



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	<b>SEVERE</b>
CONTAMINATION	<b>SEVERE</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**VOLVO L70H 623179**  
Component  
**Front Axle**  
Fluid  
**{not provided} (--- GAL)**

### RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. ( Customer Sample Comment: approximately 1 gallon in axle at time of service )

### WEAR

The iron, chrome and nickel levels are severe. Gear wear is indicated.

### CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a high concentration of water present in the oil.

### FLUID CONDITION

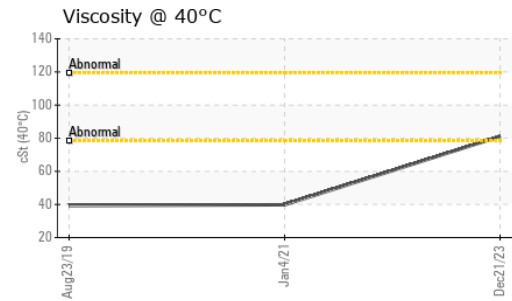
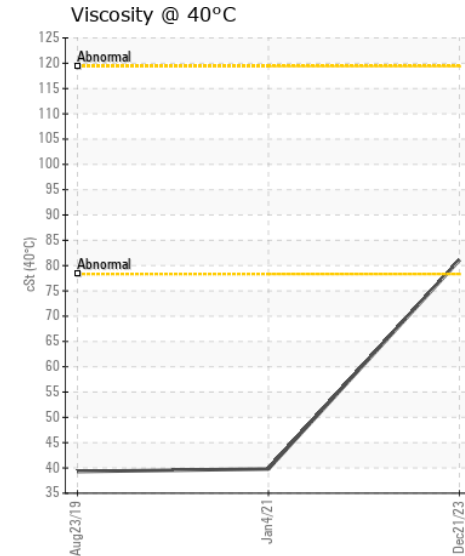
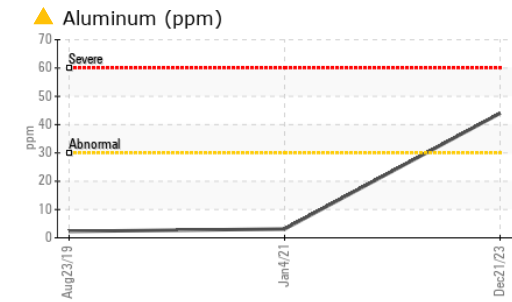
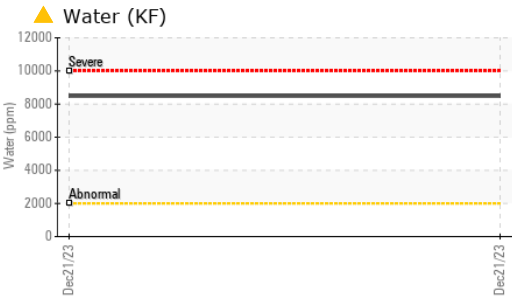
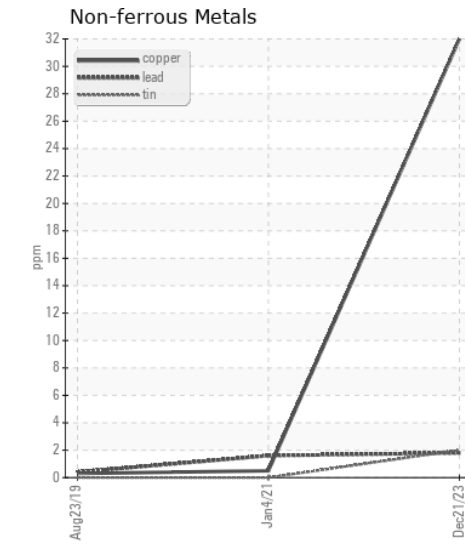
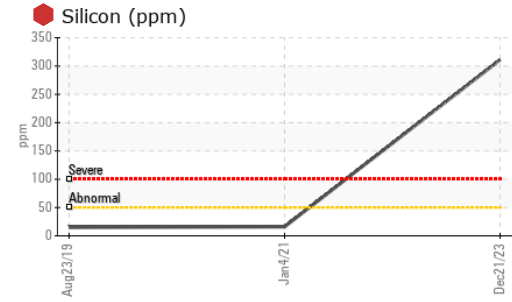
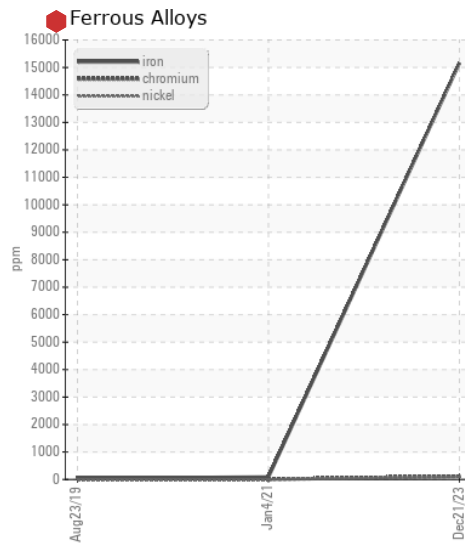
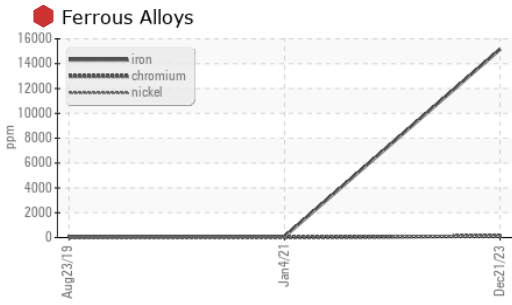
The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0006022</b>	VCP299623	VCP255541
Sample Date		Client Info		<b>21 Dec 2023</b>	04 Jan 2021	23 Aug 2019
Machine Age	hrs	Client Info		<b>10435</b>	5321	1998
Oil Age	hrs	Client Info		<b>7112</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>N/A</b>	Not Changd	N/A
Sample Status				<b>SEVERE</b>	NORMAL	NORMAL

Iron	ppm	ASTM D5185m	>500	<b>15161</b>	88	41
Chromium	ppm	ASTM D5185m	>20	<b>120</b>	2	1
Nickel	ppm	ASTM D5185m	>10	<b>92</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>2</b>	1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>44</b>	3	2
Lead	ppm	ASTM D5185m	>50	<b>2</b>	2	<1
Copper	ppm	ASTM D5185m	>120	<b>32</b>	<1	<1
Tin	ppm	ASTM D5185m	>20	<b>2</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>4</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

Silicon	ppm	ASTM D5185m	>50	<b>311</b>	16	15
Potassium	ppm	ASTM D5185m	>20	<b>12</b>	2	0
Water	%	ASTM D6304	>0.2	<b>0.848</b>	---	---
ppm Water	ppm	ASTM D6304	>2000	<b>8480</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>0.2%</b>	NEG	NEG

Sodium	ppm	ASTM D5185m		<b>40</b>	6	8
Boron	ppm	ASTM D5185m		<b>105</b>	114	125
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>21</b>	2	3
Manganese	ppm	ASTM D5185m		<b>122</b>	4	4
Magnesium	ppm	ASTM D5185m		<b>90</b>	18	12
Calcium	ppm	ASTM D5185m		<b>3417</b>	3994	4425
Phosphorus	ppm	ASTM D5185m		<b>1226</b>	1383	1423
Zinc	ppm	ASTM D5185m		<b>1410</b>	1618	1767
Sulfur	ppm	ASTM D5185m		<b>3665</b>	3277	3728
Visc @ 40°C	cSt	ASTM D445		<b>81.1</b>	39.8	39.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0006022 **Received** : 11 Jan 2024  
**Lab Number** : 06058464 **Diagnosed** : 14 Jan 2024  
**Unique Number** : 10829846 **Diagnostician** : Don Baldrige  
**Test Package** : CONST ( Additional Tests: KF )

**ATLAS ORGANICS**  
 2115 EAST CLUB BLVD  
 DURHAM, NC  
 US 27704  
 Contact: Service Manager

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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F: