935	---	---
Sample Date	10 Nov 2023	26 Apr 2023	---	---
Machine Hours	8042	7547	---	---
Oil Hours	500	500	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ATTENTION	ABNORMAL	---	---

**ARNOLD MACHINERY COMPANY**  
 2975 WEST 2100 SOUTH  
 SALT LAKE CITY, UT  
 US 84119  
 Contact: TJ LARK  
 tlark@arnoldmachinery.com  
 T: (801)972-4000  
 F: (801)975-9434



### OIL CONDITION

Visc @ 100°C	cSt	▲ 12.1	▲ 11.8	---	---
Base Number (BN)	mg KOH/g	■ 7.6	■ 7.6	---	---
Oxidation (PA)	%	62	76	---	---

### Diagnosis

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 no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



### CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	■ 0.1	■ 0.1	---	---
Nitration (PA)	%	59	58	---	---
Sulfation (PA)	%	53	57	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	▲ 2.1	---	---
Silicon	ppm	■ 3	■ 3	---	---
Sodium	ppm	■ 1	■ 2	---	---
Potassium	ppm	■ 0	■ 0	---	---



### WEAR METALS

Iron	ppm	■ 2	■ 3	---	---
Copper	ppm	■ 0	■ 4	---	---
Lead	ppm	■ <1	■ 0	---	---
Tin	ppm	■ <1	■ 0	---	---
Aluminum	ppm	■ <1	■ <1	---	---
Chromium	ppm	■ 0	■ 0	---	---
Molybdenum	ppm	■ 57	■ 34	---	---
Nickel	ppm	■ 0	■ 0	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	■ 0	■ 0	---	---
Manganese	ppm	■ <1	■ <1	---	---
Vanadium	ppm	0	<1	---	---



### ADDITIVES

Calcium	ppm	■ 1132	▲ 1190	---	---
Magnesium	ppm	■ 928	■ 362	---	---
Zinc	ppm	■ 1255	▲ 781	---	---
Phosphorus	ppm	■ 1043	▲ 634	---	---
Barium	ppm	■ 0	■ 0	---	---
Boron	ppm	■ 9	■ 50	---	---

**Depot:** VOLVO8770  
**Unique No:** 10749768  
**Signed:** Jonathan Hester  
**Report Date:** 21 Nov 2023



# CONSTRUCTION EQUIPMENT



## GRAPHS

