



# CONSTRUCTION EQUIPMENT

## SW1025005 IAA 2 VOLVO L90H 623449 - DIESEL ENGINE



**Sample No:** VCP422705  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SW1025005 IAA 2



### SAMPLE INFORMATION

Sample Number	<b>VCP422705</b>	VCP406911	VCP355160	VCP336618
Sample Date	<b>10 Oct 2023</b>	24 May 2023	09 Sep 2022	13 Apr 2022
Machine Hours	<b>13824</b>	13353	12345	12334
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>13.8</b>	15.1	14.7	13.8
Base Number (BN)	mg KOH/g	<b>10.1</b>	9.4	10.2	11.3
Oxidation (PA)	%	<b>78</b>	67	67	92



### CONTAMINATION

Soot %	%	<b>0.7</b>	0.9	0.8	0.9
Nitration (PA)	%	<b>68</b>	83	74	79
Sulfation (PA)	%	<b>61</b>	57	58	69
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>6</b>	6	5	8
Sodium	ppm	<b>2</b>	0	2	2
Potassium	ppm	<b>1</b>	2	1	1



### WEAR METALS

Iron	ppm	<b>15</b>	24	12	17
Copper	ppm	<b>&lt;1</b>	1	<1	<1
Lead	ppm	<b>0</b>	<1	0	<1
Tin	ppm	<b>&lt;1</b>	<1	<1	<1
Aluminum	ppm	<b>5</b>	4	3	5
Chromium	ppm	<b>2</b>	1	<1	2
Molybdenum	ppm	<b>52</b>	62	62	40
Nickel	ppm	<b>&lt;1</b>	<1	2	<1
Titanium	ppm	<b>&lt;1</b>	<1	0	<1
Silver	ppm	<b>0</b>	0	<1	<1
Manganese	ppm	<b>0</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	<1	<1



### ADDITIVES

Calcium	ppm	<b>1480</b>	1232	1247	1894
Magnesium	ppm	<b>636</b>	868	880	570
Zinc	ppm	<b>1192</b>	1259	1330	1180
Phosphorus	ppm	<b>1042</b>	1057	1092	1014
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>21</b>	4	6	32

### 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.

**Depot:** VOLVO6174  
**Unique No:** 10699131  
**Signed:** Wes Davis  
**Report Date:** 18 Oct 2023

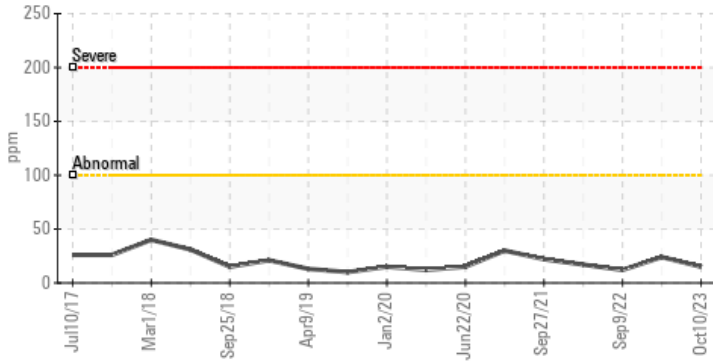


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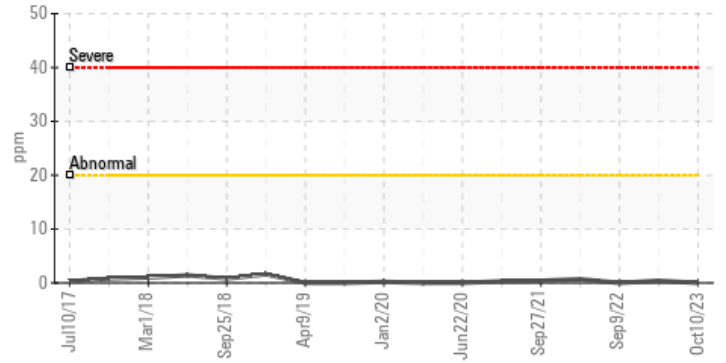


## GRAPHS

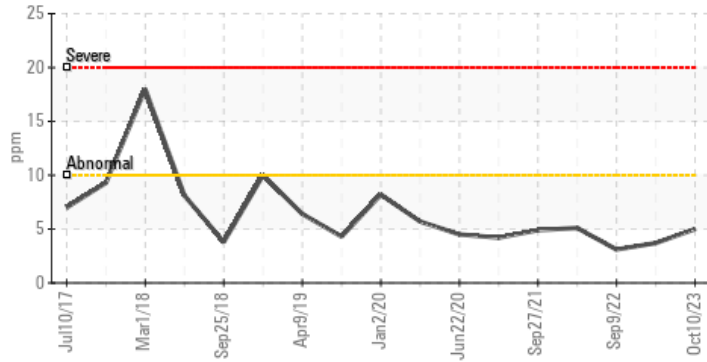
### Iron (ppm)



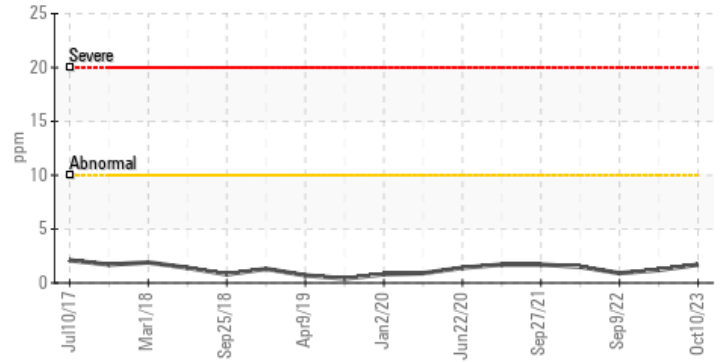
### Lead (ppm)



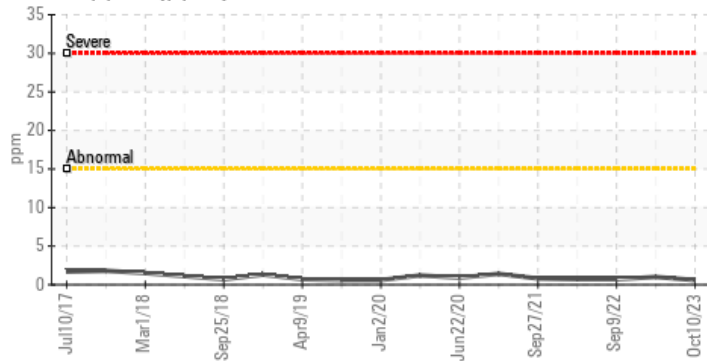
### Aluminum (ppm)



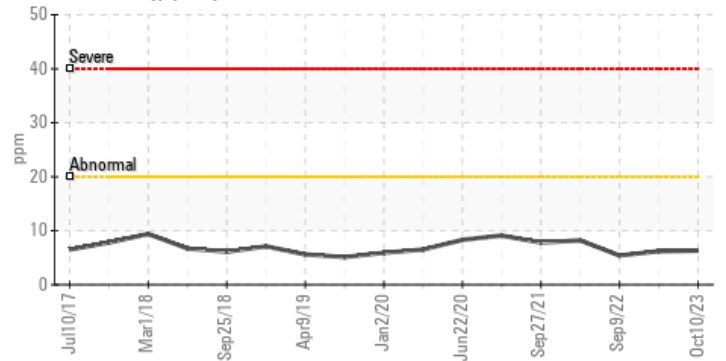
### Chromium (ppm)



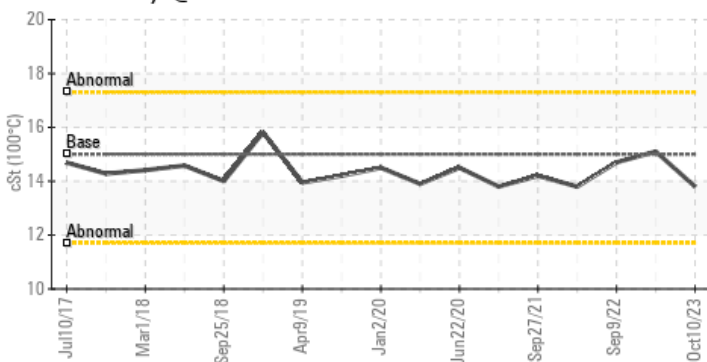
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 100°C



### Base Number

