



# CONSTRUCTION EQUIPMENT

W02007360 VOLVO L150H 6630 - DIESEL ENGINE



**Sample No:** VCP384500  
**Oil Type:** MOBIL 15W40  
**Job No:** W02007360



## SAMPLE INFORMATION

Sample Number	<b>VCP384500</b>	VCP307794	VCP295018	VCP279671
Sample Date	<b>18 Jul 2023</b>	12 May 2021	14 Dec 2020	08 Jul 2020
Machine Hours	<b>7536</b>	4060	3069	2083
Oil Hours	<b>500</b>	500	500	500
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>ABNORMAL</b>	NORMAL	NORMAL	ABNORMAL

**MCCLUNG-LOGAN EQUIPMENT CO INC**  
8450 QUARRY ROAD  
MANASSAS, VA  
US 20110  
Contact: MIKE MAYHUGH  
MMAYHUGH@MCCLUNG-LOGAN.COM  
T: (703)393-7344  
F: (703)393-7844



## OIL CONDITION

Visc @ 100°C	cSt	▲ <b>11.5</b>	■ 12.6	■ 12.5	▲ 12.0
Base Number (BN)	mg KOH/g	▲ <b>3.2</b>	---	---	---
Oxidation (PA)	%	<b>125</b>	87	88	73



## CONTAMINATION

Soot %	%	■ <b>0.8</b>	■ 0.3	■ 0.4	■ 0.3
Nitration (PA)	%	<b>118</b>	80	77	67
Sulfation (PA)	%	<b>83</b>	65	65	61
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	▲ <b>3.8</b>	<1.0	<1.0	<1.0
Silicon	ppm	▲ <b>39</b>	■ 12	■ 15	■ 8
Sodium	ppm	■ <b>6</b>	■ 3	■ 3	■ 2
Potassium	ppm	■ <b>10</b>	■ 1	■ 0	■ 0



## WEAR METALS

Iron	ppm	■ <b>56</b>	■ 10	■ 10	■ 7
Copper	ppm	■ <b>14</b>	■ 6	■ 9	■ 36
Lead	ppm	■ <b>7</b>	■ <1	■ 1	■ 2
Tin	ppm	■ <b>4</b>	■ <1	■ 1	■ 0
Aluminum	ppm	▲ <b>12</b>	■ 2	■ 1	■ 2
Chromium	ppm	■ <b>&lt;1</b>	■ <1	■ <1	■ <1
Molybdenum	ppm	■ <b>46</b>	■ 41	■ 42	■ 51
Nickel	ppm	■ <b>&lt;1</b>	■ <1	■ <1	■ <1
Titanium	ppm	<b>&lt;1</b>	<1	0	<1
Silver	ppm	■ <b>0</b>	<1	0	0
Manganese	ppm	■ <b>2</b>	■ <1	■ <1	■ <1
Vanadium	ppm	<b>0</b>	0	0	0



## ADDITIVES

Calcium	ppm	■ <b>1692</b>	■ 1472	■ 1476	■ 1554
Magnesium	ppm	■ <b>563</b>	■ 492	■ 542	■ 626
Zinc	ppm	■ <b>1192</b>	■ 1024	■ 1093	■ 1004
Phosphorus	ppm	■ <b>923</b>	■ 883	■ 876	■ 900
Barium	ppm	■ <b>&lt;1</b>	■ 0	■ 0	■ 0
Boron	ppm	■ <b>12</b>	■ 33	■ 22	■ 31

## Diagnosis

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Light fuel dilution occurring. The oil viscosity is lower than normal. The BN level is low. Confirm oil type.

**Depot:** VOLVO0002  
**Unique No:** 10566565  
**Signed:** Don Baldrige  
**Report Date:** 26 Jul 2023



# CONSTRUCTION EQUIPMENT



## GRAPHS

