



# CONSTRUCTION EQUIPMENT

## 4716-1 VOLVO A35F 10361 - DIESEL ENGINE



**Sample No:** VCP403172  
**Oil Type:** MOBIL 15W40  
**Job No:** 4716-1



### SAMPLE INFORMATION

Sample Number	<b>VCP403172</b>	VCP319821	VCP341789	VCP347292
Sample Date	<b>17 Dec 2022</b>	12 Aug 2022	31 May 2022	23 Feb 2022
Machine Hours	<b>5049</b>	4652	4568	4583
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Not Changd	Not Changd	Not Changd
Sample Status	<b>ATTENTION</b>	SEVERE	SEVERE	SEVERE

**MCCLUNG-LOGAN EQUIPMENT CO - SALEM**  
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### OIL CONDITION

Visc @ 100°C	cSt	<b>▲ 11.4</b>	▲ 5.2	▲ 10.2	▲ 10.9
Base Number (BN)	mg KOH/g	<b>■ 10.8</b>	■ 6.8	■ 11.1	■ 11.8
Oxidation (PA)	%	<b>57</b>	42	71	75



### CONTAMINATION

Soot %	%	<b>■ 0.1</b>	■ 0.1	■ 0.1	■ 0.1
Nitration (PA)	%	<b>59</b>	60	43	53
Sulfation (PA)	%	<b>53</b>	45	58	61
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>■ 0.4</b>	● 37.6	● 12.4	● 8.3
Silicon	ppm	<b>■ 4</b>	■ 12	■ 8	■ 10
Sodium	ppm	<b>■ 0</b>	■ <1	■ 2	■ 2
Potassium	ppm	<b>■ 2</b>	■ <1	■ 2	■ 0



### WEAR METALS

Iron	ppm	<b>■ 4</b>	■ 3	■ 6	■ 16
Copper	ppm	<b>■ 4</b>	■ 1	■ 1	■ 3
Lead	ppm	<b>■ 0</b>	■ 0	■ 1	■ <1
Tin	ppm	<b>■ &lt;1</b>	■ 0	■ <1	■ 0
Aluminum	ppm	<b>■ &lt;1</b>	■ 3	■ 1	■ 3
Chromium	ppm	<b>■ 0</b>	■ 0	■ <1	■ <1
Molybdenum	ppm	<b>■ 61</b>	■ 41	■ 34	■ 37
Nickel	ppm	<b>■ 0</b>	■ 0	■ <1	■ 0
Titanium	ppm	<b>0</b>	0	<1	<1
Silver	ppm	<b>■ 1</b>	0	1	0
Manganese	ppm	<b>■ &lt;1</b>	■ 0	■ <1	■ <1
Vanadium	ppm	<b>0</b>	0	<1	0



### ADDITIVES

Calcium	ppm	<b>■ 1302</b>	■ 1060	■ 1612	■ 1534
Magnesium	ppm	<b>■ 779</b>	■ 80	■ 478	■ 545
Zinc	ppm	<b>■ 1216</b>	■ 632	■ 1040	■ 1012
Phosphorus	ppm	<b>■ 1033</b>	▲ 532	■ 829	■ 892
Barium	ppm	<b>■ 0</b>	■ 0	■ 0	■ 0
Boron	ppm	<b>■ 110</b>	■ 41	■ 72	■ 64

### Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

**Depot:** VOLVO9010  
**Unique No:** 10268553  
**Signed:** Jonathan Hester  
**Report Date:** 27 Dec 2022

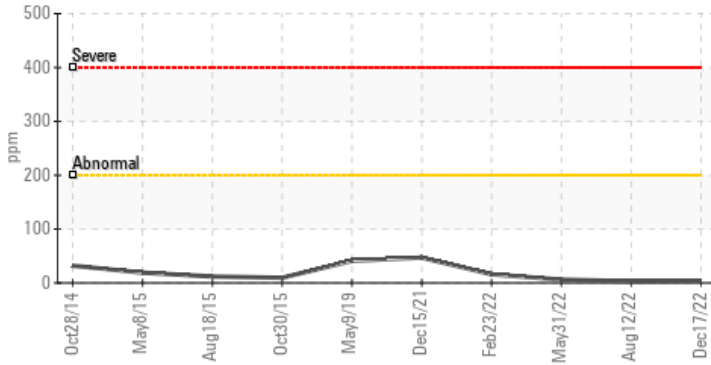


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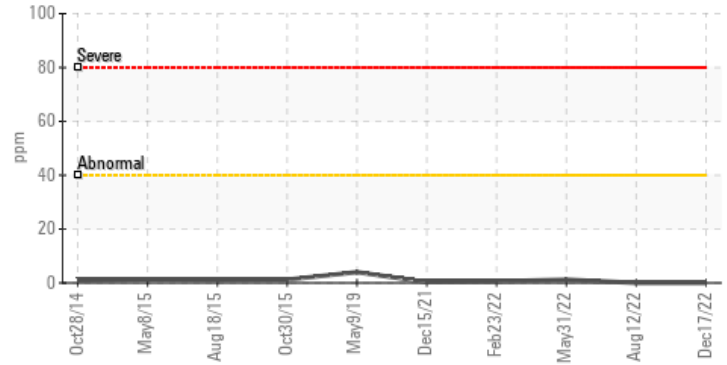


## GRAPHS

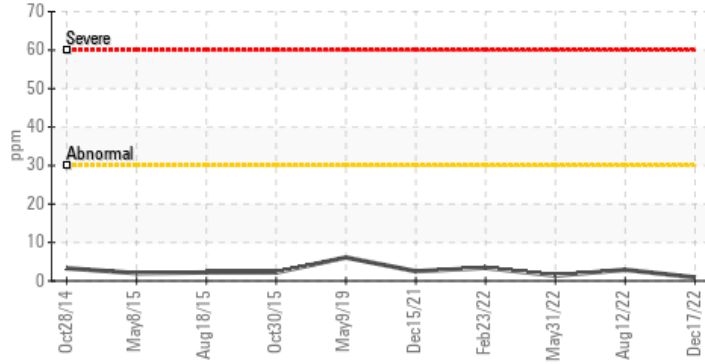
### Iron (ppm)



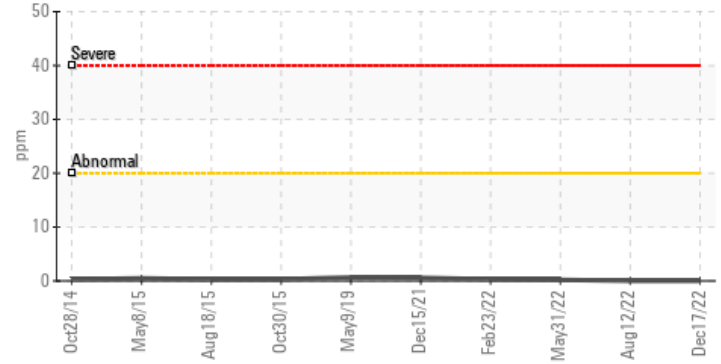
### Lead (ppm)



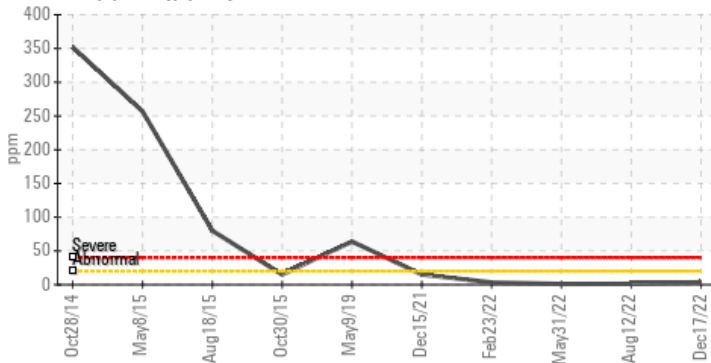
### Aluminum (ppm)



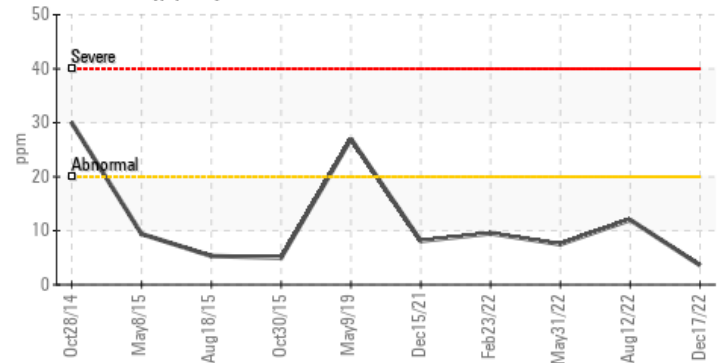
### Chromium (ppm)



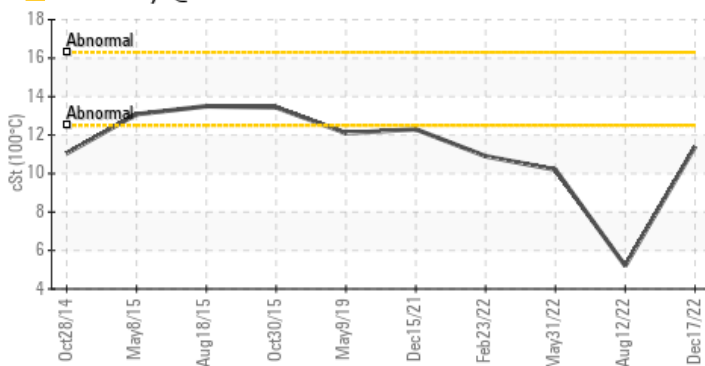
### Copper (ppm)



### Silicon (ppm)



### ▲ Viscosity @ 100°C



### Base Number

