



CONSTRUCTION EQUIPMENT

620518 NA MINING VOLVO L180H 5785 - DIESEL ENGINE



Sample No: VCP411600
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 620518 NA MINING



SAMPLE INFORMATION

Sample Number	VCP411600	VCP414713	---	---
Sample Date	16 Oct 2023	14 Sep 2023	---	---
Machine Hours	1214	628	---	---
Oil Hours	500	628	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ABNORMAL	ABNORMAL	---	---

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OIL CONDITION

Visc @ 100°C	cSt	12.7	▲ 11.2	---	---
Base Number (BN)	mg KOH/g	9.5	■ 6.2	---	---
Oxidation (PA)	%	79	57	---	---



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.1	■ 0.1	---	---
Nitration (PA)	%	59	78	---	---
Sulfation (PA)	%	61	51	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	■ 0.5	---	---
Silicon	ppm	9	■ 25	---	---
Sodium	ppm	3	■ <1	---	---
Potassium	ppm	2	■ 4	---	---



WEAR METALS

Iron	ppm	5	■ 10	---	---
Copper	ppm	▲ 71	▲ 509	---	---
Lead	ppm	<1	■ <1	---	---
Tin	ppm	<1	■ 2	---	---
Aluminum	ppm	2	■ 0	---	---
Chromium	ppm	<1	■ 0	---	---
Molybdenum	ppm	44	■ 86	---	---
Nickel	ppm	0	■ <1	---	---
Titanium	ppm	<1	0	---	---
Silver	ppm	0	■ 0	---	---
Manganese	ppm	<1	■ 2	---	---
Vanadium	ppm	<1	0	---	---



ADDITIVES

Calcium	ppm	1733	■ 2099	---	---
Magnesium	ppm	445	22	---	---
Zinc	ppm	1154	■ 1168	---	---
Phosphorus	ppm	937	■ 974	---	---
Barium	ppm	0	■ 2	---	---
Boron	ppm	35	■ 44	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level has decreased, but is still abnormal. All other 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 acceptable for the time in service.

Depot: VOLVO0093
Unique No: 10752975
Signed: Don Baldrige
Report Date: 23 Nov 2023



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GRAPHS

