



CONSTRUCTION EQUIPMENT

VOLVO L220H 2280 - DIESEL ENGINE



Sample No: VCP440139
Oil Type: MOBIL 15W40
Job No:



SAMPLE INFORMATION

Sample Number	VCP440139	VCP429831	VCP368338	VCP371227
Sample Date	26 Feb 2024	26 Jan 2024	14 Nov 2023	10 Oct 2023
Machine Hours	22698	22180	21662	21192
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	N/A
Sample Status	NORMAL	MARGINAL	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	13.1	12.4	13.2	13.3
Base Number (BN)	mg KOH/g	9.6	9.4	9.6	9.4
Oxidation (PA)	%	55	55	55	59



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.2	0.3	0.6
Nitration (PA)	%	50	53	51	61
Sulfation (PA)	%	50	50	52	54
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	0.4	<1.0	<1.0
Silicon	ppm	5	3	3	4
Sodium	ppm	2	0	0	1
Potassium	ppm	1	<1	1	0



WEAR METALS

Iron	ppm	4	4	4	9
Copper	ppm	1	2	1	2
Lead	ppm	<1	1	0	0
Tin	ppm	<1	1	<1	<1
Aluminum	ppm	3	3	1	2
Chromium	ppm	<1	<1	0	0
Molybdenum	ppm	96	66	62	62
Nickel	ppm	0	1	0	0
Titanium	ppm	<1	<1	<1	0
Silver	ppm	0	<1	0	0
Manganese	ppm	0	1	0	0
Vanadium	ppm	<1	<1	0	0



ADDITIVES

Calcium	ppm	1670	1104	1108	1146
Magnesium	ppm	1462	1010	918	971
Zinc	ppm	1937	1294	1205	1298
Phosphorus	ppm	1617	1037	984	1062
Barium	ppm	0	0	0	0
Boron	ppm	18	6	3	6

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.

Depot: VOLVO1835
Unique No: 10940257
Signed: Don Baldrige
Report Date: 26 Mar 2024



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VOLVO GRAPHS

