



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO L150H 6856
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0011364	ASC0006469	VCP441578
Sample Date		Client Info		16 May 2024	03 Jan 2024	28 Sep 2023
Machine Age	hrs	Client Info		7759	6473	6473
Oil Age	hrs	Client Info		7759	6473	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Not Changed
Filter Changed		Client Info		N/A	N/A	Not Changed
Sample Status				ABNORMAL	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	11	10	9
Chromium	ppm	ASTM D5185m	>20	2	2	2
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	2	<1
Lead	ppm	ASTM D5185m	>20	1	1	1
Copper	ppm	ASTM D5185m	>20	4	4	4
Tin	ppm	ASTM D5185m	>20	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

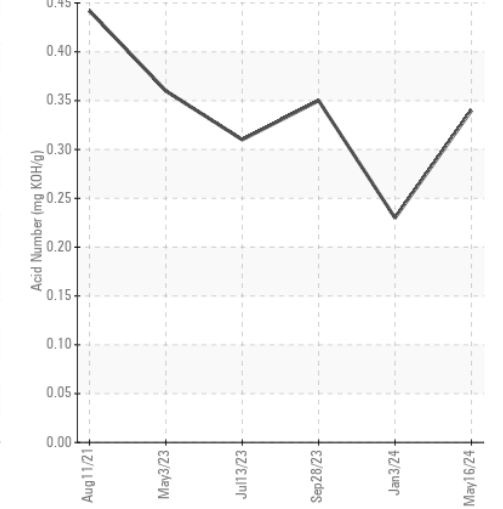
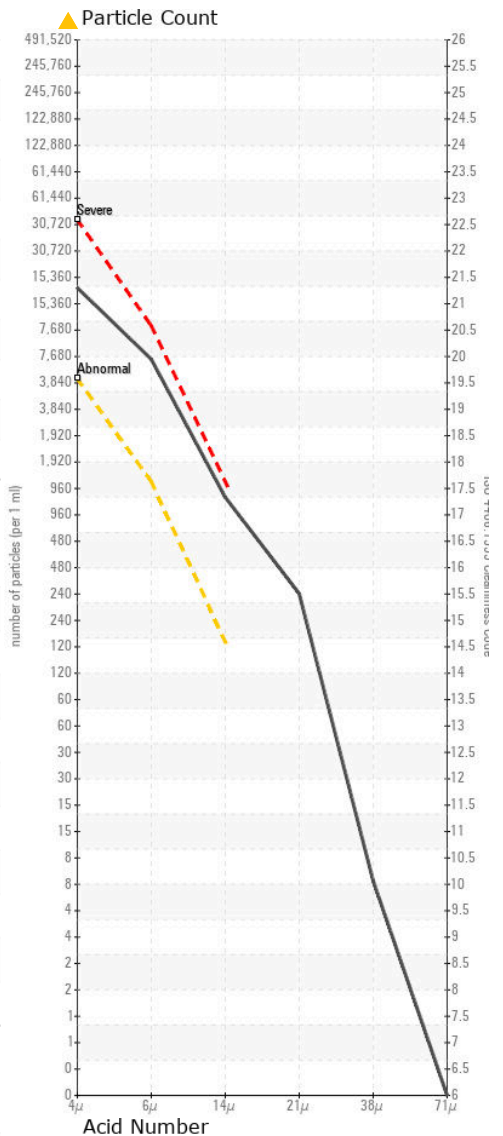
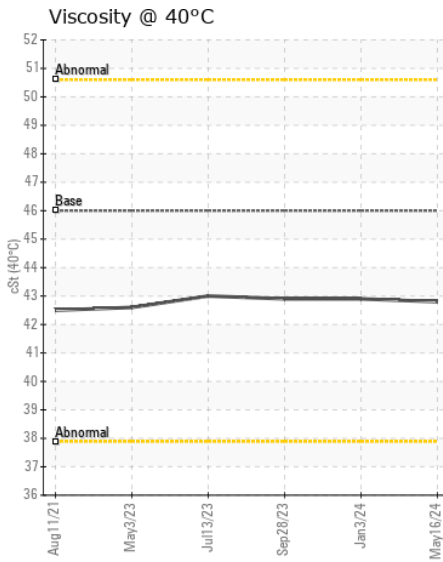
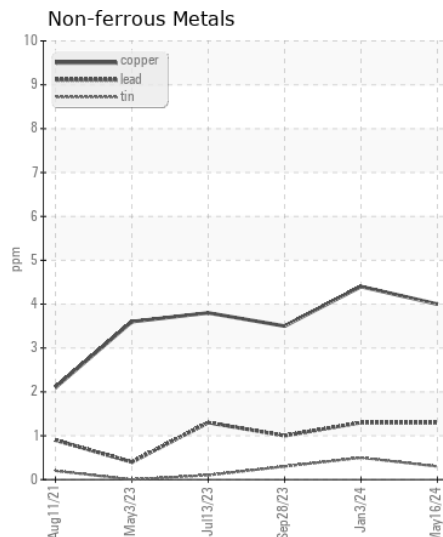
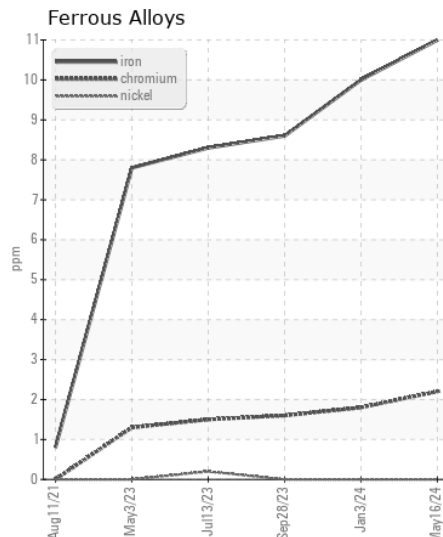
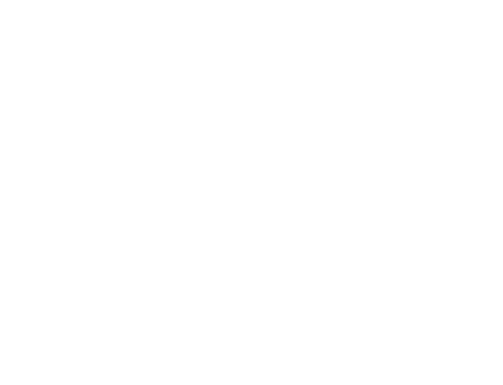
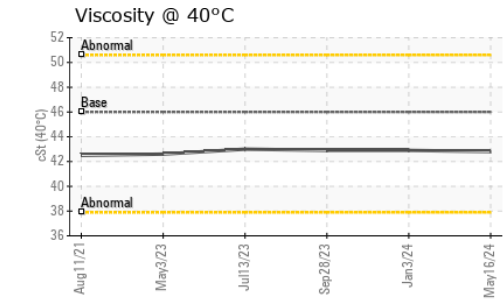
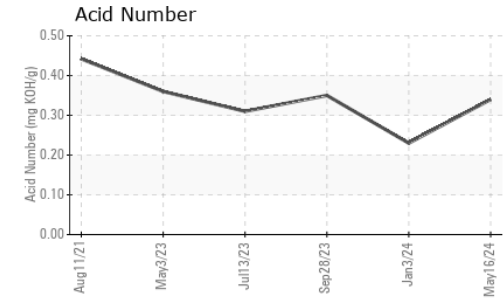
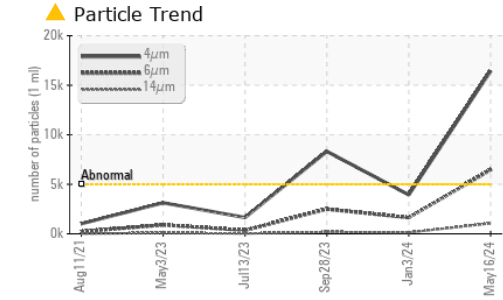
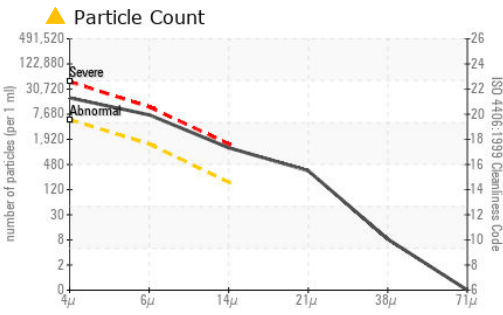
There is a moderate amount of particulates (2 to 100 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	2	2	2
Potassium	ppm	ASTM D5185m	>20	2	2	1
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 16438	● 3937	● 8323
Particles >6µm		ASTM D7647	>1300	▲ 6452	● 1635	● 2493
Particles >14µm		ASTM D7647	>160	▲ 1060	● 137	● 188
Particles >21µm		ASTM D7647	>40	▲ 300	● 25	● 47
Particles >38µm		ASTM D7647	>10	7	0	2
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 21/20/17	● 19/18/14	● 20/18/15
Silt	scalar	*Visual	NONE	LIGHT	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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	>0.2	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185m		3	0	2
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	<1	<1	1
Calcium	ppm	ASTM D5185m	49	48	43	69
Phosphorus	ppm	ASTM D5185m	354	343	348	312
Zinc	ppm	ASTM D5185m	419	404	391	422
Sulfur	ppm	ASTM D5185m	3719	2124	1923	1820
Acid Number (AN)	mg KOH/g	ASTM D8045		0.34	0.23	0.35
Visc @ 40°C	cSt	ASTM D445	46	42.8	42.9	42.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0011364
Lab Number : 06193903
Unique Number : 11056026
Test Package : CONST

Received : 29 May 2024
Tested : 30 May 2024
Diagnosed : 30 May 2024 - Wes Davis

117 - ASCENDUM MACHINERY INC - GREENVILLE
 2002 N GREENE ST
 GREENVILLE, NC
 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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