



CONSTRUCTION EQUIPMENT

SW-33588-2 WASATCH VOLVO L180H 5320 - DIESEL ENGINE



Sample No: VCP454285
Oil Type: {unknown}
Job No: SW-33588-2 WASATCH



SAMPLE INFORMATION

Sample Number	VCP454285	---	---	---
Sample Date	03 Jun 2024	---	---	---
Machine Hours	4853	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	ABNORMAL	---	---	---

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



OIL CONDITION

Visc @ 100°C	cSt	● 9.3	---	---	---
Base Number (BN)	mg KOH/g	▲ 3.3	---	---	---
Oxidation (PA)	%	82	---	---	---

Diagnosis

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. All component wear rates are normal. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN level is low. Confirm oil type. The oil viscosity is lower than typical, possibly indicating the addition of lighter grade oil.



CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	■ 0.1	---	---	---
Nitration (PA)	%	55	---	---	---
Sulfation (PA)	%	57	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	■ 0.2	---	---	---
Silicon	ppm	■ 4	---	---	---
Sodium	ppm	■ 2	---	---	---
Potassium	ppm	■ 1	---	---	---



WEAR METALS

Iron	ppm	■ 5	---	---	---
Copper	ppm	■ 6	---	---	---
Lead	ppm	■ <1	---	---	---
Tin	ppm	■ <1	---	---	---
Aluminum	ppm	■ 1	---	---	---
Chromium	ppm	■ <1	---	---	---
Molybdenum	ppm	■ 42	---	---	---
Nickel	ppm	■ 0	---	---	---
Titanium	ppm	5	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	<1	---	---	---
Vanadium	ppm	<1	---	---	---



ADDITIVES

Calcium	ppm	■ 1297	---	---	---
Magnesium	ppm	■ 61	---	---	---
Zinc	ppm	■ 673	---	---	---
Phosphorus	ppm	■ 669	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 78	---	---	---

Depot: VOLVO8770
Unique No: 11071678
Signed: Jonathan Hester
Report Date: 13 Jun 2024



CONSTRUCTION EQUIPMENT



GRAPHS

