



CONSTRUCTION EQUIPMENT

TRANSPORT LEASING VOLVO L220H 3069 - DIESEL ENGINE



Sample No: VCP406615
Oil Type: MOBIL 15W40
Job No: TRANSPORT LEASING



SAMPLE INFORMATION

Sample Number	VCP406615	VCP428884	VCP371218	VCP384991
Sample Date	22 Jan 2024	12 Dec 2023	31 Oct 2023	18 Apr 2023
Machine Hours	15042	14549	13891	13507
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	N/A
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	12.5	12.6	13.1	12.7
Base Number (BN)	mg KOH/g	9.0	8.6	9.2	9.1
Oxidation (PA)	%	57	61	62	60



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.2	0.3	0.3	0.2
Nitration (PA)	%	57	61	58	59
Sulfation (PA)	%	52	53	55	53
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	2	3	3	3
Sodium	ppm	<1	1	2	1
Potassium	ppm	<1	1	4	0



WEAR METALS

Iron	ppm	1	3	6	3
Copper	ppm	2	2	14	<1
Lead	ppm	1	<1	1	0
Tin	ppm	<1	<1	0	0
Aluminum	ppm	<1	1	2	<1
Chromium	ppm	<1	0	0	0
Molybdenum	ppm	65	66	61	69
Nickel	ppm	0	0	<1	0
Titanium	ppm	<1	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1068	1045	1171	1208
Magnesium	ppm	892	899	1041	941
Zinc	ppm	1168	1196	1216	1274
Phosphorus	ppm	1010	992	1069	1008
Barium	ppm	0	0	1	0
Boron	ppm	6	8	6	12

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: 10859446
Signed: Wes Davis
Report Date: 02 Feb 2024



CONSTRUCTION EQUIPMENT



GRAPHS

