



CONSTRUCTION EQUIPMENT

VOLVO L220H 2279 - DIESEL ENGINE



Sample No: VCP371219
Oil Type: MOBIL 15W40
Job No:



SAMPLE INFORMATION

Sample Number	VCP371219	VCP440842	VCP401918	VCP400163
Sample Date	14 Mar 2024	05 Feb 2024	14 Dec 2023	18 Oct 2023
Machine Hours	21838	21382	20856	20348
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

ARNOLD MACHINERY COMPANY
 464 WASHINGTON STREET S
 TWIN FALLS, ID
 US 83301
 Contact: JANA E HYMAS
 jhymas@arnoldmachinery.com
 T: (208)733-1715
 F: (775)356-7152



OIL CONDITION

Visc @ 100°C	cSt	12.0	12.5	12.9	13.2
Base Number (BN)	mg KOH/g	9.5	8.7	9.1	9.0
Oxidation (PA)	%	51	56	58	61



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.4	0.5	0.5	0.5
Nitration (PA)	%	53	61	58	55
Sulfation (PA)	%	52	52	53	54
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	0.4	<1.0	<1.0	<1.0
Silicon	ppm	7	4	5	7
Sodium	ppm	0	1	1	2
Potassium	ppm	1	0	1	0



WEAR METALS

Iron	ppm	6	5	4	4
Copper	ppm	<1	1	<1	<1
Lead	ppm	<1	0	<1	0
Tin	ppm	<1	0	<1	0
Aluminum	ppm	3	5	5	4
Chromium	ppm	<1	0	0	0
Molybdenum	ppm	56	65	65	49
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	0	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1539	1168	1051	1122
Magnesium	ppm	794	921	880	750
Zinc	ppm	1306	1175	1176	1010
Phosphorus	ppm	1122	1005	990	925
Barium	ppm	0	0	0	4
Boron	ppm	14	9	12	19

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. 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.

Depot: VOLVO1835
Unique No: 10940264
Signed: Wes Davis
Report Date: 26 Mar 2024



CONSTRUCTION EQUIPMENT



VOLVO GRAPHS

