



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area

**[SITE ONE]**

Machine Id

**VOLVO L45H 4122127**

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		ASC0011491	ASC0006340	VCP421170
Sample Date		Client Info		09 May 2024	24 Jan 2024	10 Apr 2023
Machine Age	hrs	Client Info		4409	3805	2452
Oil Age	hrs	Client Info		4409	805	0
Filter Age	hrs	Client Info		4409	805	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	5	7	7
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	1	2	1
Lead	ppm	ASTM D5185m	>20	<1	2	2
Copper	ppm	ASTM D5185m	>150	2	3	4
Tin	ppm	ASTM D5185m	>20	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

### CONTAMINATION

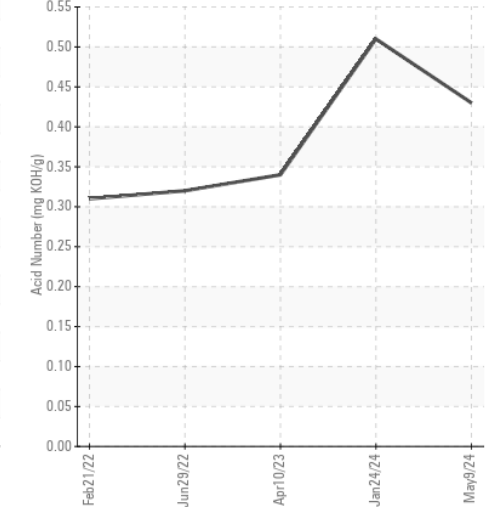
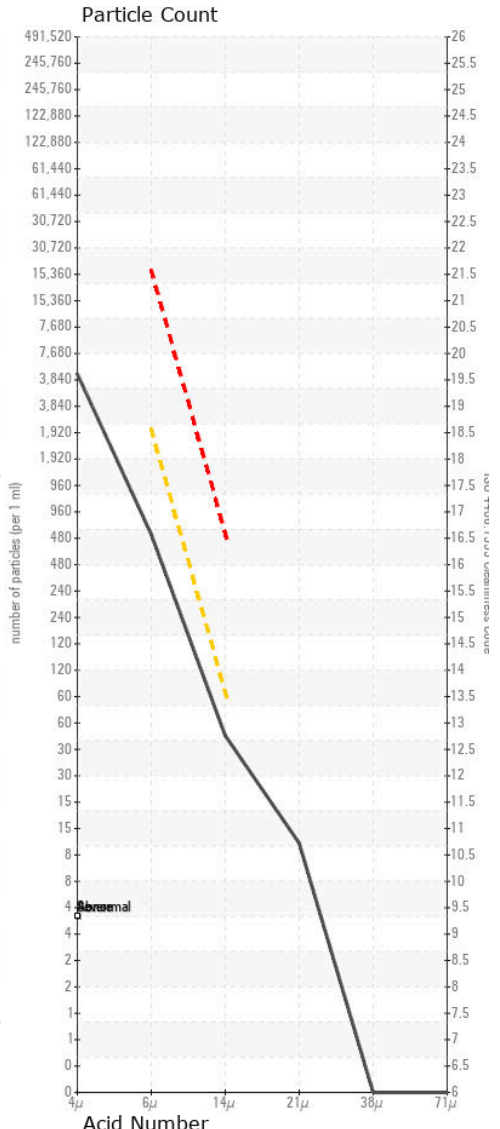
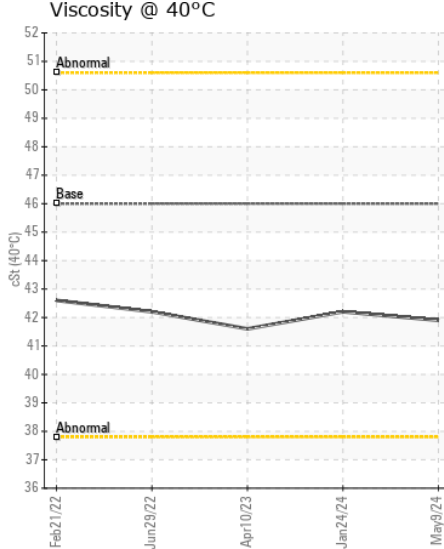
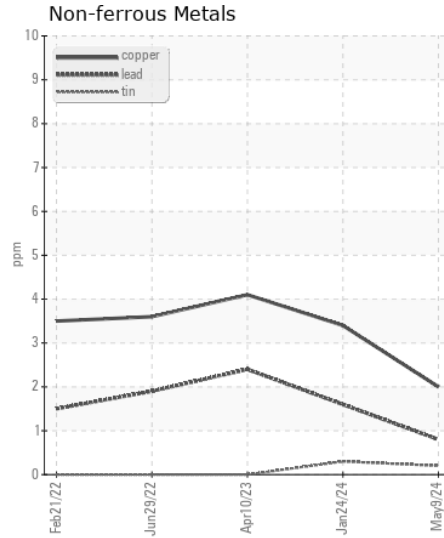
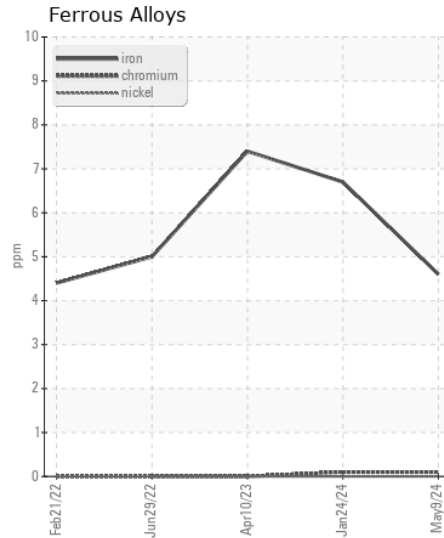
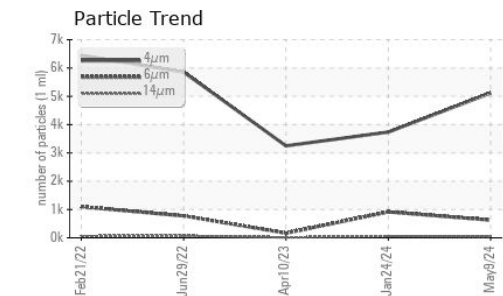
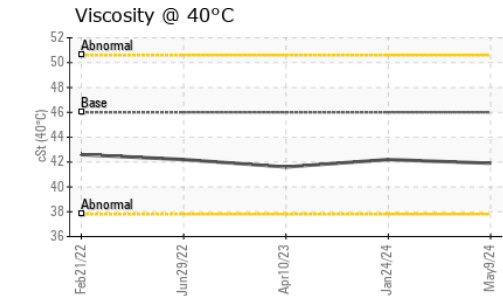
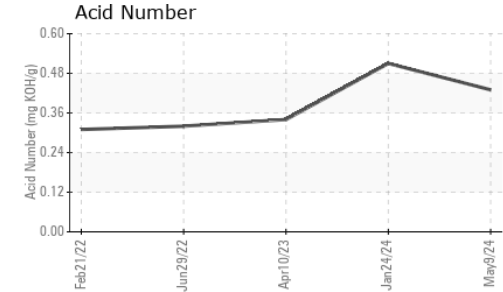
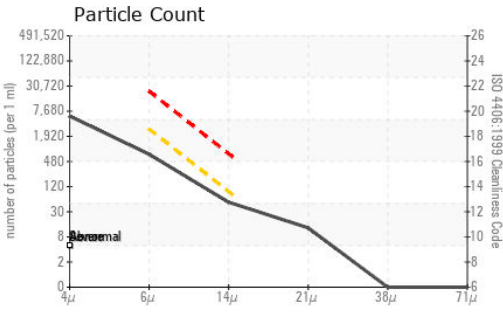
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	7	7	9
Potassium	ppm	ASTM D5185m	>20	0	<1	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		5117	3736	3249
Particles >6µm		ASTM D7647	>2500	627	918	164
Particles >14µm		ASTM D7647	>80	45	58	12
Particles >21µm		ASTM D7647	>20	11	5	2
Particles >38µm		ASTM D7647	>4	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	20/16/13	19/17/13	19/15/11
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	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		<1	1	0
Boron	ppm	ASTM D5185m	14	0	0	0
Barium	ppm	ASTM D5185m	0.0	1	0	0
Molybdenum	ppm	ASTM D5185m	0.0	0	<1	0
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	10	6	2
Calcium	ppm	ASTM D5185m	49	55	47	45
Phosphorus	ppm	ASTM D5185m	354	325	303	326
Zinc	ppm	ASTM D5185m	419	414	384	429
Sulfur	ppm	ASTM D5185m	3719	1629	1407	1685
Acid Number (AN)	mg KOH/g	ASTM D8045		0.43	0.51	0.34
Visc @ 40°C	cSt	ASTM D445	46	41.9	42.2	41.6



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0011491  
**Lab Number** : 06178657  
**Unique Number** : 11029983  
**Test Package** : CONST  
**Received** : 14 May 2024  
**Tested** : 15 May 2024  
**Diagnosed** : 15 May 2024 - Wes Davis

**113 - ASCENDUM MACHINERY INC - GARNER**  
 3561 JONES SAUSAGE ROAD  
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 US 27529  
 Contact: TRENT BROADWELL  
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Certificate L2367  
 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)