



# CONSTRUCTION EQUIPMENT

## SW1032182 IAA 6 VOLVO L90H 625150 - DIESEL ENGINE



**Sample No:** VCP442951  
**Oil Type:** DIESEL ENGINE OIL SAE 15W40  
**Job No:** SW1032182 IAA 6



### SAMPLE INFORMATION

Sample Number	<b>VCP442951</b>	VCP437524	VCP413312	VCP369014
Sample Date	<b>28 Mar 2024</b>	04 Jan 2024	25 Aug 2023	02 May 2023
Machine Hours	<b>8415</b>	7830	7315	6748
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**ARNOLD MACHINERY COMPANY**  
 4323 EAST WINSLOW AVENUE  
 PHOENIX, AZ  
 US 85040  
 Contact: RANDY PRZEKURAT  
 randyp@arnoldmachinery.com  
 T:  
 F: (602)414-1904



### OIL CONDITION

Visc @ 100°C	cSt	<b>13.0</b>	13.0	13.5	14.1
Base Number (BN)	mg KOH/g	<b>9.8</b>	9.1	9.1	6.8
Oxidation (PA)	%	<b>80</b>	68	77	80



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.4</b>	0.5	0.7	0.7
Nitration (PA)	%	<b>68</b>	66	83	84
Sulfation (PA)	%	<b>60</b>	56	60	59
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	3	4	6
Sodium	ppm	<b>2</b>	1	1	0
Potassium	ppm	<b>0</b>	<1	0	1



### WEAR METALS

Iron	ppm	<b>6</b>	4	13	15
Copper	ppm	<b>&lt;1</b>	<1	2	1
Lead	ppm	<b>0</b>	0	0	0
Tin	ppm	<b>0</b>	0	0	0
Aluminum	ppm	<b>1</b>	<1	<1	1
Chromium	ppm	<b>&lt;1</b>	0	<1	1
Molybdenum	ppm	<b>47</b>	50	58	60
Nickel	ppm	<b>0</b>	0	0	0
Titanium	ppm	<b>&lt;1</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>0</b>	0	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>1606</b>	1203	1281	1279
Magnesium	ppm	<b>684</b>	820	868	976
Zinc	ppm	<b>1247</b>	1262	1304	1357
Phosphorus	ppm	<b>1012</b>	946	1053	1051
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>27</b>	10	<1	12

### 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:** 10963157  
**Signed:** Wes Davis  
**Report Date:** 05 Apr 2024

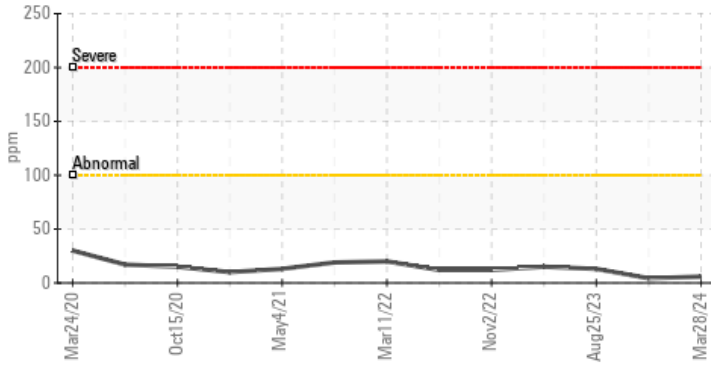


# CONSTRUCTION EQUIPMENT

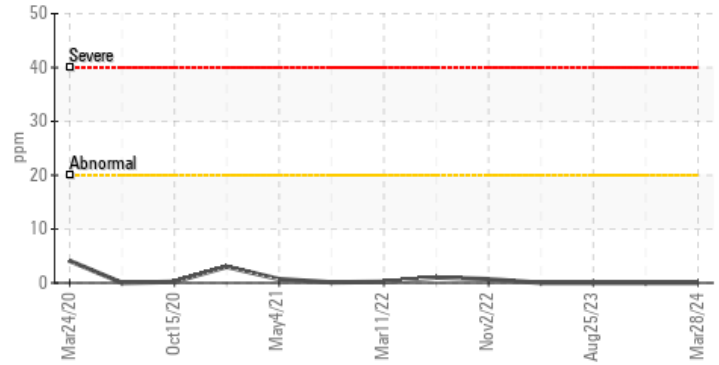


## GRAPHS

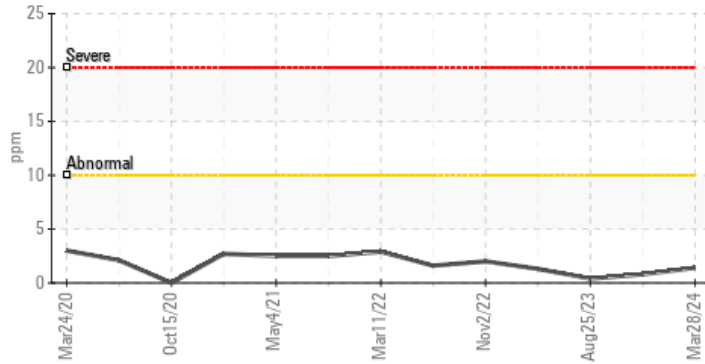
### Iron (ppm)



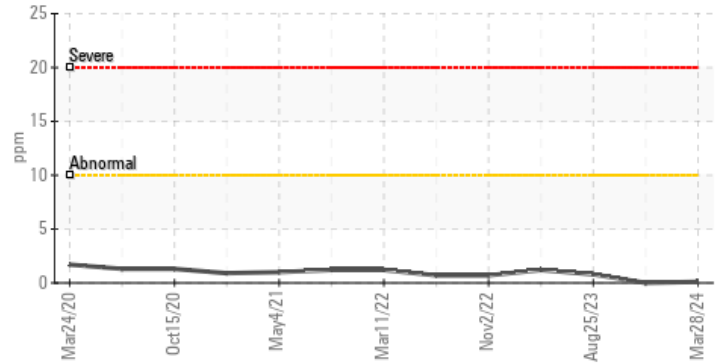
### Lead (ppm)



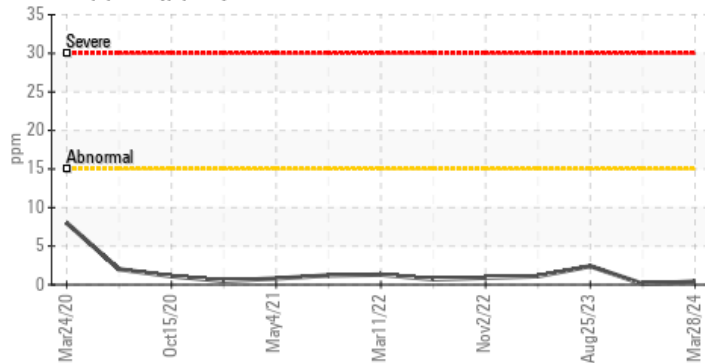
### Aluminum (ppm)



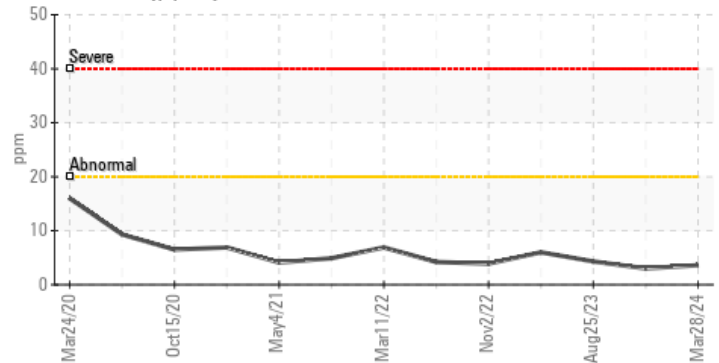
### Chromium (ppm)



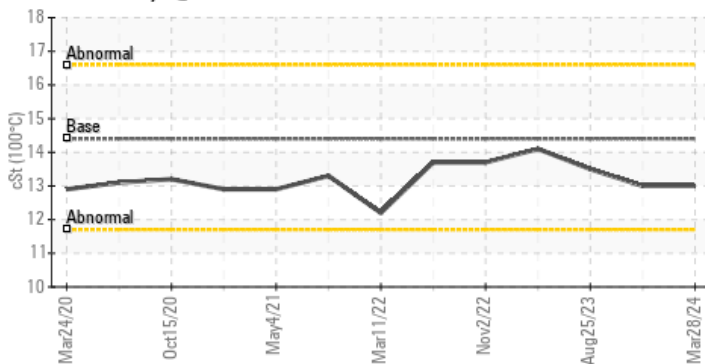
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 100°C



### Base Number

