



# ASCENDUM

## OIL ANALYSIS REPORT

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



Machine Id  
**VOLVO L120H 632917**  
Component  
**Hydraulic System**  
Fluid  
**VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0011200</b>	ASC0010313	VCP432999
Sample Date		Client Info		<b>14 Jun 2024</b>	25 Mar 2024	06 Sep 2023
Machine Age	hrs	Client Info		<b>6025</b>	5529	4106
Oil Age	hrs	Client Info		<b>4602</b>	1423	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>5</b>	5	6
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	1
Lead	ppm	ASTM D5185m	>20	<b>1</b>	2	1
Copper	ppm	ASTM D5185m	>20	<b>1</b>	2	2
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

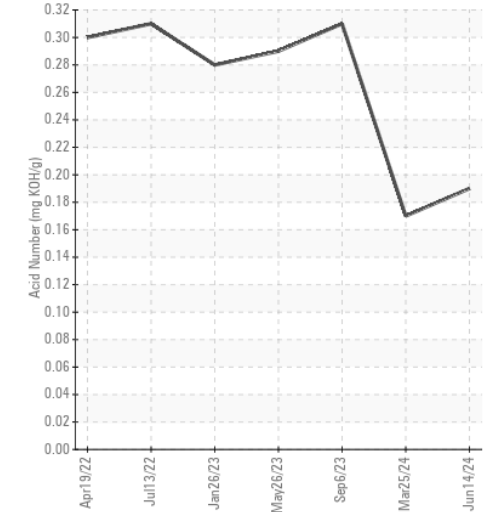
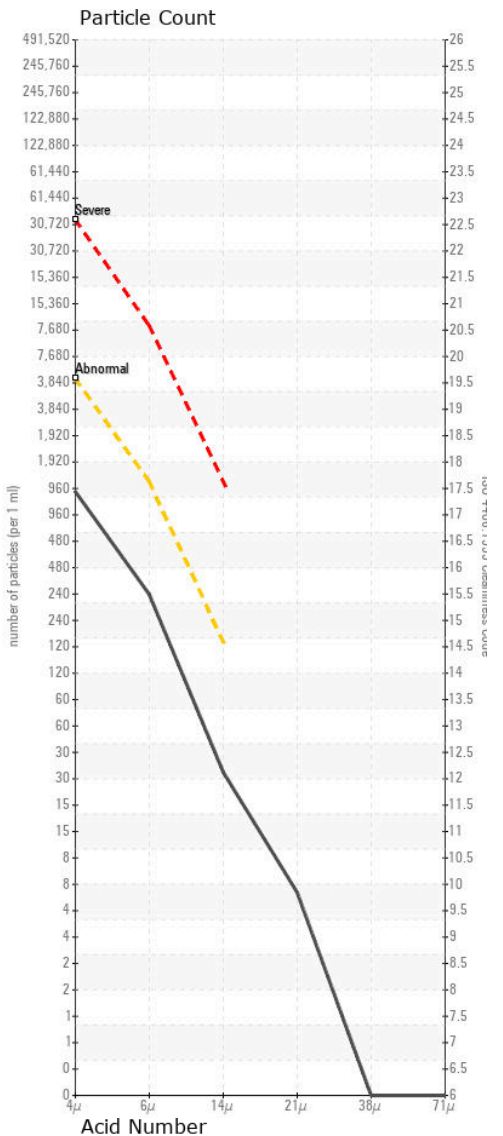
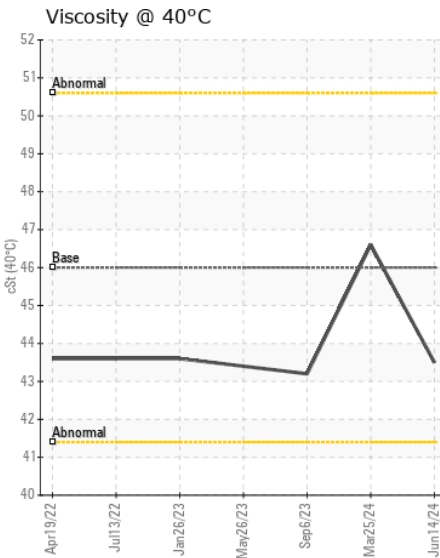
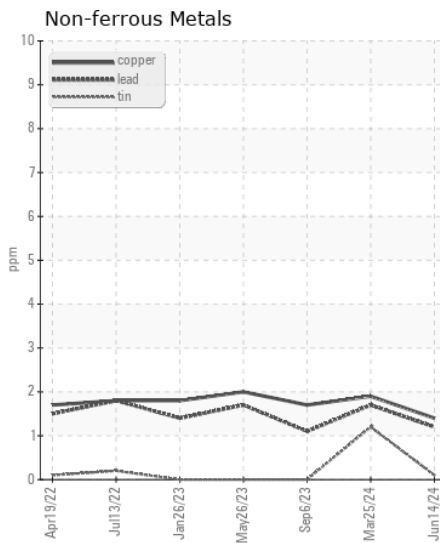
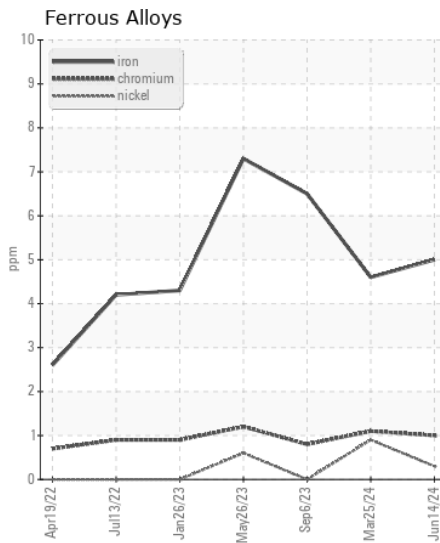
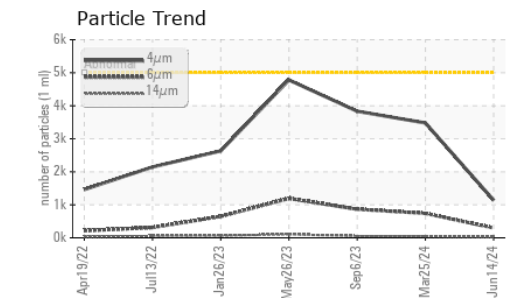
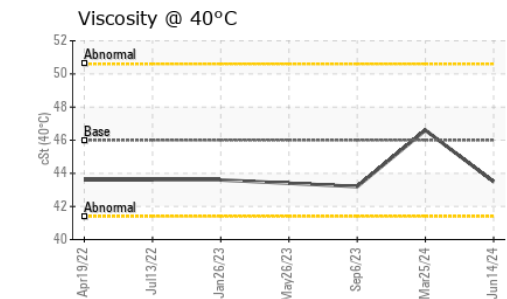
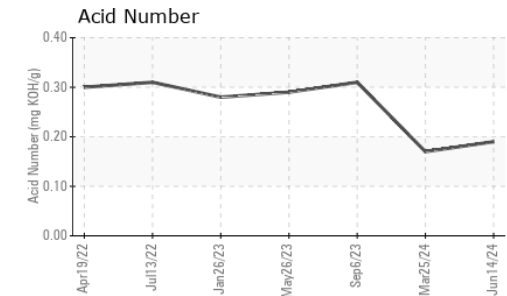
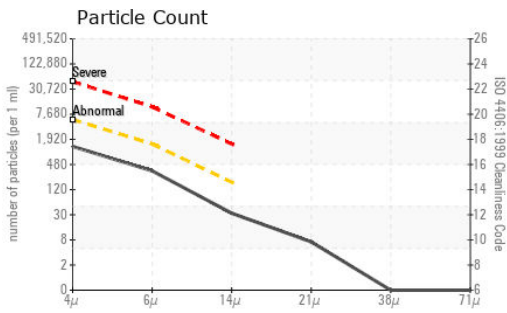
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>3</b>	3	4
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>1140</b>	3478	3833
Particles >6µm		ASTM D7647	>1300	<b>297</b>	740	865
Particles >14µm		ASTM D7647	>160	<b>29</b>	48	52
Particles >21µm		ASTM D7647	>40	<b>6</b>	11	12
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>17/15/12</b>	19/17/13	19/17/13
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>NEG</b>	NEG	NEG

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Boron	ppm	ASTM D5185m	14	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	1	<1
Manganese	ppm	ASTM D5185m	0.0	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	2.6	<b>4</b>	3	3
Calcium	ppm	ASTM D5185m	49	<b>56</b>	61	70
Phosphorus	ppm	ASTM D5185m	354	<b>347</b>	352	361
Zinc	ppm	ASTM D5185m	419	<b>466</b>	438	447
Sulfur	ppm	ASTM D5185m	3719	<b>1338</b>	1402	2335
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.19</b>	0.17	0.31
Visc @ 40°C	cSt	ASTM D445	46	<b>43.5</b>	46.6	43.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0011200  
**Lab Number** : 06228049  
**Unique Number** : 11111542  
**Test Package** : CONST

**Received** : 03 Jul 2024  
**Tested** : 08 Jul 2024  
**Diagnosed** : 08 Jul 2024 - Jonathan Hester

**117 - ASCENDUM MACHINERY INC - GREENVILLE**  
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 US 27834

Contact: BRANDON JENKINS  
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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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