



# CONSTRUCTION EQUIPMENT

## SW-27393-3 DAZ VOLVO L90H 625 190 - DIESEL ENGINE



**Sample No:** VCP439407  
**Oil Type:** MOBIL 15W40  
**Job No:** SW-27393-3 DAZ



### SAMPLE INFORMATION

Sample Number	<b>VCP439407</b>	VCP435898	VCP375278	VCP355904
Sample Date	<b>10 Jan 2024</b>	04 Jan 2024	22 Aug 2022	12 Jul 2022
Machine Hours	<b>4006</b>	4000	1748	1502
Oil Hours	<b>110</b>	0	0	0
Oil Changed	<b>Changed</b>	Not Changd	Not Changd	Not Changd
Sample Status	<b>SEVERE</b>	SEVERE	NORMAL	ABNORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>▲ 9.1</b>	▲ 7.8	■ 13.5	■ 14.1
Base Number (BN)	mg KOH/g	<b>■ 8.0</b>	■ 8.7	■ 9.5	■ 8.4
Oxidation (PA)	%	<b>51</b>	48	57	81



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>■ 0.5</b>	■ 0.5	■ 0.4	■ 1.7
Nitration (PA)	%	<b>50</b>	49	55	103
Sulfation (PA)	%	<b>51</b>	50	57	77
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>● 13.9</b>	● 16.9	<1.0	<1.0
Silicon	ppm	<b>■ 19</b>	▲ 28	■ 6	■ 18
Sodium	ppm	<b>■ 0</b>	■ 0	■ 2	■ 3
Potassium	ppm	<b>■ 2</b>	■ 1	■ 2	■ 5



### WEAR METALS

Iron	ppm	<b>■ 26</b>	■ 16	■ 18	■ 107
Copper	ppm	<b>■ 2</b>	■ 1	■ 2	■ 17
Lead	ppm	<b>■ 0</b>	■ <1	■ <1	■ 4
Tin	ppm	<b>■ 0</b>	■ <1	■ <1	■ 4
Aluminum	ppm	<b>■ 12</b>	▲ 10	■ 9	▲ 58
Chromium	ppm	<b>■ 2</b>	■ 2	■ 2	■ 8
Molybdenum	ppm	<b>■ 54</b>	■ 48	■ 65	■ 37
Nickel	ppm	<b>■ 0</b>	■ <1	■ 1	■ 0
Titanium	ppm	<b>0</b>	<1	0	<1
Silver	ppm	<b>■ 0</b>	■ 0	<1	0
Manganese	ppm	<b>■ &lt;1</b>	■ <1	■ <1	■ 5
Vanadium	ppm	<b>0</b>	0	<1	0



### ADDITIVES

Calcium	ppm	<b>■ 957</b>	■ 843	■ 1237	■ 1283
Magnesium	ppm	<b>■ 830</b>	■ 714	■ 630	■ 758
Zinc	ppm	<b>■ 1100</b>	■ 967	■ 1194	■ 1082
Phosphorus	ppm	<b>■ 848</b>	■ 797	■ 994	■ 899
Barium	ppm	<b>■ 3</b>	■ 0	■ 0	■ 0
Boron	ppm	<b>■ 6</b>	■ 5	■ 154	■ 32

### Diagnosis

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

**Depot:** VOLVO8770  
**Unique No:** 10835354  
**Signed:** Don Baldrige  
**Report Date:** 20 Jan 2024



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## GRAPHS

