CONSTRUCTION EQUIPMENT

E15091 SHANE KINSBUR VOLVO L120G 30219 - DIESEL ENGINE

Sample No: VCP388149
Oil Type: NOT GIVEN
Job No: E15091 SHANE KINSBUR

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SAMPLE INFORMATION

Sample Number		**VCP388149**	VCP149320	VCE122024	VCE122347
Sample Date		**26 Oct 2023**	23 Sep 2015	10 Apr 2015	10 Feb 2015
Machine Hours		**14614**	12150	11692	11278
Oil Hours		**0**	0	400	400
Oil Changed		**Not Changd**	N/A	Changed	Changed
Sample Status		**SEVERE**	NORMAL	ATTENTION	ABNORMAL

OIL CONDITION

Visc @ 100°C	cSt	**14.4**	14.74	14.88	15.26
Base Number (BN)	mg KOH/g	**13.0**	---	---	---
Oxidation (PA)	%	**69**	40	56	56

CONTAMINATION

Soot %	%	**0.7**	0.3	0.4	0.4
Nitration (PA)	%	**97**	50	67	67
Sulfation (PA)	%	**75**	44	58	61
Glycol	%	**0.20**	NEG	NEG	NEG
Fuel	%	**<1.0**	<1.0	<1.0	<1.0
Silicon	ppm	**47**	6	4	9
Sodium	ppm	**1501**	64	75	101
Potassium	ppm	**2117**	9	4	0

WEAR METALS

Iron	ppm	**82**	29	36	71
Copper	ppm	**36**	1	2	3
Lead	ppm	**7**	<1	<1	2
Tin	ppm	**4**	0	1	2
Aluminum	ppm	**56**	13	11	24
Chromium	ppm	**3**	2	2	6
Molybdenum	ppm	**69**	55	56	60
Nickel	ppm	**3**	1	<1	2
Titanium	ppm	**<1**	<1	0	<1
Silver	ppm	**0**	0	0	<1
Manganese	ppm	**2**	<1	<1	<1
Vanadium	ppm	**<1**	0	0	<1

ADDITIVES

Calcium	ppm	**1942**	1678	1679	1292
Magnesium	ppm	**337**	706	810	1224
Zinc	ppm	**1342**	1284	1350	1510
Phosphorus	ppm	**2220**	1036	1189	1235
Barium	ppm	**1**	0	0	0
Boron	ppm	**143**	43	48	27

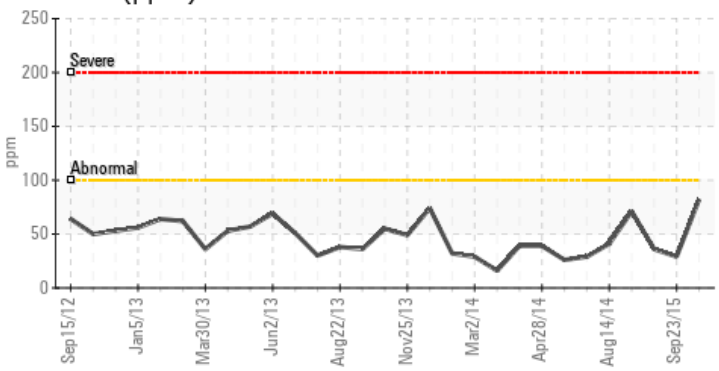
Diagnosis

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We advise that you check for the source of the coolant leak. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.Bearing and/or bushing wear is indicated. Sodium and/or potassium levels are high. Test for glycol is positive. There is a high concentration of glycol present in the oil. Elemental level of silicon (Si) above normal. The oil is no longer serviceable due to the presence of contaminants.

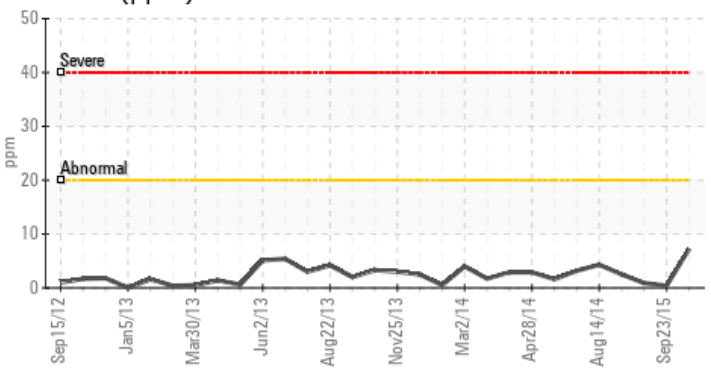
Depot: VOLVO0010
Unique No: 10723724
Signed: Don Baldridge
Report Date: 03 Nov 2023

GRAPHS

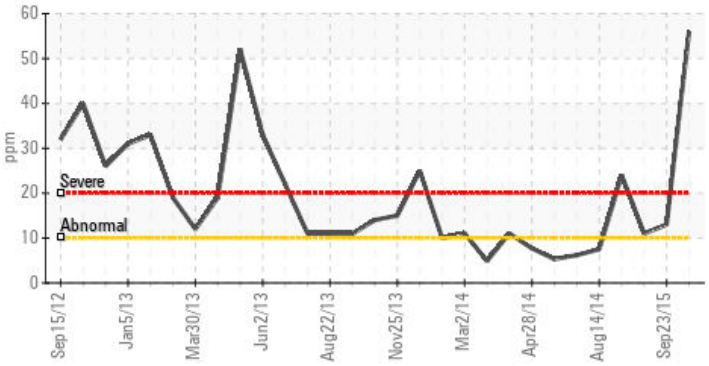
Iron (ppm)



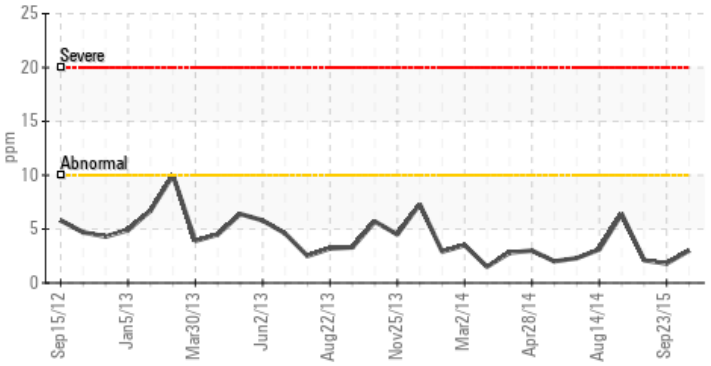
Lead (ppm)



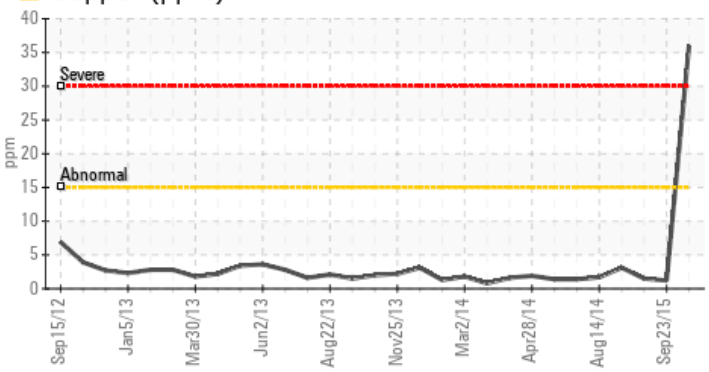
▲ Aluminum (ppm)



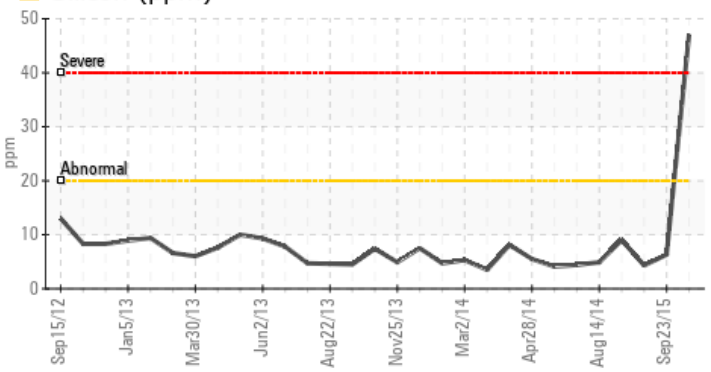
Chromium (ppm)



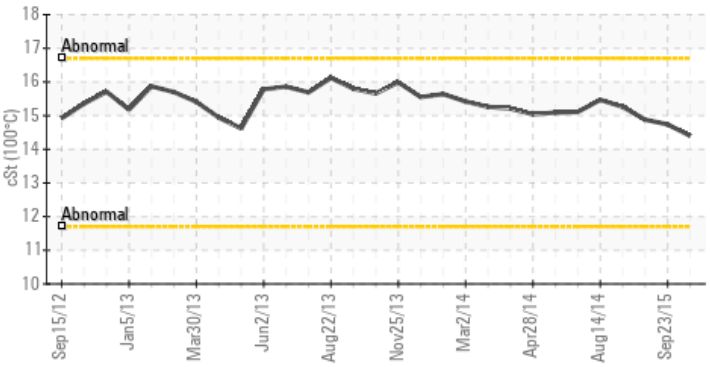
▲ Copper (ppm)



▲ Silicon (ppm)



Viscosity @ 100°C



Base Number