



CONSTRUCTION EQUIPMENT

8000393157 VOLVO L30GS 3224376 - DIESEL ENGINE



Sample No: VCP380413
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 8000393157



SAMPLE INFORMATION

Sample Number	VCP380413	VCP394657	VCP332598	VCP334120
Sample Date	08 Feb 2024	15 Sep 2023	26 Jul 2022	21 Jan 2022
Machine Hours	5244	4682	2994	2193
Oil Hours	0	0	780	2193
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	ABNORMAL	NORMAL	NORMAL

STRONGCO EQUIP (AB)
 6 - 38403 BURNT LAKE TRAIL
 RED DEER COUNTY, AB
 CA T4S 2L4
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OIL CONDITION

Visc @ 100°C	cSt	14.8	15.1	15.4	14.9
Oxidation (PA)	%	135	114	139	135

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0.2	0	0
Nitration (PA)	%	117	131	125	121
Sulfation (PA)	%	77	72	76	74
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	▲ 28	▲ 34	6	8
Sodium	ppm	6	6	4	4
Potassium	ppm	2	2	<1	<1

Diagnosis

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Aluminum ppm levels are noted. All other component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil is no longer serviceable due to the presence of contaminants.

WEAR METALS

Iron	ppm	46	50	14	14
Copper	ppm	11	▲ 17	<1	<1
Lead	ppm	<1	<1	0	0
Tin	ppm	<1	1	<1	<1
Aluminum	ppm	▲ 9	▲ 13	2	2
Chromium	ppm	3	4	<1	<1
Molybdenum	ppm	41	43	42	43
Nickel	ppm	<1	<1	<1	<1
Titanium	ppm	0	<1	<1	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	1	<1	<1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	1714	1722	1705	1660
Magnesium	ppm	505	521	515	531
Zinc	ppm	1086	1117	1153	1129
Phosphorus	ppm	910	980	929	958
Barium	ppm	0	0	0	0
Boron	ppm	51	40	49	44

Depot: VOLVO9652
Unique No: 5724398
Signed: Kevin Marson
Report Date: 14 Feb 2024

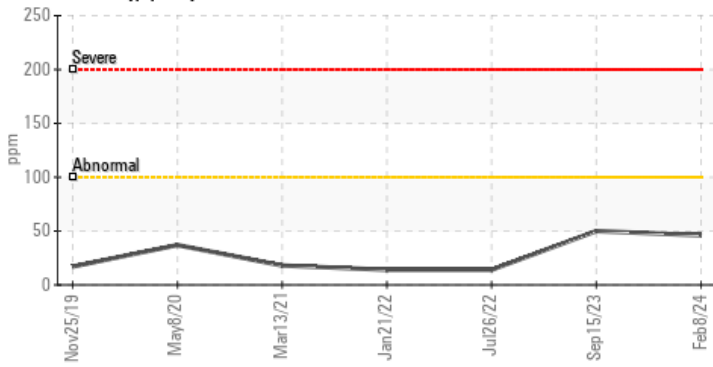


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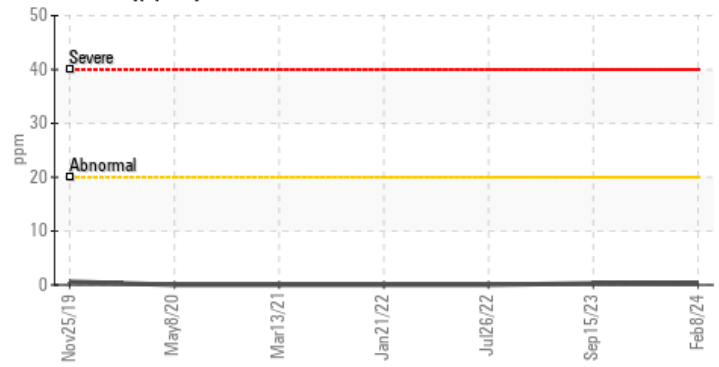


GRAPHS

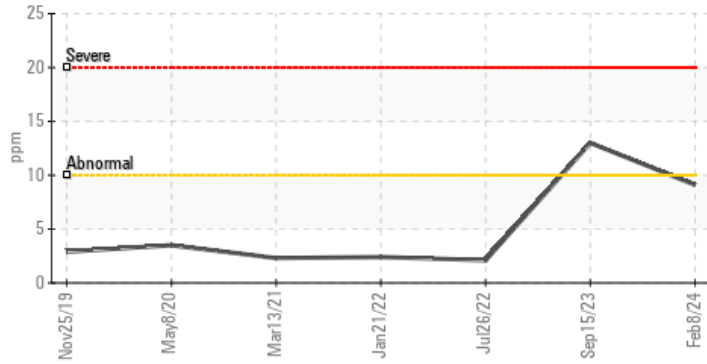
Iron (ppm)



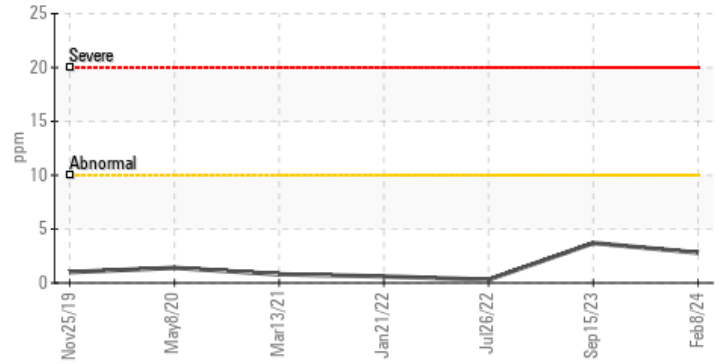
Lead (ppm)



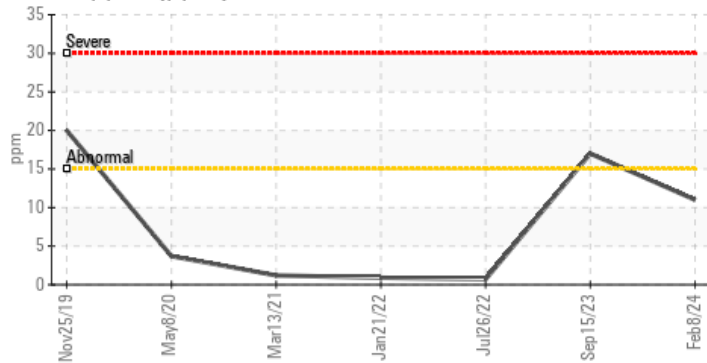
Aluminum (ppm)



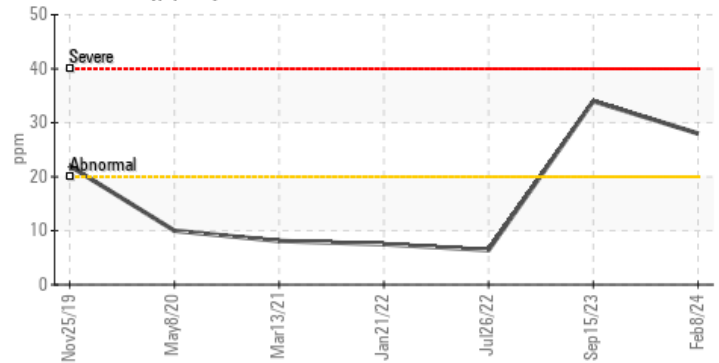
Chromium (ppm)



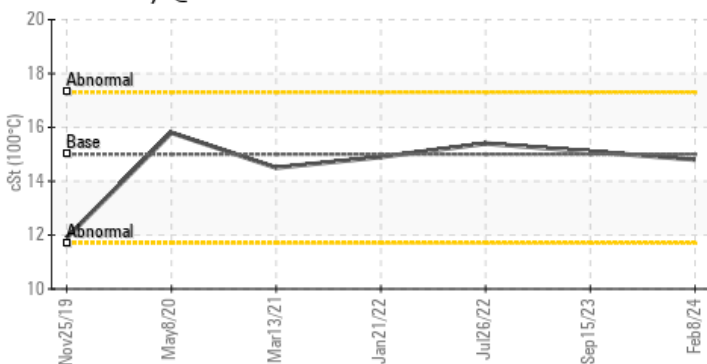
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Soot %

