



# CONSTRUCTION EQUIPMENT

SWO-068735 VOLVO L120H 632828 - DIESEL ENGINE



**Sample No:** VCP447529  
**Oil Type:** DIESEL ENGINE OIL SAE 40  
**Job No:** SWO-068735



## SAMPLE INFORMATION

Sample Number	<b>VCP447529</b>	VCP432960	VCP412981	VCP395373
Sample Date	<b>05 Jan 2024</b>	04 Oct 2023	30 May 2023	20 Feb 2023
Machine Hours	<b>4372</b>	3901	3418	2946
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

### SAIIA CONSTRUCTION LLC

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## OIL CONDITION

Visc @ 100°C	cSt	<b>13.5</b>	13.3	13.5	13.4
Base Number (BN)	mg KOH/g	<b>10.1</b>	9.5	10.3	10.8
Oxidation (PA)	%	<b>82</b>	80	82	84

## CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.2</b>	0.3	0.3	0.2
Nitration (PA)	%	<b>60</b>	58	66	62
Sulfation (PA)	%	<b>60</b>	60	63	62
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	6	4	5
Sodium	ppm	<b>2</b>	3	2	1
Potassium	ppm	<b>&lt;1</b>	0	0	1

## 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 acceptable for the time in service.

## WEAR METALS

Iron	ppm	<b>6</b>	11	12	13
Copper	ppm	<b>1</b>	1	0	2
Lead	ppm	<b>1</b>	0	0	<1
Tin	ppm	<b>&lt;1</b>	1	0	<1
Aluminum	ppm	<b>4</b>	4	1	3
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>39</b>	39	42	45
Nickel	ppm	<b>1</b>	0	0	0
Titanium	ppm	<b>&lt;1</b>	0	0	0
Silver	ppm	<b>&lt;1</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	0	0

## ADDITIVES

Calcium	ppm	<b>1607</b>	1631	1797	1741
Magnesium	ppm	<b>547</b>	514	568	503
Zinc	ppm	<b>1137</b>	1110	1286	1117
Phosphorus	ppm	<b>939</b>	941	995	940
Barium	ppm	<b>0</b>	0	0	2
Boron	ppm	<b>21</b>	30	36	42

**Depot:** SAIBIR  
**Unique No:** 10830439  
**Signed:** Don Baldrige  
**Report Date:** 15 Jan 2024

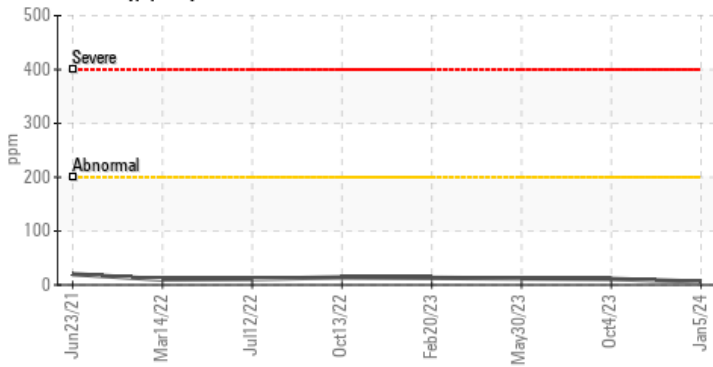


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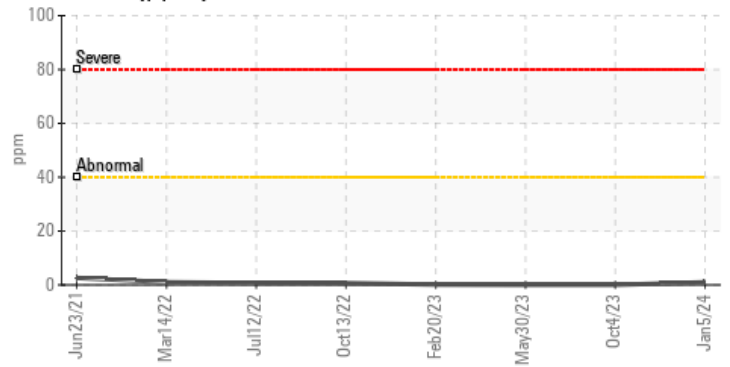


## GRAPHS

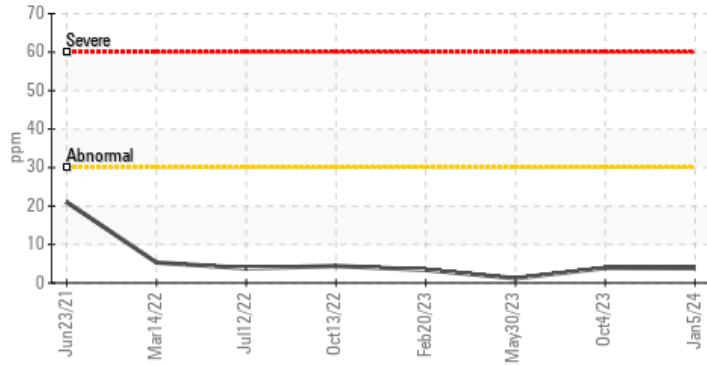
### Iron (ppm)



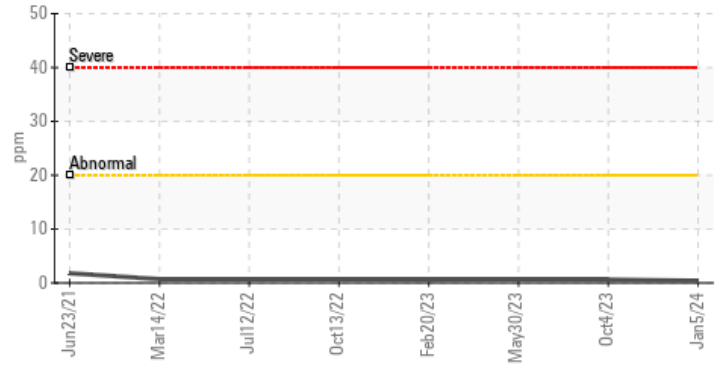
### Lead (ppm)



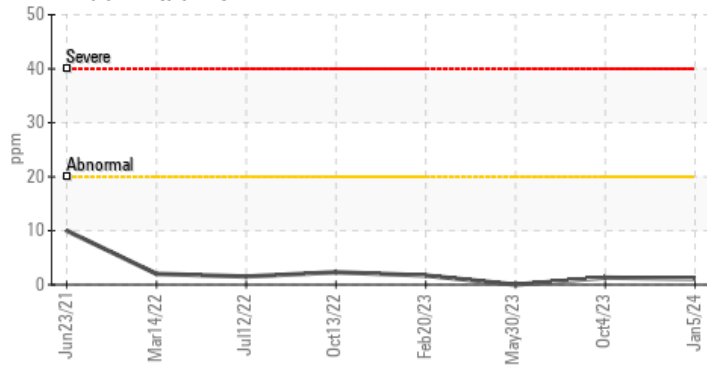
### Aluminum (ppm)



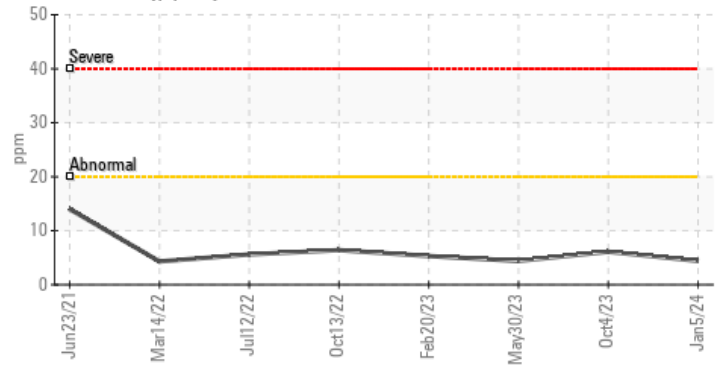
### Chromium (ppm)



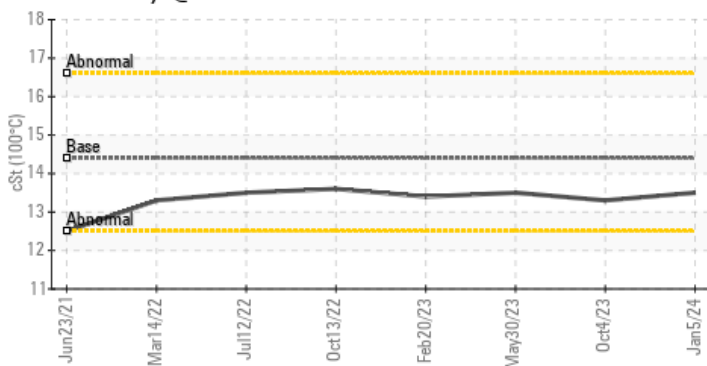
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 100°C



### Base Number

