



# CONSTRUCTION EQUIPMENT

## 8 VOLVO L90H 23321 - DIESEL ENGINE



**Sample No:** VCP452139  
**Oil Type:** MOBIL DELVAC 1300 SUPER15W40  
**Job No:** 8



### SAMPLE INFORMATION

Sample Number	<b>VCP452139</b>	VCP325024	VCP358479	VCP344005
Sample Date	<b>31 Jan 2024</b>	02 Feb 2023	07 Sep 2022	11 May 2022
Machine Hours	<b>24791</b>	24345	23930	23491
Oil Hours	<b>500</b>	400	450	600
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**PLEASANT RIVER LUMBER**  
 PO BOX 68  
 DOVER FOXCROFT, ME  
 US 04426  
 Contact: BURLEY HIGGINS  
 burley@pleasantriverlumber.com  
 T:  
 F: (207)564-8259



### OIL CONDITION

Visc @ 100°C	cSt	<b>12.6</b>	13.2	13.2	13.3
Base Number (BN)	mg KOH/g	<b>8.9</b>	9.3	9.9	8.6
Oxidation (PA)	%	<b>62</b>	62	70	72

### 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	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.1</b>	0.3	0.3	0.5
Nitration (PA)	%	<b>66</b>	72	83	90
Sulfation (PA)	%	<b>52</b>	54	59	58
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>3</b>	3	3	4
Sodium	ppm	<b>2</b>	2	6	33
Potassium	ppm	<b>0</b>	0	1	1



### WEAR METALS

Iron	ppm	<b>3</b>	6	6	13
Copper	ppm	<b>&lt;1</b>	<1	1	2
Lead	ppm	<b>0</b>	0	<1	0
Tin	ppm	<b>0</b>	0	<1	<1
Aluminum	ppm	<b>2</b>	2	3	5
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>58</b>	63	65	69
Nickel	ppm	<b>0</b>	0	0	0
Titanium	ppm	<b>0</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	<1
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>1141</b>	1120	1096	1223
Magnesium	ppm	<b>882</b>	975	944	1066
Zinc	ppm	<b>1202</b>	1286	1283	1385
Phosphorus	ppm	<b>1028</b>	1047	1048	1163
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>13</b>	2	4	<1

**Depot:** PLEDOV  
**Unique No:** 10873256  
**Signed:** Wes Davis  
**Report Date:** 13 Feb 2024

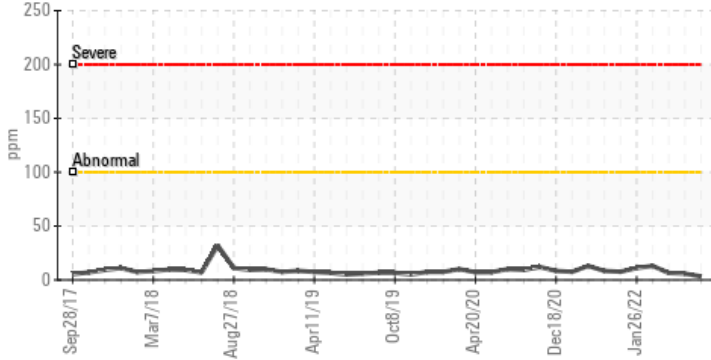


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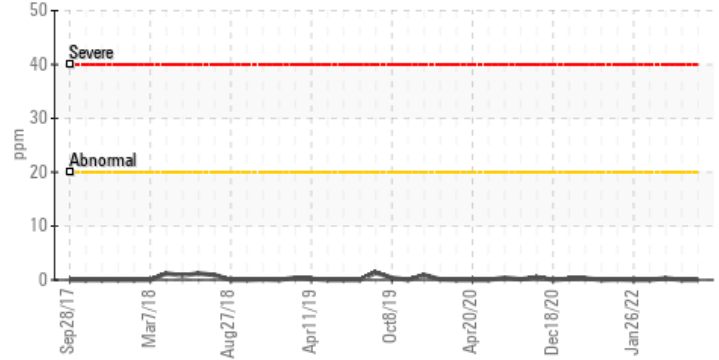


## GRAPHS

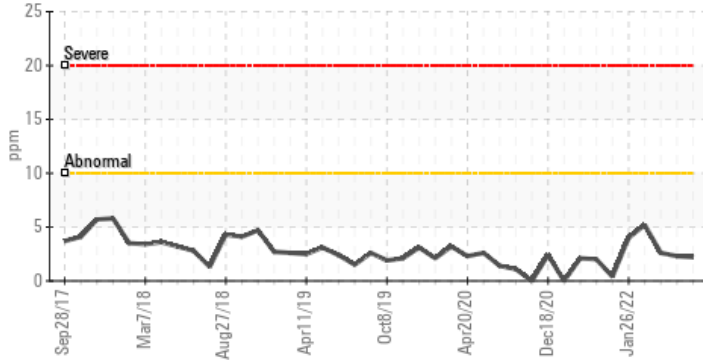
### Iron (ppm)



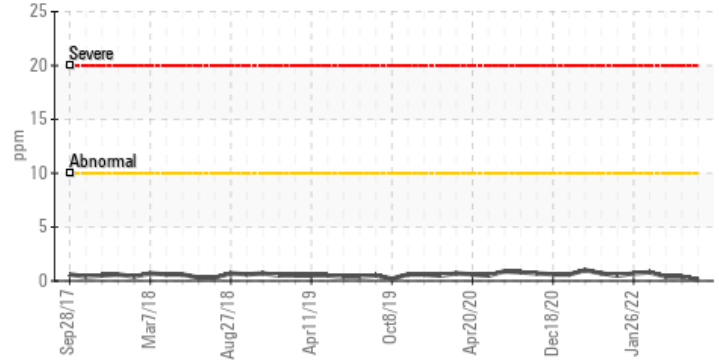
### Lead (ppm)



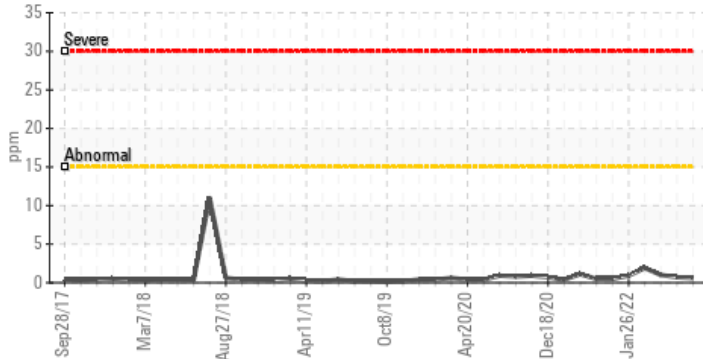
### Aluminum (ppm)



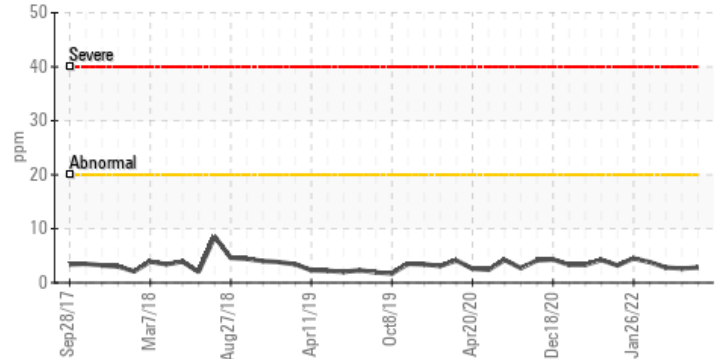
### Chromium (ppm)



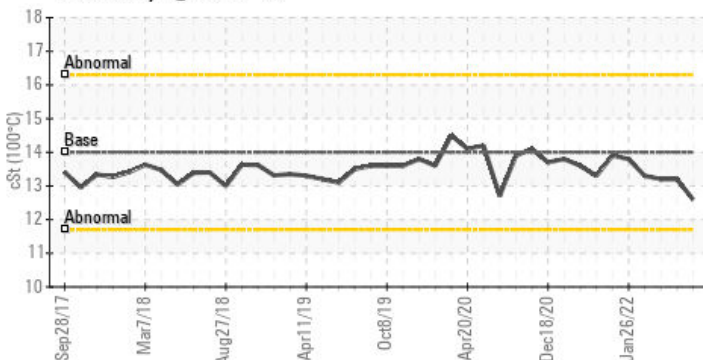
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 100°C



### Base Number

