



# CONSTRUCTION EQUIPMENT

A11402 JMC VOLVO ECR235E 311598 - DIESEL ENGINE



**Sample No:** VCP430943  
**Oil Type:** MOBIL 15W40  
**Job No:** A11402 JMC



## SAMPLE INFORMATION

Sample Number	<b>VCP430943</b>	VCP288124	---	---
Sample Date	<b>31 Oct 2023</b>	19 Nov 2020	---	---
Machine Hours	<b>1145</b>	490	---	---
Oil Hours	<b>500</b>	490	---	---
Oil Changed	<b>Changed</b>	Changed	---	---
Sample Status	<b>ABNORMAL</b>	NORMAL	---	---

**HOFFMAN EQUIPMENT - LIONVILLE**  
120 GORDON DRIVE  
LIONVILLE, PA  
US 19341  
Contact: JIM FEHR  
jim.fehr@hoffmanequip.com  
T: (610)363-9200  
F: (610)594-0829



## OIL CONDITION

Visc @ 100°C	cSt	█ <b>12.5</b>	█ 12.8	---	---
Base Number (BN)	mg KOH/g	█ <b>9.2</b>	---	---	---
Oxidation (PA)	%	<b>82</b>	74	---	---

## Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. We recommend an early resample to monitor this condition. Piston, ring and cylinder wear is indicated. 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

Soot %	%	█ <b>0.2</b>	█ 0.1	---	---
Nitration (PA)	%	<b>77</b>	49	---	---
Sulfation (PA)	%	<b>60</b>	60	---	---
Glycol	%	<b>NEG</b>	NEG	---	---
Fuel	%	<b>&lt;1.0</b>	<1.0	---	---
Silicon	ppm	█ <b>15</b>	█ 7	---	---
Sodium	ppm	█ <b>2</b>	█ 3	---	---
Potassium	ppm	█ <b>2</b>	█ 1	---	---



## WEAR METALS

Iron	ppm	▲ <b>121</b>	█ 21	---	---
Copper	ppm	█ <b>6</b>	█ 2	---	---
Lead	ppm	█ <b>0</b>	█ <1	---	---
Tin	ppm	█ <b>1</b>	█ <1	---	---
Aluminum	ppm	▲ <b>17</b>	█ 0	---	---
Chromium	ppm	█ <b>2</b>	█ <1	---	---
Molybdenum	ppm	█ <b>50</b>	█ 41	---	---
Nickel	ppm	█ <b>2</b>	█ 2	---	---
Titanium	ppm	<b>&lt;1</b>	<1	---	---
Silver	ppm	█ <b>0</b>	0	---	---
Manganese	ppm	█ <b>1</b>	█ 1	---	---
Vanadium	ppm	<b>&lt;1</b>	0	---	---



## ADDITIVES

Calcium	ppm	█ <b>1703</b>	█ 1627	---	---
Magnesium	ppm	█ <b>514</b>	█ 411	---	---
Zinc	ppm	█ <b>1161</b>	█ 1011	---	---
Phosphorus	ppm	█ <b>955</b>	█ 875	---	---
Barium	ppm	█ <b>7</b>	█ 0	---	---
Boron	ppm	█ <b>27</b>	█ 54	---	---

**Depot:** VOLVO8879  
**Unique No:** 10737794  
**Signed:** Don Baldrige  
**Report Date:** 14 Nov 2023

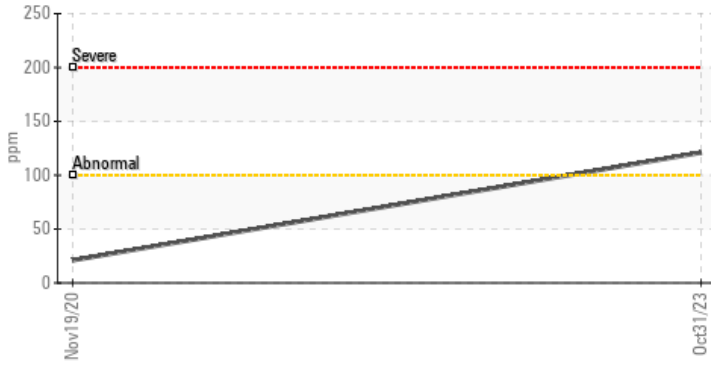


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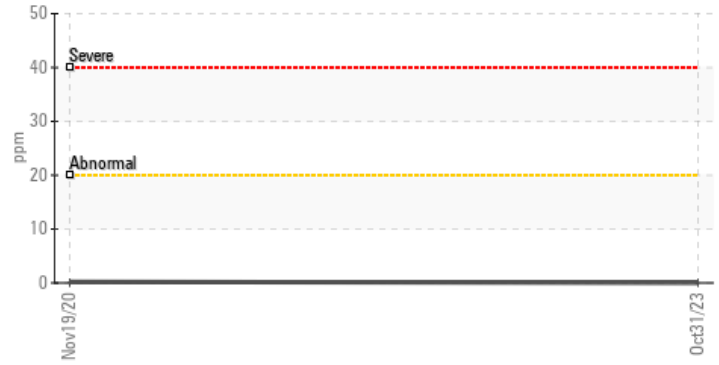


## GRAPHS

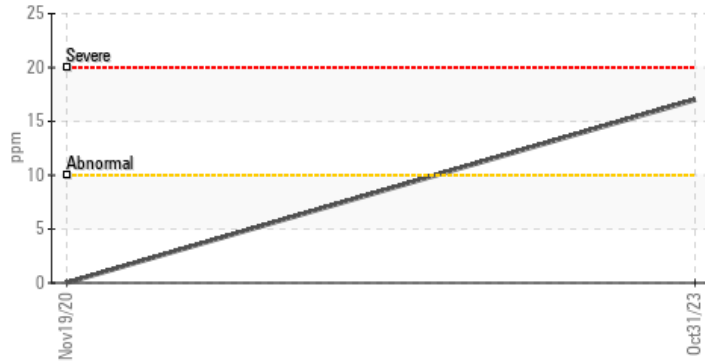
### ▲ Iron (ppm)



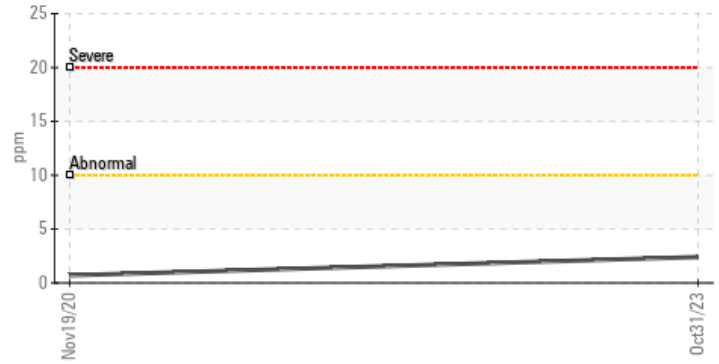
### Lead (ppm)



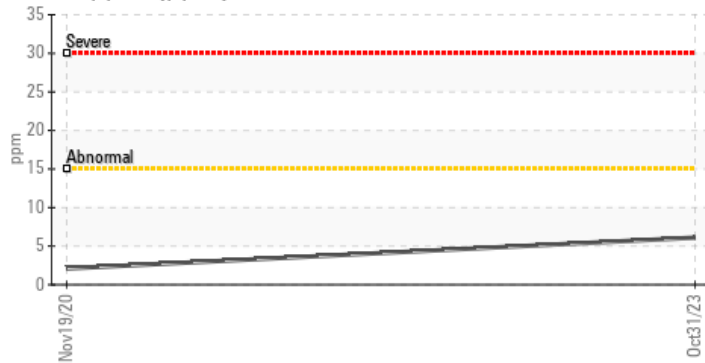
### ▲ Aluminum (ppm)



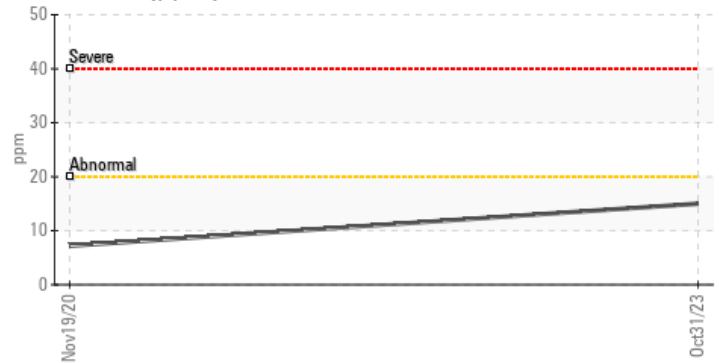
### Chromium (ppm)



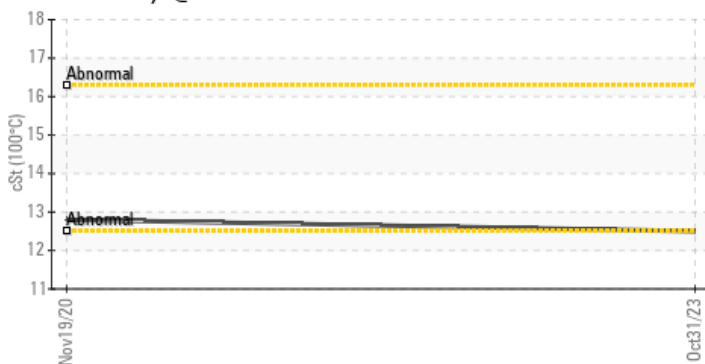
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 100°C



### Base Number

