



# CONSTRUCTION EQUIPMENT

9594 CURTIS BAY VOLVO L90G 3163 - DIESEL ENGINE



**Sample No:** VCP413772  
**Oil Type:** CHEVRON 15W40  
**Job No:** 9594 CURTIS BAY



## SAMPLE INFORMATION

Sample Number	<b>VCP413772</b>	VCP404290	VCP360335	VCP292322
Sample Date	<b>15 Sep 2023</b>	19 Dec 2022	20 May 2022	18 Nov 2020
Machine Hours	<b>16208</b>	15374	14701	13515
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>ABNORMAL</b>	NORMAL	ABNORMAL	NORMAL

**IAA - INSURANCE AUTO AUCTIONS - BALTIMORE**  
 3131 HAWKINS POINT RD  
 BALTIMORE, MD  
 US 21226  
 Contact: Service Manager

## OIL CONDITION

Visc @ 100°C	cSt	<b>13.3</b>	13.3	13.6	13.9
Base Number (BN)	mg KOH/g	<b>6.6</b>	8.4	6.7	---
Oxidation (PA)	%	<b>67</b>	72	82	55

T:  
F:

## CONTAMINATION

Soot %	%	<b>0.7</b>	0.6	1	0.3
Nitration (PA)	%	<b>78</b>	79	101	78
Sulfation (PA)	%	<b>63</b>	67	71	53
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>14</b>	9	9	5
Sodium	ppm	<b>▲ 123</b>	0	0	2
Potassium	ppm	<b>10</b>	8	0	2

## Diagnosis

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. The aluminum level is abnormal. All other component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

## WEAR METALS

Iron	ppm	<b>34</b>	17	45	13
Copper	ppm	<b>2</b>	<1	2	<1
Lead	ppm	<b>2</b>	1	10	<1
Tin	ppm	<b>&lt;1</b>	<1	<1	<1
Aluminum	ppm	<b>▲ 13</b>	7	▲ 16	7
Chromium	ppm	<b>1</b>	<1	1	<1
Molybdenum	ppm	<b>159</b>	128	97	27
Nickel	ppm	<b>&lt;1</b>	0	<1	0
Titanium	ppm	<b>2</b>	<1	5	15
Silver	ppm	<b>0</b>	0	<1	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	<1	<1

## ADDITIVES

Calcium	ppm	<b>2160</b>	1583	1600	1588
Magnesium	ppm	<b>753</b>	534	693	708
Zinc	ppm	<b>1644</b>	1070	804	818
Phosphorus	ppm	<b>1319</b>	886	626	735
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>277</b>	251	62	69

**Depot:** IAABAL  
**Unique No:** 10657355  
**Signed:** Jonathan Hester  
**Report Date:** 22 Sep 2023



# CONSTRUCTION EQUIPMENT



## VOLVO GRAPHS

