



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area
Ascendum Machinery 500HR CSA/Lemon Springs, NC
Machine Id
VOLVO L180H 2127 (S/N 5262)
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0006281	ASC0002617	VCP390311
Sample Date		Client Info		11 Jan 2024	16 Nov 2023	15 Dec 2022
Machine Age	hrs	Client Info		7444	7030	5511
Oil Age	hrs	Client Info		1444	3030	0
Filter Age	hrs	Client Info		1444	3030	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	N/A	Not Changd
Sample Status				SEVERE	SEVERE	ABNORMAL

WEAR

All component wear rates are normal.

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

CONTAMINATION

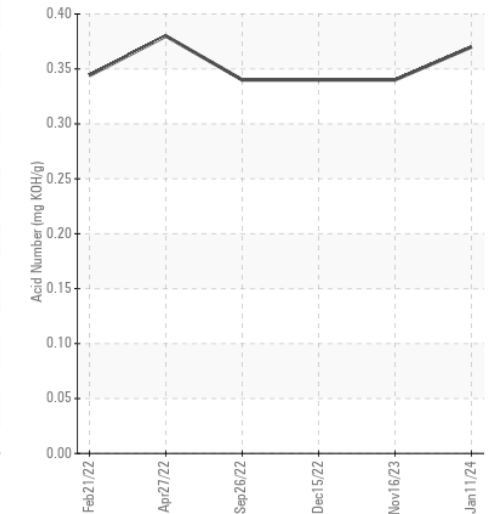
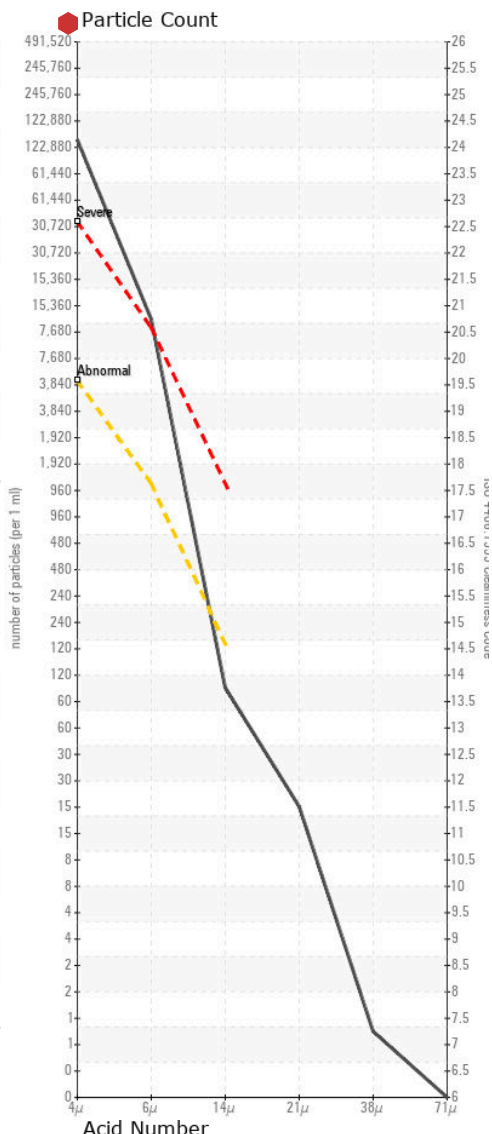
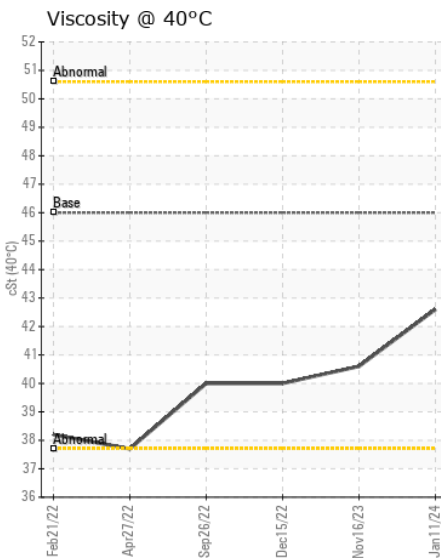
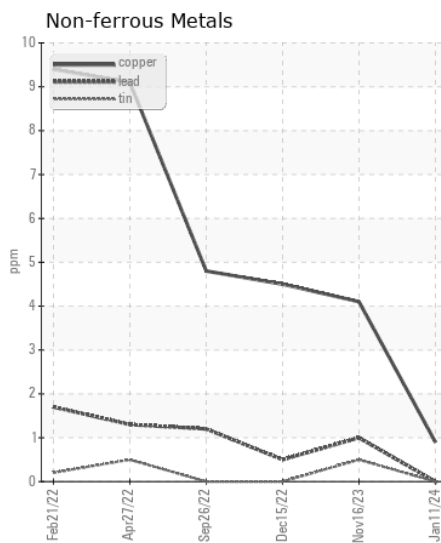
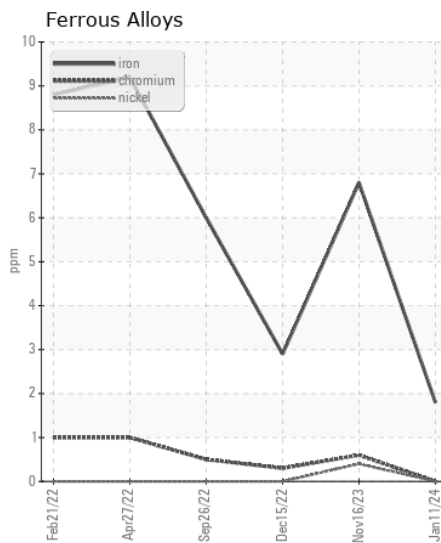
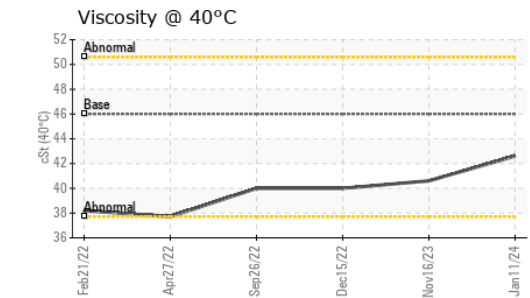
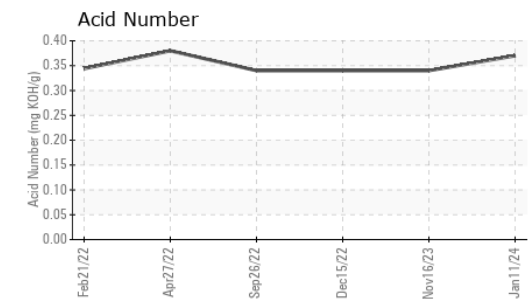
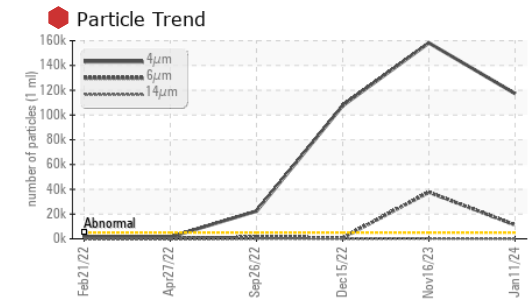
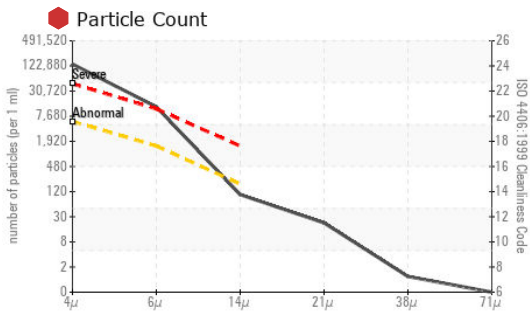
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	4	7	5
Potassium	ppm	ASTM D5185m	>20	<1	3	0
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	117296	158237	107515
Particles >6µm		ASTM D7647	>1300	11157	37645	798
Particles >14µm		ASTM D7647	>160	90	243	10
Particles >21µm		ASTM D7647	>40	19	57	2
Particles >38µm		ASTM D7647	>10	1	2	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	24/21/14	24/22/15	24/17/10
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE	VLITE
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	0.2%

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		1	0	1
Boron	ppm	ASTM D5185m	14	2	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	0	<1	0
Magnesium	ppm	ASTM D5185m	2.6	9	4	<1
Calcium	ppm	ASTM D5185m	49	88	59	42
Phosphorus	ppm	ASTM D5185m	354	362	285	328
Zinc	ppm	ASTM D5185m	419	438	424	409
Sulfur	ppm	ASTM D5185m	3719	1175	1982	2307
Acid Number (AN)	mg KOH/g	ASTM D8045		0.37	0.34	0.34
Visc @ 40°C	cSt	ASTM D445	46	42.6	40.6	40.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0006281 **Received** : 17 Jan 2024
Lab Number : 06062574 **Diagnosed** : 18 Jan 2024
Unique Number : 10833956 **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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