



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area  
**Ascendum Machinery**  
Machine Id  
**VOLVO L120H RL83 (S/N L120HV633323)**  
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		ASC0011004	ASC0006399	ASC0002634
Sample Date		Client Info		31 May 2024	07 Mar 2024	12 Jan 2024
Machine Age	hrs	Client Info		4054	3480	3136
Oil Age	hrs	Client Info		4054	3480	3136
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	N/A	Not Changd
Sample Status				NORMAL	ATTENTION	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	4	7	6
Chromium	ppm	ASTM D5185m	>20	2	<1	2
Nickel	ppm	ASTM D5185m	>10	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	2	2
Lead	ppm	ASTM D5185m	>20	<1	2	1
Copper	ppm	ASTM D5185m	>150	2	4	2
Tin	ppm	ASTM D5185m	>20	0	1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

### CONTAMINATION

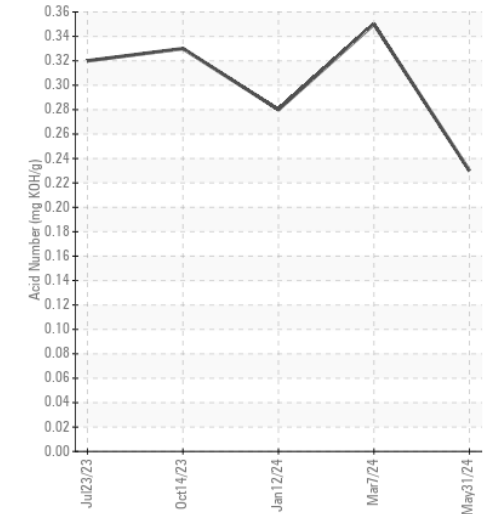
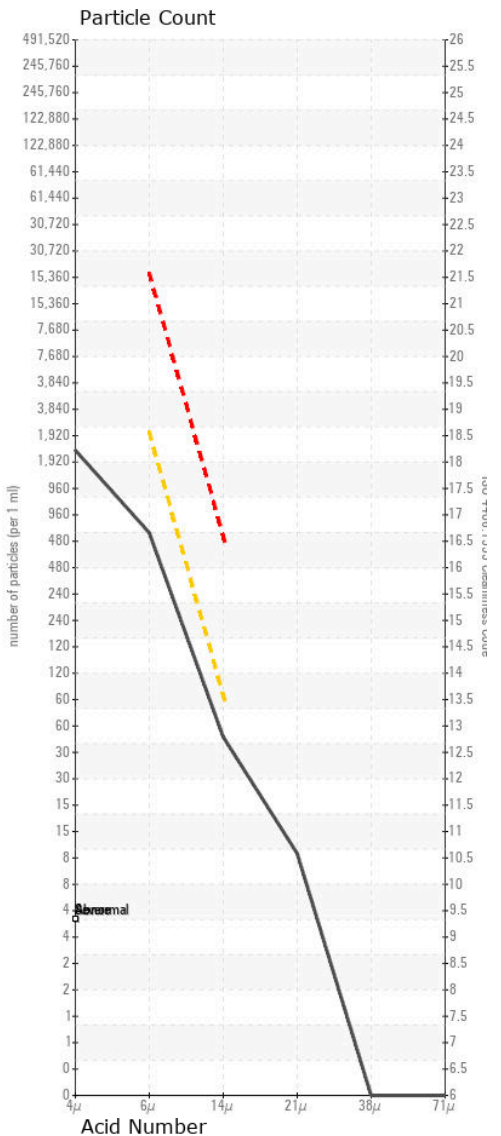
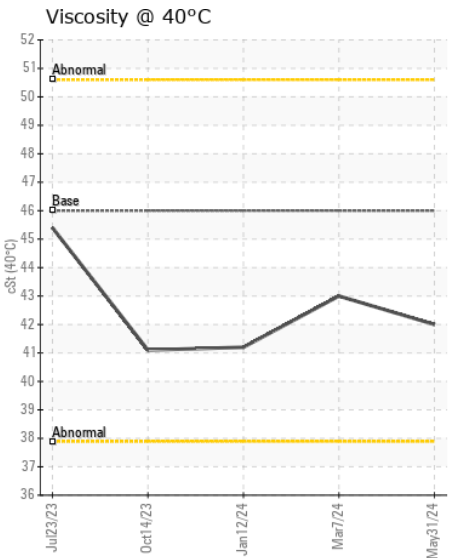
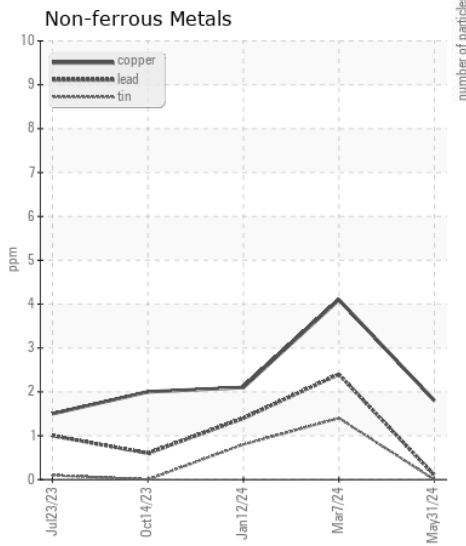
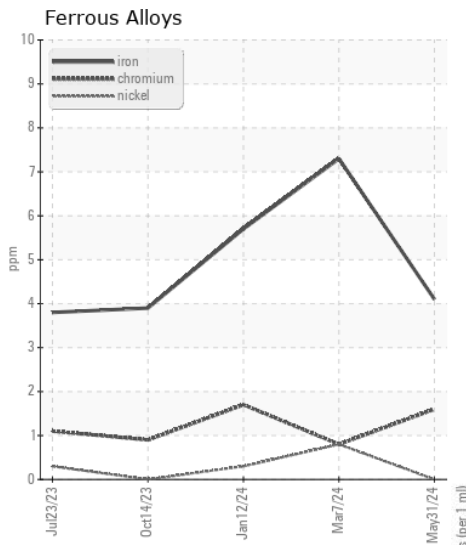
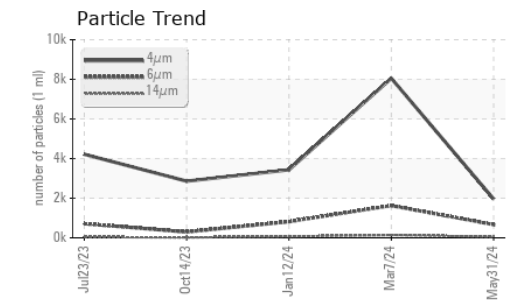
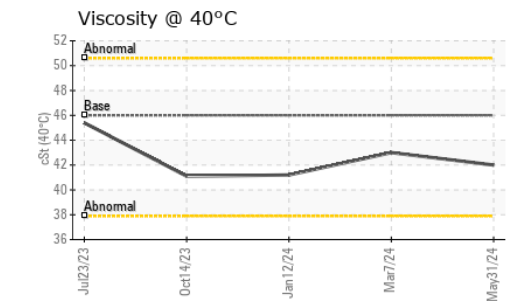
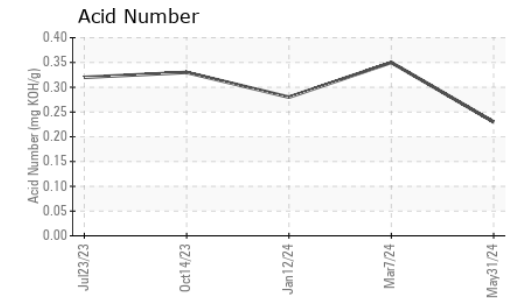
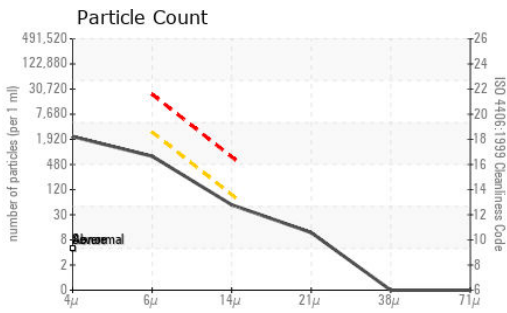
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	2	5	3
Potassium	ppm	ASTM D5185m	>20	0	2	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		1959	8051	3433
Particles >6µm		ASTM D7647	>2500	665	1625	815
Particles >14µm		ASTM D7647	>80	46	142	66
Particles >21µm		ASTM D7647	>20	10	35	21
Particles >38µm		ASTM D7647	>4	0	2	2
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	18/17/13	20/18/14	19/17/13
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		2	<1	0
Boron	ppm	ASTM D5185m	14	0	0	0
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	<1	1	1
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	<1	2	3
Calcium	ppm	ASTM D5185m	49	59	84	59
Phosphorus	ppm	ASTM D5185m	354	328	349	367
Zinc	ppm	ASTM D5185m	419	424	414	428
Sulfur	ppm	ASTM D5185m	3719	1893	2138	2311
Acid Number (AN)	mg KOH/g	ASTM D8045		0.23	0.35	0.28
Visc @ 40°C	cSt	ASTM D445	46	42.0	43.0	41.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : ASC0011004

Lab Number : 06212302

Unique Number : 11085166

Test Package : CONST

Received : 17 Jun 2024

Tested : 19 Jun 2024

Diagnosed : 19 Jun 2024 - Wes Davis

HILCO TRANSPORT

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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)