



CONSTRUCTION EQUIPMENT

686740 GERDAU VOLVO L350H 1221 - DIESEL ENGINE



Sample No: VCP445304
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 686740 GERDAU



SAMPLE INFORMATION

Sample Number	VCP445304	VCP452380	VCP431348	VCP407136
Sample Date	07 Mar 2024	10 Jan 2024	20 Sep 2023	07 Jun 2023
Machine Hours	8902	7847	6073	4286
Oil Hours	500	500	1000	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	MARGINAL	NORMAL	NORMAL	NORMAL

ALTA EQUIPMENT COMPANY - METRO WEST
 56195 PONTIAC TRAIL
 NEW HUDSON, MI
 US 48165
 Contact: PAUL CONZ
 paul.conz@altg.com
 T: (313)348-8861
 F: (248)356-2029



OIL CONDITION

Visc @ 100°C	cSt	▲ 12.3	■ 13.3	■ 13.1	■ 13.9
Base Number (BN)	mg KOH/g	■ 9.5	■ 8.9	■ 6.5	■ 9.5
Oxidation (PA)	%	64	64	67	54

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	■ 0.2	■ 0.3	■ 0.5	■ 0.2
Nitration (PA)	%	59	68	71	57
Sulfation (PA)	%	53	55	59	52
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	▲ 3.5	<1.0	<1.0	<1.0
Silicon	ppm	■ 4	■ 5	■ 4	■ 2
Sodium	ppm	■ 2	■ 0	■ 1	■ 0
Potassium	ppm	■ 2	■ 3	■ 5	■ 1



WEAR METALS

Iron	ppm	■ 4	■ 10	■ 15	■ 5
Copper	ppm	■ 1	■ 3	■ 6	■ 2
Lead	ppm	■ <1	■ 0	■ <1	■ 0
Tin	ppm	■ <1	■ 0	■ 1	■ <1
Aluminum	ppm	■ 2	■ 2	■ 3	■ 0
Chromium	ppm	■ <1	■ <1	■ 0	■ 0
Molybdenum	ppm	■ 53	■ 67	■ 59	■ 56
Nickel	ppm	■ <1	■ 0	■ <1	■ <1
Titanium	ppm	<1	0	0	0
Silver	ppm	■ 0	■ 0	■ 0	■ 0
Manganese	ppm	■ <1	■ 0	■ <1	■ <1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	■ 1202	■ 1113	■ 1070	■ 1005
Magnesium	ppm	■ 820	■ 1052	■ 978	■ 884
Zinc	ppm	■ 1169	■ 1314	■ 1234	■ 1151
Phosphorus	ppm	■ 995	■ 929	■ 954	■ 952
Barium	ppm	■ 0	■ 5	■ 0	■ 0
Boron	ppm	■ 9	■ 2	■ 0	■ 0

Depot: VOLVO2990
Unique No: 10937568
Signed: Jonathan Hester
Report Date: 27 Mar 2024



CONSTRUCTION EQUIPMENT



GRAPHS

