



ASCENDUM

OIL ANALYSIS REPORT



Area
Ascendum Machinery
Machine Id
VOLVO EC350E 310863
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0001741	ASC0001332	VCP398638
Sample Date		Client Info		15 Jan 2024	11 Sep 2023	02 May 2023
Machine Age	hrs	Client Info		4726	4195	3480
Oil Age	hrs	Client Info		531	4195	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	Not Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	<1	▲ 29	4
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	1	0	<1
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>150	<1	22	13
Tin	ppm	ASTM D5185m	>10	0	0	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

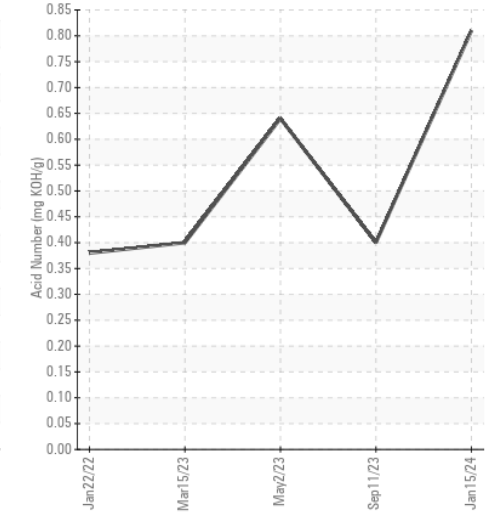
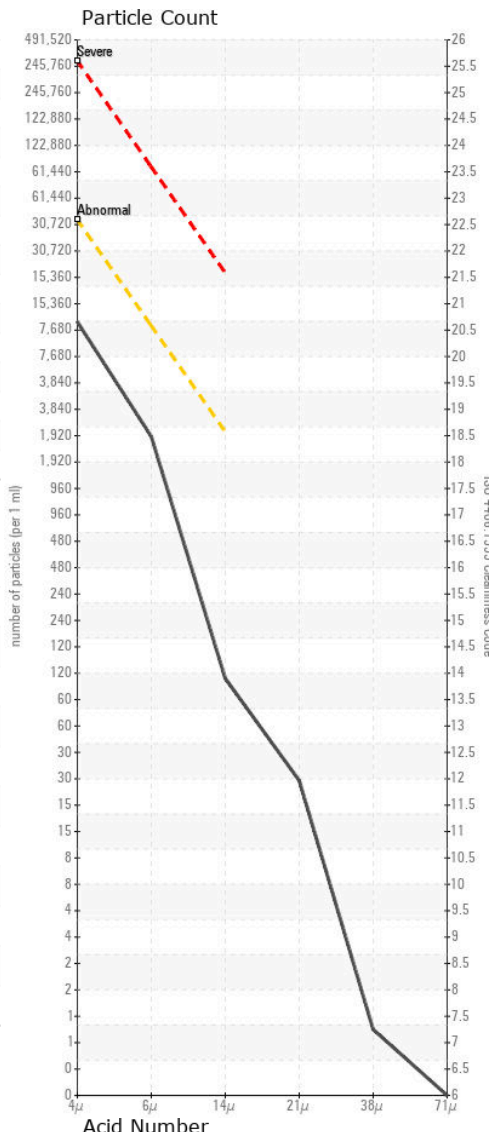
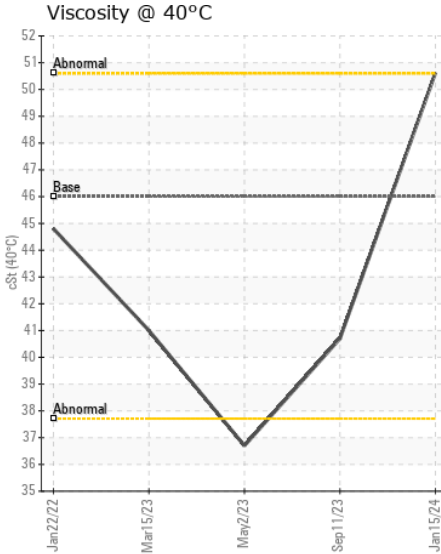
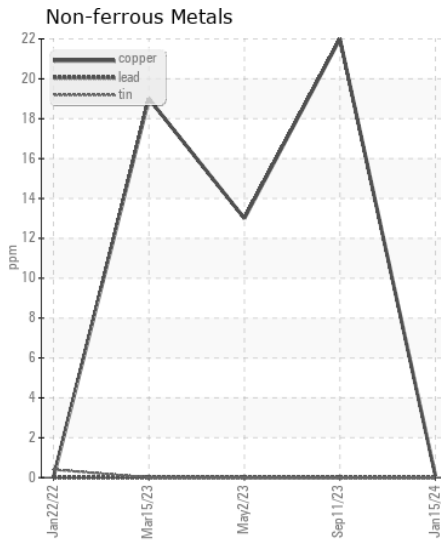
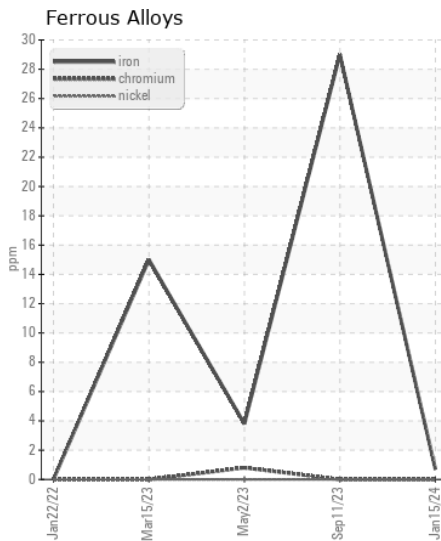
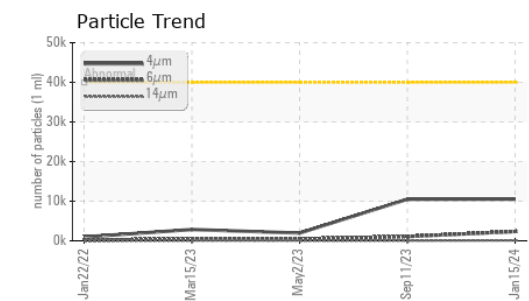
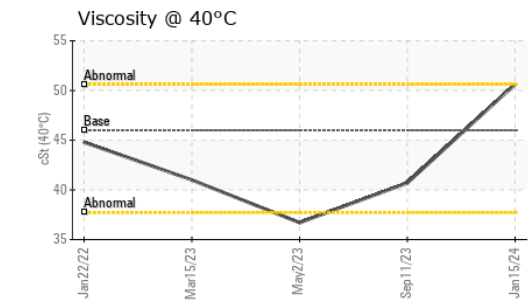
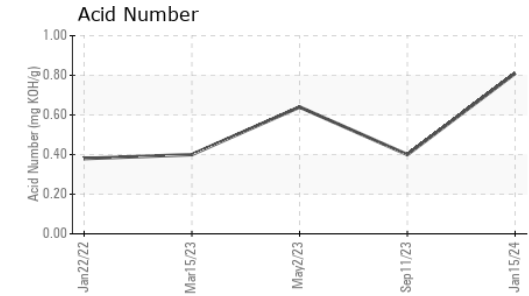
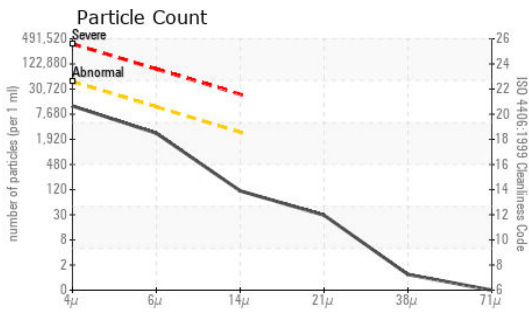
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	4	9	2
Potassium	ppm	ASTM D5185m	>20	<1	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>40000	10528	10498	1954
Particles >6µm		ASTM D7647	>10000	2348	1077	463
Particles >14µm		ASTM D7647	>2500	99	51	33
Particles >21µm		ASTM D7647	>640	26	10	7
Particles >38µm		ASTM D7647	>160	1	0	1
Particles >71µm		ASTM D7647	>40	0	0	0
Oil Cleanliness		ISO 4406 (c)	>22/20/18	21/18/14	21/17/13	18/16/12
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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		1	2	<1
Boron	ppm	ASTM D5185m	14	35	0	0
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	2	<1	<1
Manganese	ppm	ASTM D5185m	0.0	0	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	14	0	2
Calcium	ppm	ASTM D5185m	49	1207	64	388
Phosphorus	ppm	ASTM D5185m	354	563	380	456
Zinc	ppm	ASTM D5185m	419	713	437	527
Sulfur	ppm	ASTM D5185m	3719	2368	1752	1264
Acid Number (AN)	mg KOH/g	ASTM D8045		0.81	0.40	0.64
Visc @ 40°C	cSt	ASTM D445	46	50.62	40.7	36.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0001741 **Received** : 17 Jan 2024
Lab Number : 06062572 **Diagnosed** : 24 Jan 2024
Unique Number : 10833954 **Diagnostician** : Doug Bogart
Test Package : MOBCE

CAROLINA PRECISION GRADING
 7427 MATTHEWS MINT HILL ROAD
 CHARLOTTE, NC
 US 28227
 Contact: Service Manager

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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