



ASCENDUM

OIL ANALYSIS REPORT



Area
Ascendum Machinery
 Machine Id
VOLVO EC380E 314421
 Component
Hydraulic System
 Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

RECOMMENDATION

We advise that you check for the source of water entry. We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0001738	VCP0005197	---
Sample Date		Client Info		10 Jan 2024	28 Nov 2022	---
Machine Age	hrs	Client Info		2446	1731	---
Oil Age	hrs	Client Info		715	1731	---
Filter Age	hrs	Client Info		0	1731	---
Oil Changed		Client Info		Not Chngd	Changed	---
Filter Changed		Client Info		Not Chngd	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	5	5	---
Chromium	ppm	ASTM D5185m	>10	<1	1	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>20	0	<1	---
Lead	ppm	ASTM D5185m	>20	0	0	---
Copper	ppm	ASTM D5185m	>150	9	18	---
Tin	ppm	ASTM D5185m	>10	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

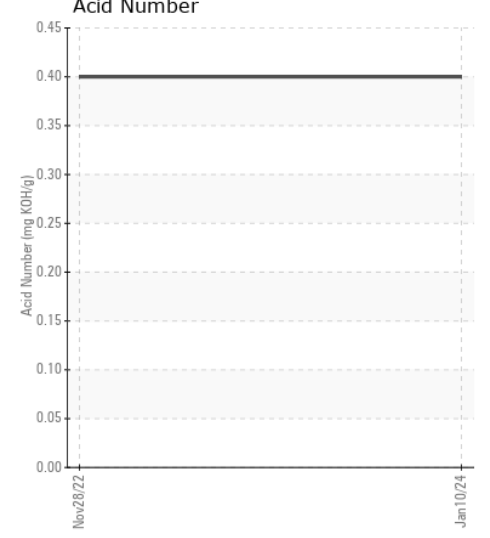
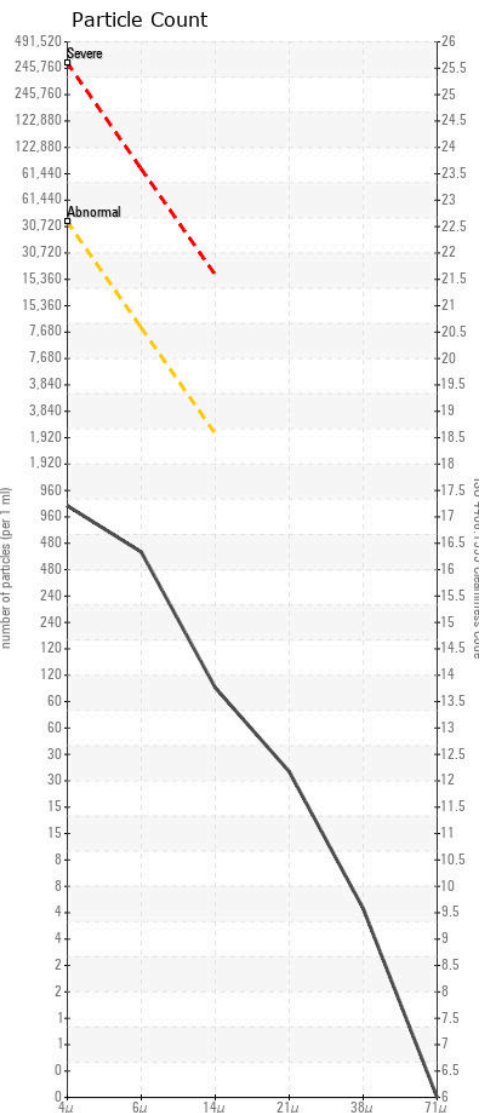
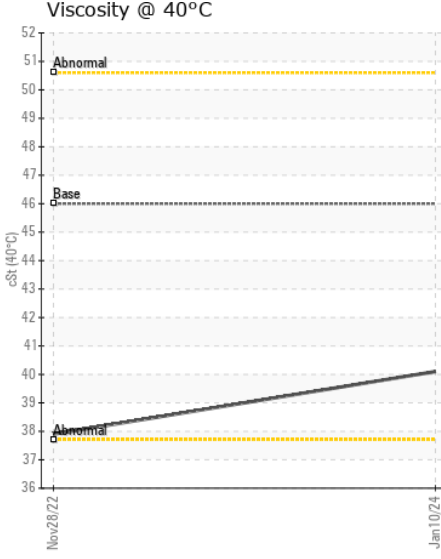
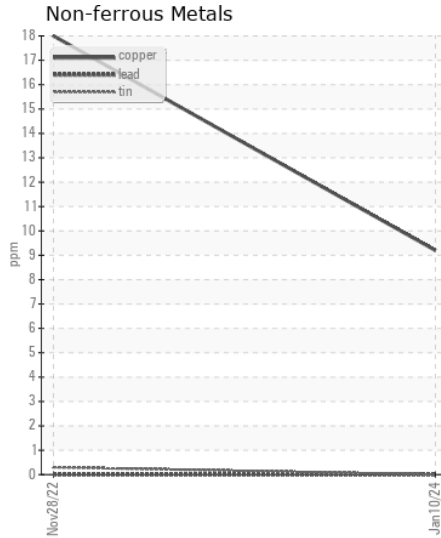
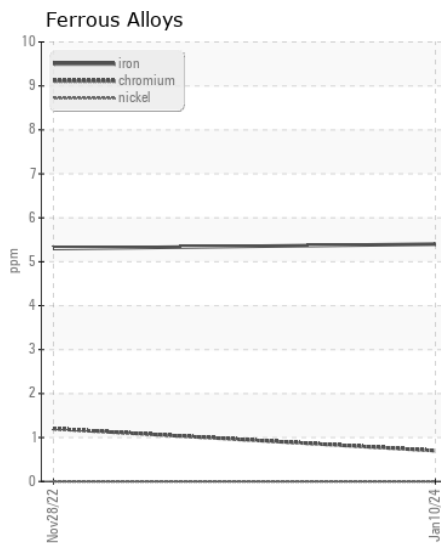
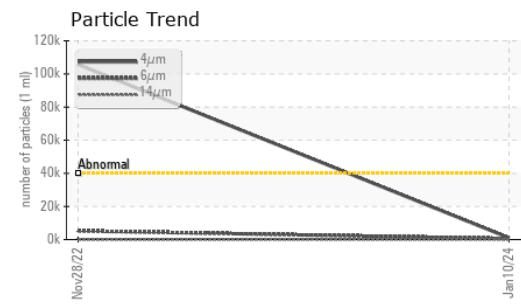
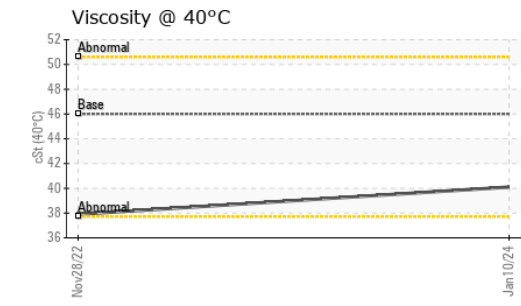
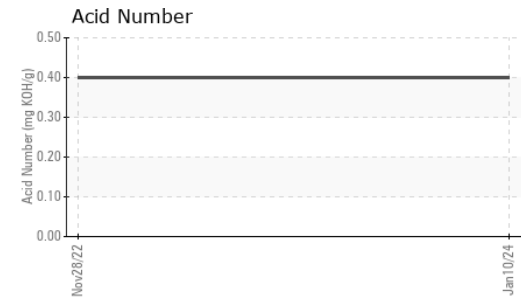
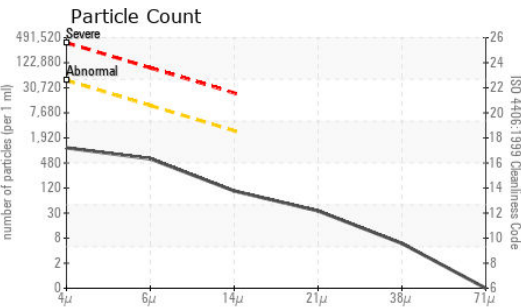
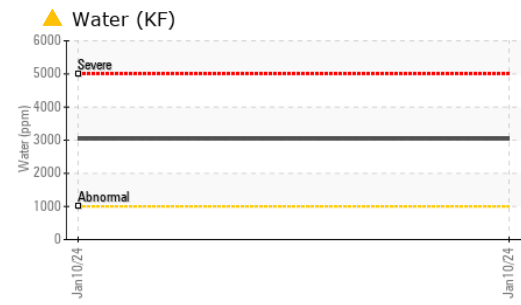
There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>50	5	9	---
Potassium	ppm	ASTM D5185m	>20	0	0	---
Water	%	ASTM D6304	>0.1	▲ 0.304	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ 3040	---	---
Particles >4µm		ASTM D7647	>40000	974	▲ 105661	---
Particles >6µm		ASTM D7647	>10000	531	5228	---
Particles >14µm		ASTM D7647	>2500	90	23	---
Particles >21µm		ASTM D7647	>640	30	8	---
Particles >38µm		ASTM D7647	>160	5	1	---
Particles >71µm		ASTM D7647	>40	0	0	---
Oil Cleanliness		ISO 4406 (c)	>22/20/18	17/16/14	▲ 24/20/12	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	0.2%	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	1	---
Boron	ppm	ASTM D5185m	14	12	1	---
Barium	ppm	ASTM D5185m	0.0	0	0	---
Molybdenum	ppm	ASTM D5185m	0.0	4	<1	---
Manganese	ppm	ASTM D5185m	0.0	0	0	---
Magnesium	ppm	ASTM D5185m	2.6	69	9	---
Calcium	ppm	ASTM D5185m	49	218	161	---
Phosphorus	ppm	ASTM D5185m	354	334	310	---
Zinc	ppm	ASTM D5185m	419	407	370	---
Sulfur	ppm	ASTM D5185m	3719	1726	2032	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.40	0.40	---
Visc @ 40°C	cSt	ASTM D445	46	40.1	37.9	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0001738 **Received** : 12 Jan 2024
Lab Number : 06059235 **Diagnosed** : 18 Jan 2024
Unique Number : 10830617 **Diagnostician** : Jonathan Hester
Test Package : MOBCE (Additional Tests: KF)

ENVIRONMENTAL HOLDINGS GROUP LLC
 4000 TRIANGLE LANE SUITE 160
 EXPORT, PA
 US 15632
 Contact: Service Manager

Certificate L2367
 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)

T:
F: