



CONSTRUCTION EQUIPMENT

TRANSPORT LEASING VOLVO L220H 2279 - DIESEL ENGINE



Sample No: VCP401918
Oil Type: MOBIL 15W40
Job No: TRANSPORT LEASING



SAMPLE INFORMATION

Sample Number	VCP401918	VCP400163	VCP382210	VCP393757
Sample Date	14 Dec 2023	18 Oct 2023	28 Aug 2023	20 Mar 2023
Machine Hours	20856	20348	19900	19667
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	N/A	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	12.9	13.2	13.1	12.7
Base Number (BN)	mg KOH/g	9.1	9.0	9.4	9.6
Oxidation (PA)	%	58	61	55	57



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.5	0.5	0.2	0.5
Nitration (PA)	%	58	55	50	60
Sulfation (PA)	%	53	54	52	54
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	5	7	4	4
Sodium	ppm	1	2	2	2
Potassium	ppm	1	0	<1	<1



WEAR METALS

Iron	ppm	4	4	4	7
Copper	ppm	<1	<1	<1	<1
Lead	ppm	<1	0	0	<1
Tin	ppm	<1	0	0	<1
Aluminum	ppm	5	4	2	6
Chromium	ppm	0	0	<1	<1
Molybdenum	ppm	65	49	70	63
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1051	1122	1210	1112
Magnesium	ppm	880	750	957	901
Zinc	ppm	1176	1010	1275	1183
Phosphorus	ppm	990	925	1037	997
Barium	ppm	0	4	0	2
Boron	ppm	12	19	22	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 acceptable for the time in service.

Depot: VOLVO1835
Unique No: 10795629
Signed: Don Baldrige
Report Date: 21 Dec 2023

VOLVO **GRAPHS**

