



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Ascendum Machinery/500 Hour CSA
Machine Id
VOLVO L150H 2197 (S/N L150HV6957)
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		ASC0011418	ASC0008714	ASC0002606
Sample Date		Client Info		15 May 2024	27 Mar 2024	25 Jan 2024
Machine Age	hrs	Client Info		8433	8219	7473
Oil Age	hrs	Client Info		500	5282	1473
Filter Age	hrs	Client Info		500	0	1473
Oil Changed		Client Info		Not Changed	N/A	Not Changed
Filter Changed		Client Info		Not Changed	N/A	Not Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	8	16	13
Chromium	ppm	ASTM D5185m	>20	<1	2	2
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		<1	1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	6	13	10
Lead	ppm	ASTM D5185m	>20	2	3	2
Copper	ppm	ASTM D5185m	>150	1	4	4
Tin	ppm	ASTM D5185m	>20	<1	1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

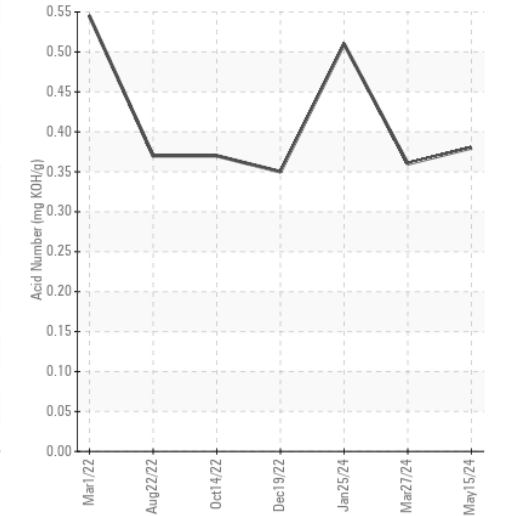
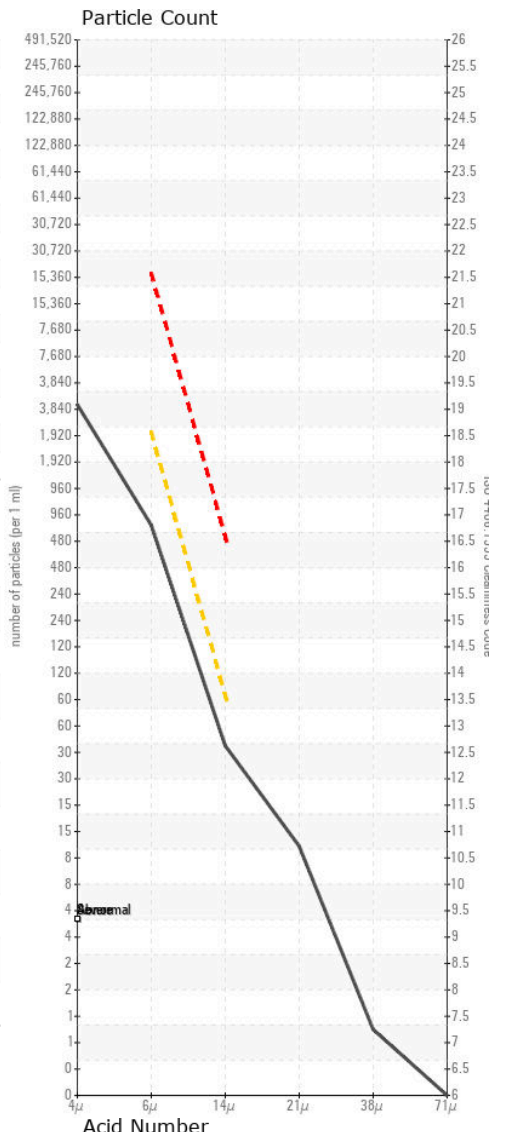
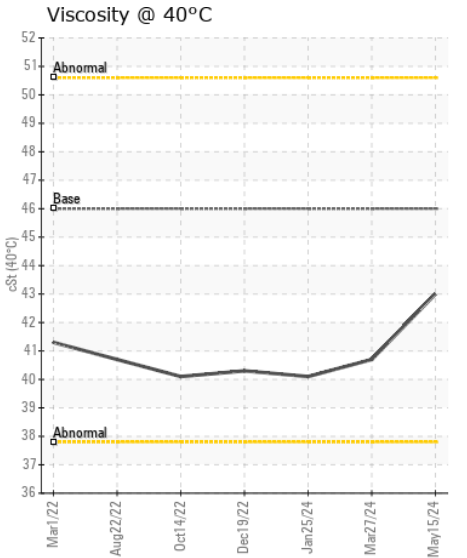
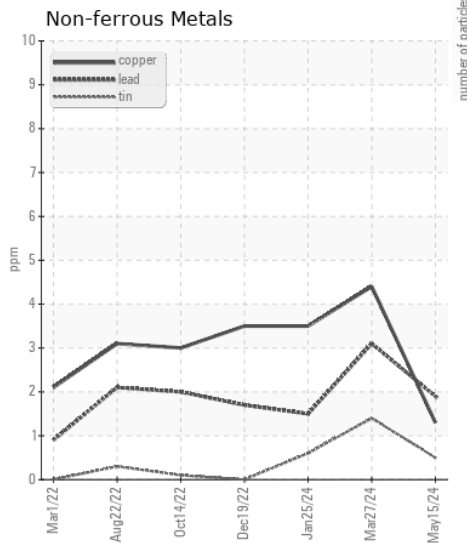
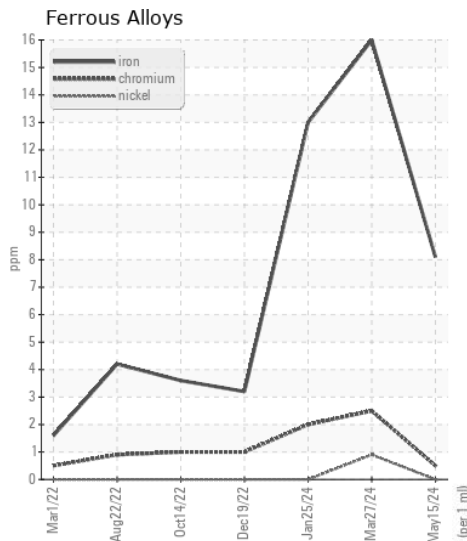
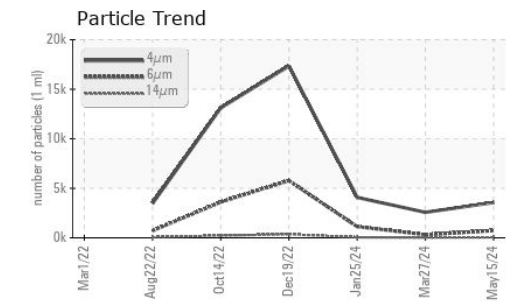
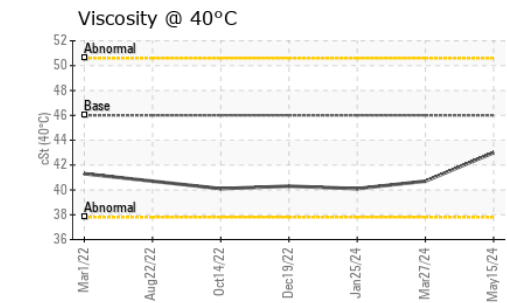
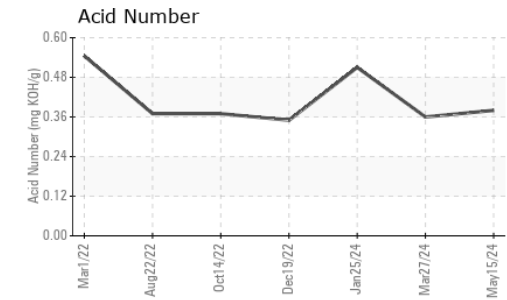
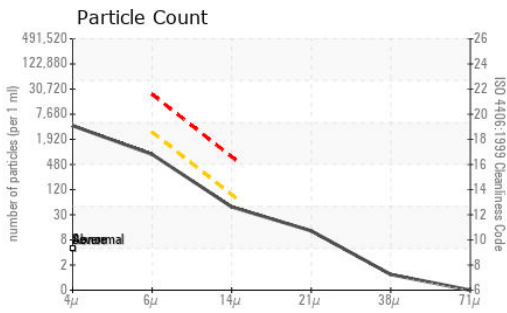
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	8	14	11
Potassium	ppm	ASTM D5185m	>20	<1	2	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		3562	2573	4078
Particles >6µm		ASTM D7647	>2500	735	314	1126
Particles >14µm		ASTM D7647	>80	41	17	46
Particles >21µm		ASTM D7647	>20	11	7	8
Particles >38µm		ASTM D7647	>4	1	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	19/17/13	19/15/11	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		3	5	6
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	0
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	0	<1	0
Calcium	ppm	ASTM D5185m	49	51	52	45
Phosphorus	ppm	ASTM D5185m	354	352	332	319
Zinc	ppm	ASTM D5185m	419	437	415	394
Sulfur	ppm	ASTM D5185m	3719	1027	891	870
Acid Number (AN)	mg KOH/g	ASTM D8045		0.38	0.36	0.51
Visc @ 40°C	cSt	ASTM D445	46	43.0	40.7	40.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0011418
Lab Number : 06186059
Unique Number : 11042811
Test Package : CONST

Received : 21 May 2024
Tested : 22 May 2024
Diagnosed : 22 May 2024 - Wes Davis

G S MATERIALS INC
 PO BOX 1335
 BURLINGTON, NC
 US 27216

Contact: KAREN NEWPORT
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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)