



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area
Ascendum Machinery 500HR CSA/Princeton, NC
Machine Id
VOLVO L150H 2202 (S/N 7017)
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0006290	VCP403920	VCP369754
Sample Date		Client Info		10 Jan 2024	10 Mar 2023	02 Jan 2023
Machine Age	hrs	Client Info		6052	3602	3046
Oil Age	hrs	Client Info		2052	0	0
Filter Age	hrs	Client Info		2052	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Not Changed	Not Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<1	1	3
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	1	8	7
Lead	ppm	ASTM D5185m	>20	0	1	2
Copper	ppm	ASTM D5185m	>20	0	5	4
Tin	ppm	ASTM D5185m	>20	0	0	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

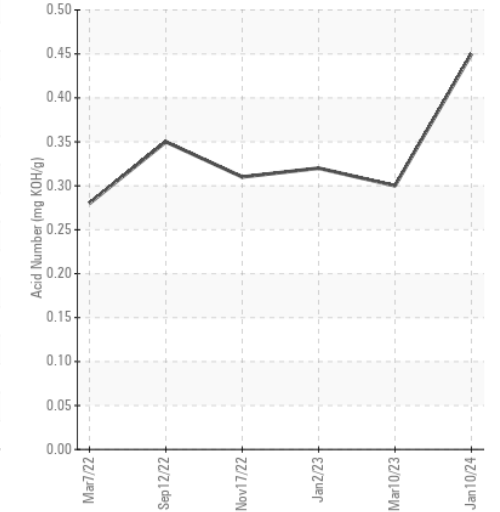
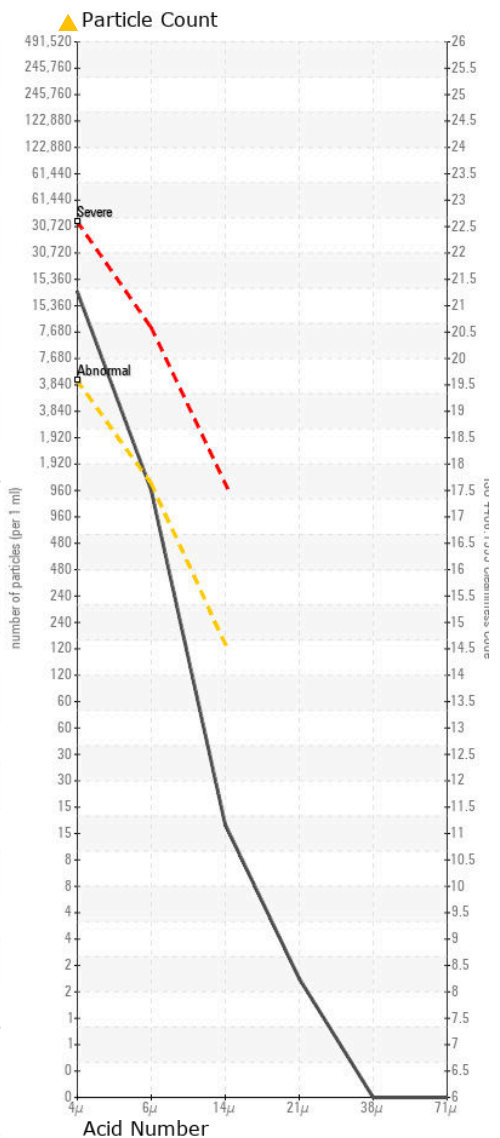
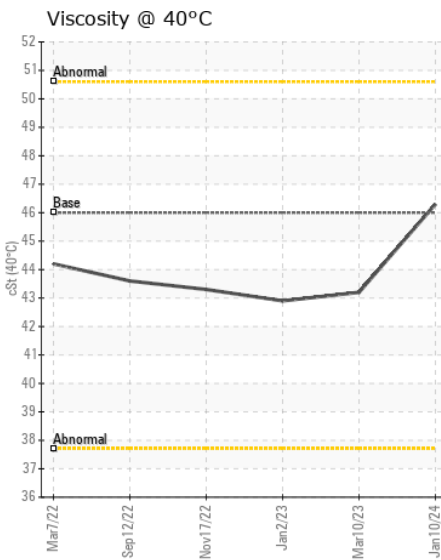
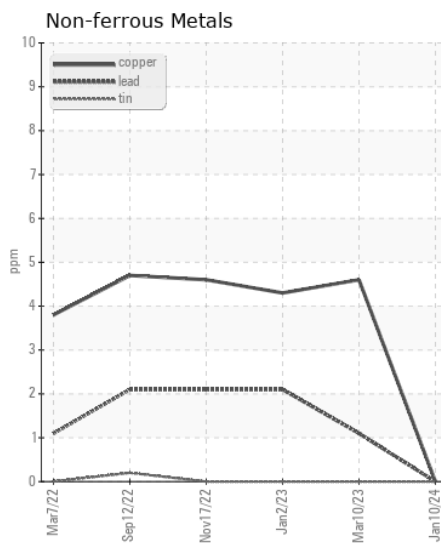
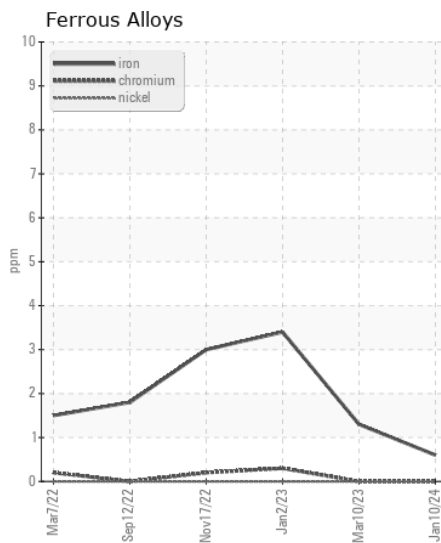
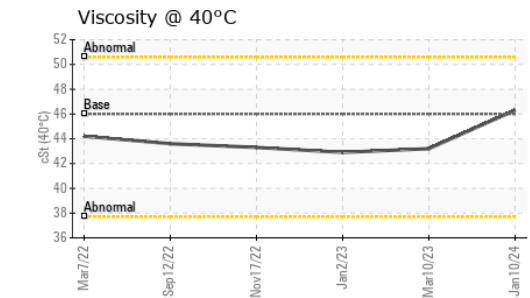
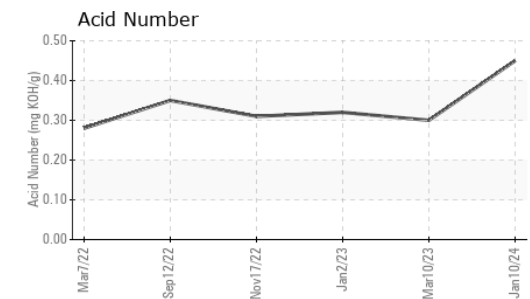
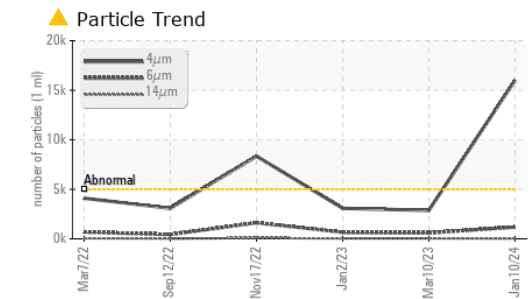
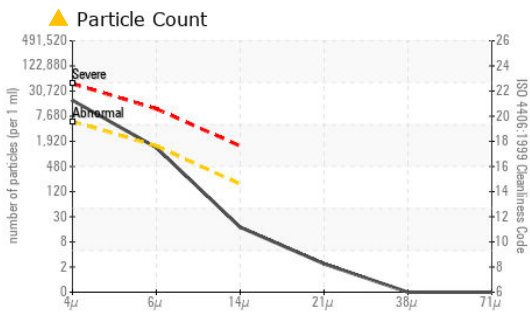
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<1	9	8
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 16011	2869	3079
Particles >6µm		ASTM D7647	>1300	1189	601	657
Particles >14µm		ASTM D7647	>160	15	34	29
Particles >21µm		ASTM D7647	>40	2	7	6
Particles >38µm		ASTM D7647	>10	0	1	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 21/17/11	19/16/12	19/17/12
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	>0.2	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		0	1	1
Boron	ppm	ASTM D5185m	14	0	0	0
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	0	0	0
Manganese	ppm	ASTM D5185m	0.0	0	<1	0
Magnesium	ppm	ASTM D5185m	2.6	0	2	0
Calcium	ppm	ASTM D5185m	49	60	45	46
Phosphorus	ppm	ASTM D5185m	354	353	326	344
Zinc	ppm	ASTM D5185m	419	442	397	425
Sulfur	ppm	ASTM D5185m	3719	883	1367	1778
Acid Number (AN)	mg KOH/g	ASTM D8045		0.45	0.30	0.32
Visc @ 40°C	cSt	ASTM D445	46	46.3	43.2	42.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0006290 **Received** : 17 Jan 2024
Lab Number : 06062576 **Diagnosed** : 18 Jan 2024
Unique Number : 10833958 **Diagnostician** : Wes Davis
Test Package : CONST

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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