



# CONSTRUCTION EQUIPMENT

10190 PCS SALES VOLVO L120H 14091 - DIESEL ENGINE



**Sample No:** VCP435514  
**Oil Type:** CHEVRON 15W40  
**Job No:** 10190 PCS SALES



## SAMPLE INFORMATION

Sample Number	<b>VCP435514</b>	VCP384775	VCP361106	VCP294153
Sample Date	<b>10 Jan 2024</b>	27 Dec 2022	22 Jul 2022	15 Dec 2020
Machine Hours	<b>6317</b>	5490	5380	4098
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>ABNORMAL</b>	NORMAL	ABNORMAL	ABNORMAL

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## OIL CONDITION

Visc @ 100°C	cSt	<b>13.2</b>	13.8	12.7	13.7
Base Number (BN)	mg KOH/g	<b>7.2</b>	8.6	7.2	---
Oxidation (PA)	%	<b>67</b>	66	82	72

## CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.5</b>	0.2	0.6	0.7
Nitration (PA)	%	<b>71</b>	56	98	94
Sulfation (PA)	%	<b>62</b>	64	71	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>	3	7	4
Sodium	ppm	<b>2</b>	1	2	3
Potassium	ppm	<b>2</b>	3	1	3

## Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The aluminum level is abnormal. All other 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>17</b>	8	30	35
Copper	ppm	<b>2</b>	<1	3	2
Lead	ppm	<b>&lt;1</b>	2	15	2
Tin	ppm	<b>1</b>	<1	3	2
Aluminum	ppm	<b>▲ 16</b>	9	▲ 22	▲ 29
Chromium	ppm	<b>&lt;1</b>	<1	1	2
Molybdenum	ppm	<b>80</b>	107	112	28
Nickel	ppm	<b>0</b>	<1	1	<1
Titanium	ppm	<b>2</b>	1	4	16
Silver	ppm	<b>0</b>	0	<1	<1
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	<1	<1	<1

## ADDITIVES

Calcium	ppm	<b>1423</b>	1431	1554	1573
Magnesium	ppm	<b>487</b>	487	660	706
Zinc	ppm	<b>1246</b>	1010	773	825
Phosphorus	ppm	<b>1052</b>	856	606	659
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>212</b>	353	158	26

**Depot:** VOLV00150  
**Unique No:** 10834659  
**Signed:** Don Baldrige  
**Report Date:** 19 Jan 2024



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## VOLVO GRAPHS

