



# CONSTRUCTION EQUIPMENT

## VOLVO L110H 05632247 - DIESEL ENGINE



**Sample No:** VCP436454  
**Oil Type:** VALVOLINE 15W40  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP436454</b>	VCP436562	VCP430925	VCP438661
Sample Date	<b>09 Apr 2024</b>	12 Mar 2024	12 Feb 2024	22 Jan 2024
Machine Hours	<b>6919</b>	6669	0	6230
Oil Hours	<b>250</b>	258	0	286
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**CITY CARTING**  
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 MILFORD, CT  
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 F:



### OIL CONDITION

Visc @ 100°C	cSt	<b>12.6</b>	12.4	12.0	12.4
Base Number (BN)	mg KOH/g	<b>6.9</b>	7.0	6.8	7.1
Oxidation (PA)	%	<b>36</b>	37	42	34

### 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 acceptable for the time in service.



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.1</b>	0.1	0.1	0.1
Nitration (PA)	%	<b>48</b>	51	48	43
Sulfation (PA)	%	<b>43</b>	43	45	42
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	4	5	3
Sodium	ppm	<b>&lt;1</b>	<1	<1	<1
Potassium	ppm	<b>&lt;1</b>	<1	<1	3



### WEAR METALS

Iron	ppm	<b>4</b>	3	1	<1
Copper	ppm	<b>&lt;1</b>	<1	0	0
Lead	ppm	<b>0</b>	0	0	1
Tin	ppm	<b>1</b>	0	0	<1
Aluminum	ppm	<b>2</b>	2	3	2
Chromium	ppm	<b>0</b>	<1	0	0
Molybdenum	ppm	<b>22</b>	25	55	27
Nickel	ppm	<b>0</b>	0	0	<1
Titanium	ppm	<b>0</b>	0	<1	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>0</b>	<1	0	<1
Vanadium	ppm	<b>0</b>	0	<1	<1



### ADDITIVES

Calcium	ppm	<b>2069</b>	1997	2033	1885
Magnesium	ppm	<b>150</b>	179	137	138
Zinc	ppm	<b>944</b>	976	1055	990
Phosphorus	ppm	<b>792</b>	840	878	852
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>31</b>	26	48	32

**Depot:** CITMILCON  
**Unique No:** 10980219  
**Signed:** Don Baldrige  
**Report Date:** 18 Apr 2024

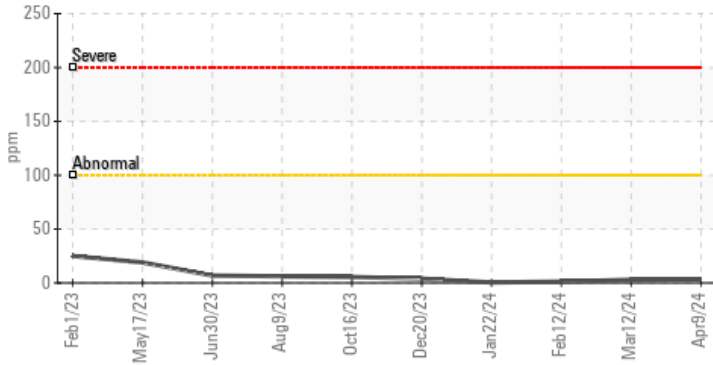


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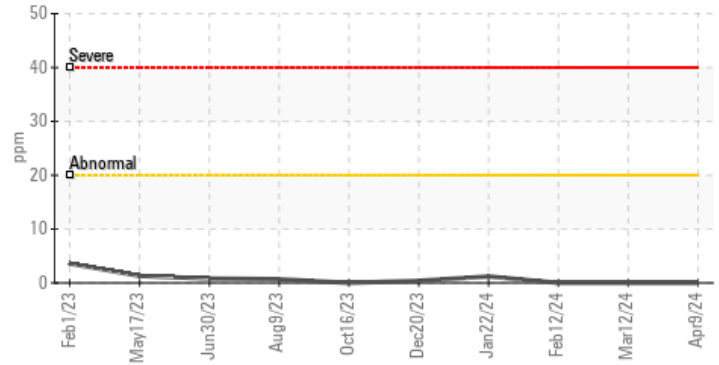


## GRAPHS

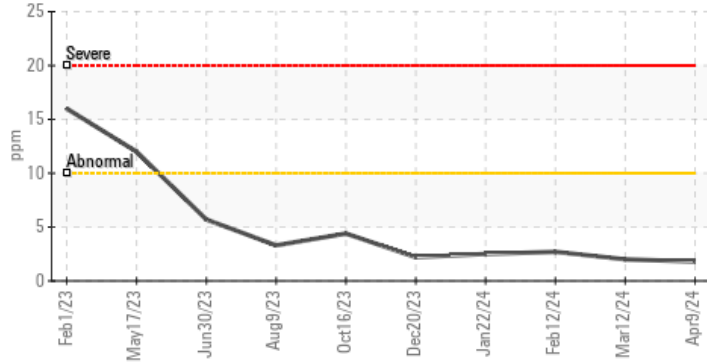
### Iron (ppm)



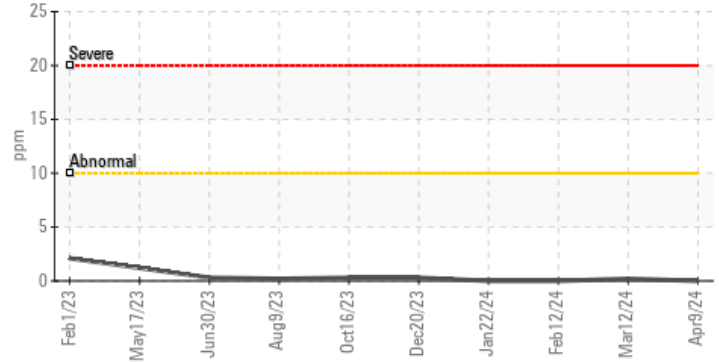
### Lead (ppm)



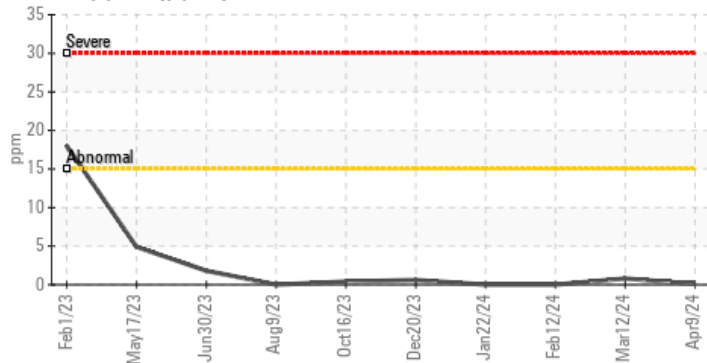
### Aluminum (ppm)



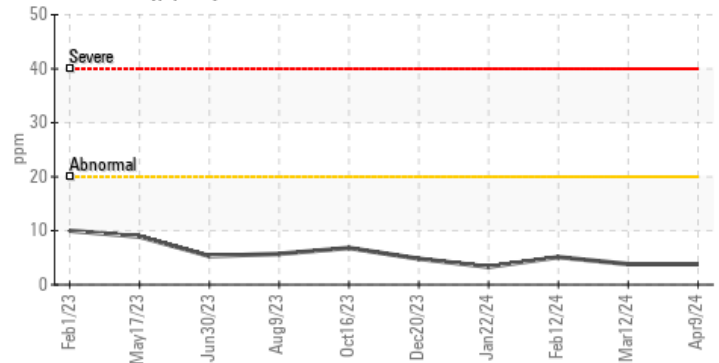
### Chromium (ppm)



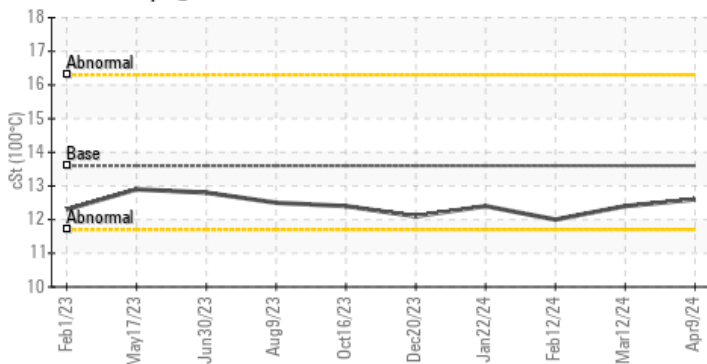
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 100°C



### Base Number

