



# CONSTRUCTION EQUIPMENT

8000378801 VOLVO L30GS 3224376 - DIESEL ENGINE



**Sample No:** VCP394657  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 8000378801



## SAMPLE INFORMATION

Sample Number	<b>VCP394657</b>	VCP332598	VCP334120	VCP280637
Sample Date	<b>15 Sep 2023</b>	26 Jul 2022	21 Jan 2022	13 Mar 2021
Machine Hours	<b>4682</b>	2994	2193	1471
Oil Hours	<b>0</b>	780	2193	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>ABNORMAL</b>	NORMAL	NORMAL	NORMAL

**STRONGCO EQUIP (AB)**  
6 - 38403 BURNT LAKE TRAIL  
RED DEER COUNTY, AB  
CA T4S 2L4  
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## OIL CONDITION

Visc @ 100°C	cSt	<b>15.1</b>	15.4	14.9	14.5
Oxidation (PA)	%	<b>114</b>	139	135	131

## CONTAMINATION

Soot %	%	<b>0.2</b>	0	0	0
Nitration (PA)	%	<b>131</b>	125	121	115
Sulfation (PA)	%	<b>72</b>	76	74	73
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>▲ 34</b>	6	8	8
Sodium	ppm	<b>6</b>	4	4	6
Potassium	ppm	<b>2</b>	<1	<1	<1

## WEAR METALS

Iron	ppm	<b>50</b>	14	14	18
Copper	ppm	<b>▲ 17</b>	<1	<1	1
Lead	ppm	<b>&lt;1</b>	0	0	0
Tin	ppm	<b>1</b>	<1	<1	<1
Aluminum	ppm	<b>▲ 13</b>	2	2	2
Chromium	ppm	<b>4</b>	<1	<1	<1
Molybdenum	ppm	<b>43</b>	42	43	38
Nickel	ppm	<b>&lt;1</b>	<1	<1	<1
Titanium	ppm	<b>&lt;1</b>	<1	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	0

## ADDITIVES

Calcium	ppm	<b>1722</b>	1705	1660	1634
Magnesium	ppm	<b>521</b>	515	531	517
Zinc	ppm	<b>1117</b>	1153	1129	910
Phosphorus	ppm	<b>980</b>	929	958	721
Barium	ppm	<b>0</b>	0	0	<1
Boron	ppm	<b>40</b>	49	44	45

## Diagnosis

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil from the component if this has not already been done. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Copper ppm levels are abnormal. Aluminum ppm levels are noted. Bearing wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

**Depot:** VOLVO9652  
**Unique No:** 5644124  
**Signed:** Bill Quesnel  
**Report Date:** 18 Sep 2023



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## GRAPHS

