



# CONSTRUCTION EQUIPMENT

## HASLAM ELTEC ET 108 - DIESEL ENGINE



**Sample No:** VCP406219  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** HASLAM



### SAMPLE INFORMATION

Sample Number	<b>VCP406219</b>	VCP403732	VCP424093	VCP315284
Sample Date	<b>11 Oct 2023</b>	26 Sep 2023	16 Aug 2023	28 Jul 2023
Machine Hours	<b>3500</b>	3692	0	3249
Oil Hours	<b>0</b>	40	150	70
Oil Changed	<b>Not Chngd</b>	Not Chngd	Changed	Not Chngd
Sample Status	<b>SEVERE</b>	ATTENTION	SEVERE	SEVERE

**CHADWICK-BAROSS INC**  
 188 PERRY ROAD  
 BANGOR, ME  
 US 04401  
 Contact: MIKE MORIN  
 mmorin@chadwick-baross.com  
 T: (207)735-0856  
 F: (207)941-0856

### OIL CONDITION

Visc @ 100°C	cSt	<b>▲ 10.7</b>	▲ 12.0	● 9.9	● 10.4
Base Number (BN)	mg KOH/g	<b>■ 10.2</b>	■ 10.8	■ 9.9	■ 10.2
Oxidation (PA)	%	<b>80</b>	79	81	77

### CONTAMINATION

Soot %	%	<b>■ 0.5</b>	■ 0.2	■ 0.6	■ 0.3
Nitration (PA)	%	<b>63</b>	47	71	58
Sulfation (PA)	%	<b>62</b>	61	63	60
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>● 9.8</b>	▲ 3.4	● 14.5	● 10.4
Silicon	ppm	<b>■ 5</b>	■ 4	■ 3	■ 3
Sodium	ppm	<b>■ 0</b>	■ <1	■ 0	■ 1
Potassium	ppm	<b>■ 2</b>	■ 1	■ 1	■ <1

### WEAR METALS

Iron	ppm	<b>■ 6</b>	■ 3	■ 8	■ 4
Copper	ppm	<b>■ &lt;1</b>	■ <1	■ 2	■ <1
Lead	ppm	<b>■ &lt;1</b>	■ 0	■ <1	■ 0
Tin	ppm	<b>■ &lt;1</b>	■ <1	■ <1	■ 0
Aluminum	ppm	<b>■ 0</b>	■ 2	■ 1	■ 2
Chromium	ppm	<b>■ &lt;1</b>	■ 0	■ <1	■ <1
Molybdenum	ppm	<b>■ 37</b>	■ 40	■ 35	■ 37
Nickel	ppm	<b>■ &lt;1</b>	■ 0	■ 0	■ 0
Titanium	ppm	<b>0</b>	0	0	0
Silver	ppm	<b>■ 0</b>	■ 0	■ <1	■ 0
Manganese	ppm	<b>■ &lt;1</b>	■ <1	■ <1	■ <1
Vanadium	ppm	<b>0</b>	0	0	0

### ADDITIVES

Calcium	ppm	<b>■ 1401</b>	■ 1559	■ 1394	■ 1551
Magnesium	ppm	<b>■ 420</b>	■ 445	■ 400	■ 478
Zinc	ppm	<b>■ 979</b>	■ 1058	■ 939	■ 1073
Phosphorus	ppm	<b>■ 811</b>	■ 894	■ 783	■ 889
Barium	ppm	<b>■ 1</b>	■ 0	■ 2	■ 0
Boron	ppm	<b>■ 38</b>	■ 60	■ 36	■ 48

### Diagnosis

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

**Depot:** VOLVO0007  
**Unique No:** 10688775  
**Signed:** Wes Davis  
**Report Date:** 16 Oct 2023

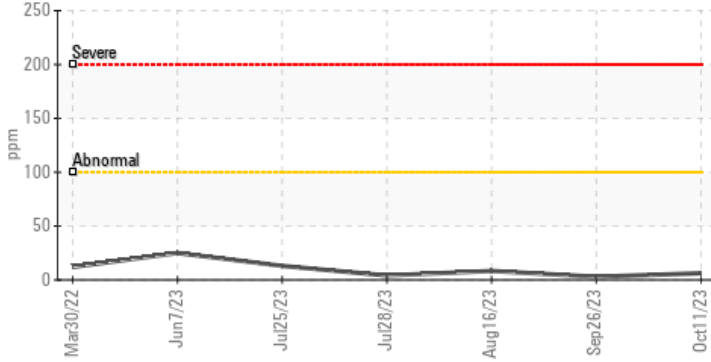


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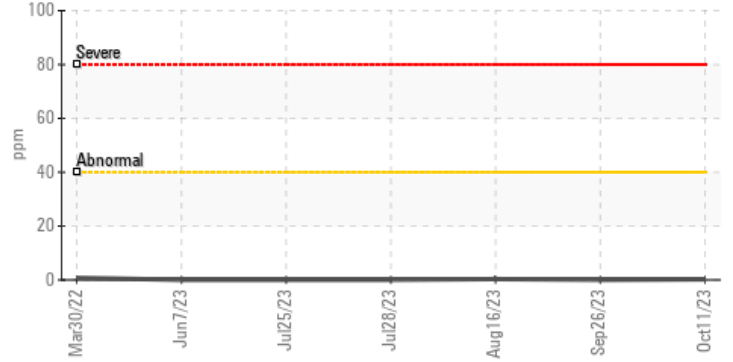


## GRAPHS

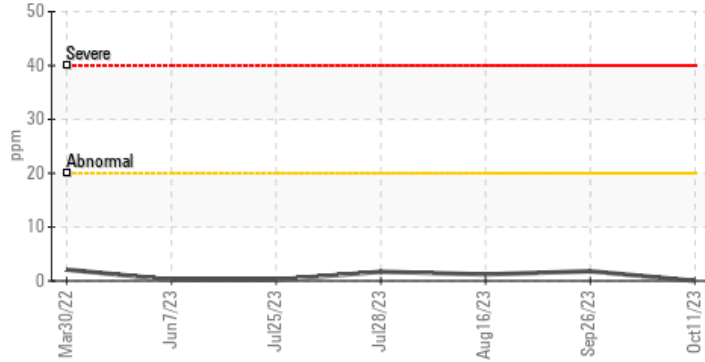
### Iron (ppm)



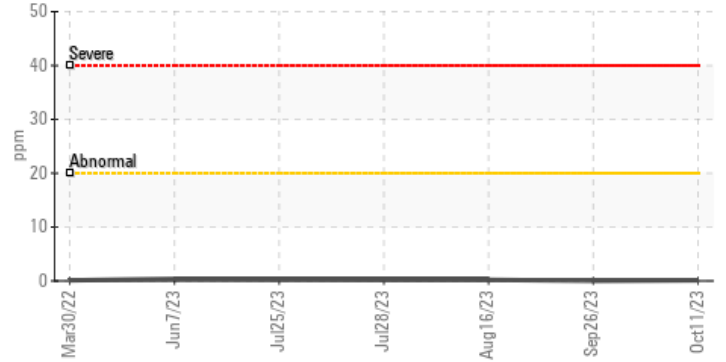
### Lead (ppm)



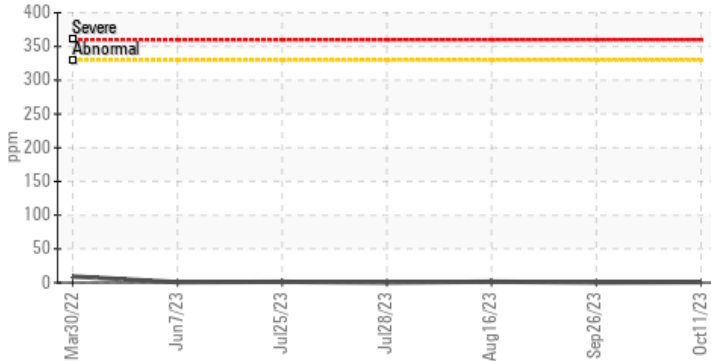
### Aluminum (ppm)



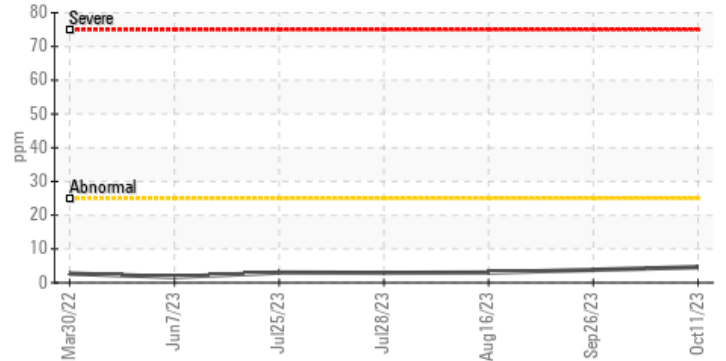
### Chromium (ppm)



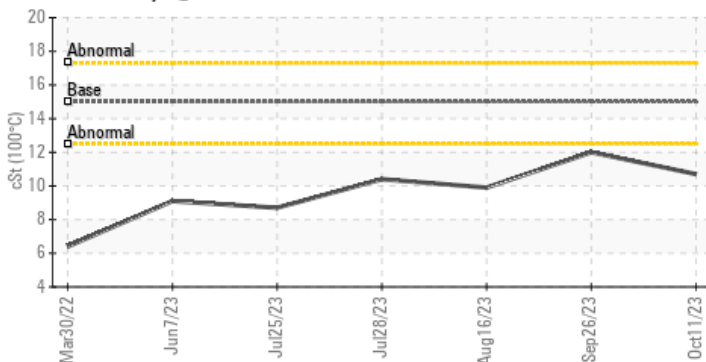
### Copper (ppm)



### Silicon (ppm)



### ▲ Viscosity @ 100°C



### Base Number

