



CONSTRUCTION EQUIPMENT

2007 VOLVO L90G 3117 - DIESEL ENGINE



Sample No: VCP434257
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 2007



SAMPLE INFORMATION

Sample Number	VCP434257	VCP385012	VCP382942	VCP373549
Sample Date	18 Jun 2024	17 Oct 2023	09 Jun 2023	06 Dec 2022
Machine Hours	13585	13160	12700	12245
Oil Hours	0	0	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

LEONARDS CONTRACTING
 30850 STEPHENSON HWY
 MADISON HEIGHTS, MI
 US 48071
 Contact: LARRY SCHRADER
 larry.schrader@sdevelop.com
 T: (810)499-1953
 F: x:



OIL CONDITION

Visc @ 100°C	cSt	12.8	13.1	13.2	13.2
Base Number (BN)	mg KOH/g	10.7	11.0	10.5	12.3
Oxidation (PA)	%	80	82	86	86

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.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.4	0.4	0.3	0.4
Nitration (PA)	%	56	54	56	63
Sulfation (PA)	%	61	62	63	66
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	13	15	19	14
Sodium	ppm	2	3	3	<1
Potassium	ppm	2	1	2	2



WEAR METALS

Iron	ppm	11	11	19	20
Copper	ppm	<1	0	<1	2
Lead	ppm	0	1	0	<1
Tin	ppm	<1	1	<1	1
Aluminum	ppm	6	4	8	5
Chromium	ppm	<1	1	2	<1
Molybdenum	ppm	40	41	42	45
Nickel	ppm	0	<1	<1	0
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	<1	0



ADDITIVES

Calcium	ppm	1707	1715	1771	1737
Magnesium	ppm	508	549	531	486
Zinc	ppm	1174	1216	1214	1100
Phosphorus	ppm	918	978	987	932
Barium	ppm	0	0	0	0
Boron	ppm	51	45	59	41

Depot: LEOMAD
Unique No: 11098976
Signed: Wes Davis
Report Date: 27 Jun 2024

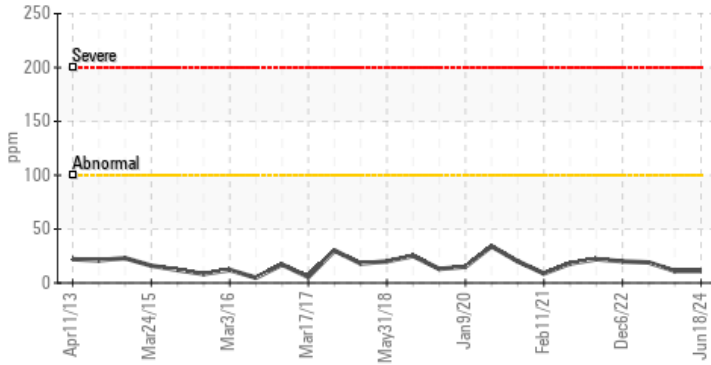


CONSTRUCTION EQUIPMENT

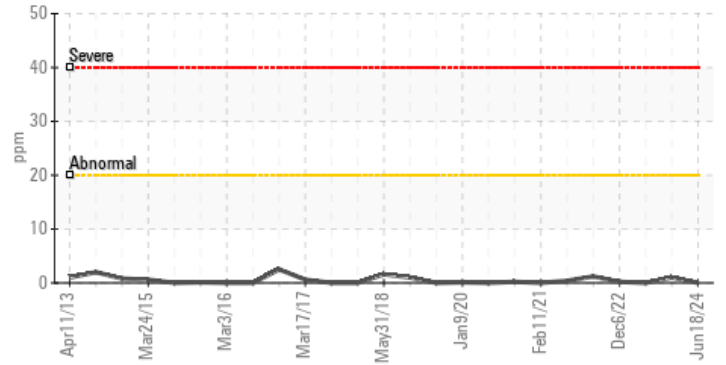


GRAPHS

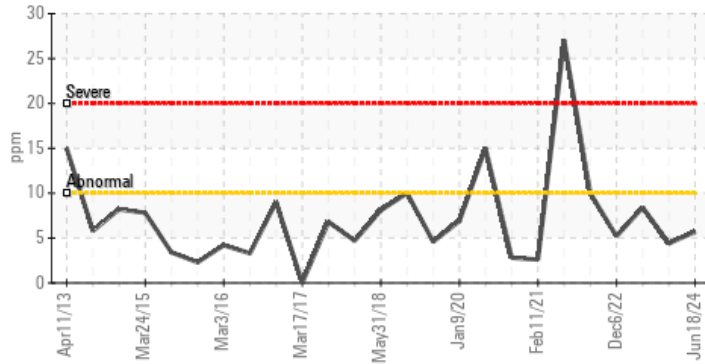
Iron (ppm)



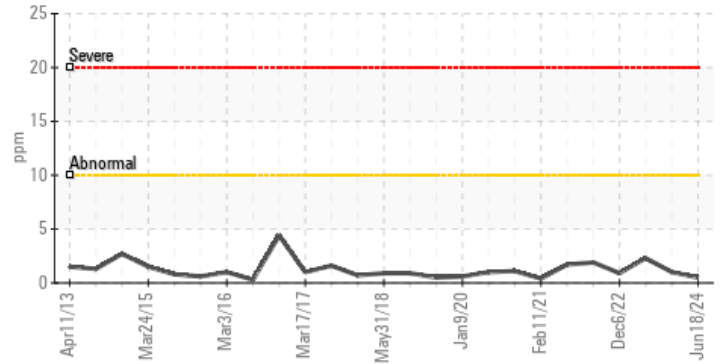
Lead (ppm)



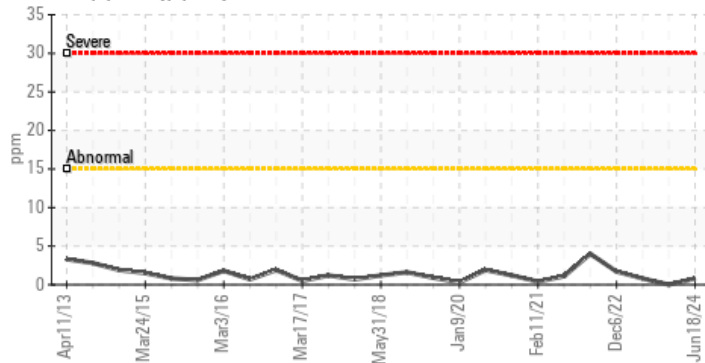
Aluminum (ppm)



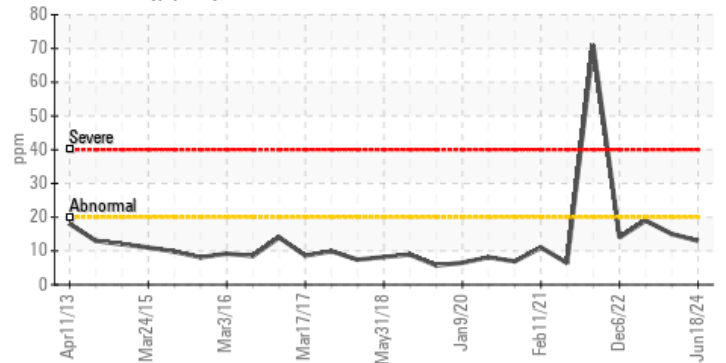
Chromium (ppm)



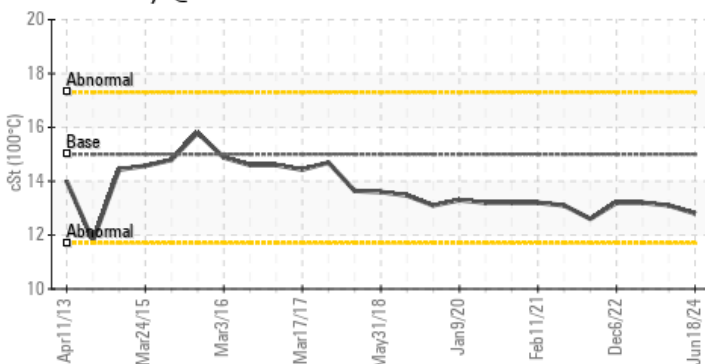
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

