



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO L90F 68404
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0004782	VCP288248	---
Sample Date		Client Info		19 Apr 2024	07 Jan 2021	---
Machine Age	hrs	Client Info		20502	16633	---
Oil Age	hrs	Client Info		2000	0	---
Filter Age	hrs	Client Info		2000	0	---
Oil Changed		Client Info		Not Chngd	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	0	<1	---
Chromium	ppm	ASTM D5185m	>20	0	0	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	<1	---
Aluminum	ppm	ASTM D5185m	>20	<1	0	---
Lead	ppm	ASTM D5185m	>20	0	<1	---
Copper	ppm	ASTM D5185m	>150	0	<1	---
Tin	ppm	ASTM D5185m	>20	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

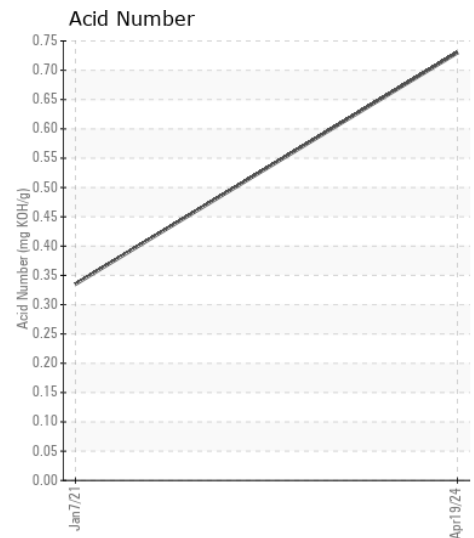
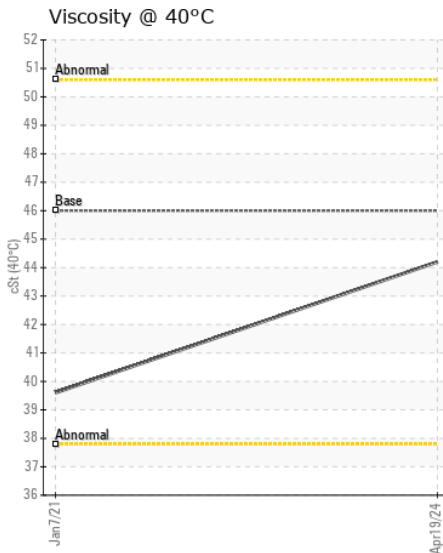
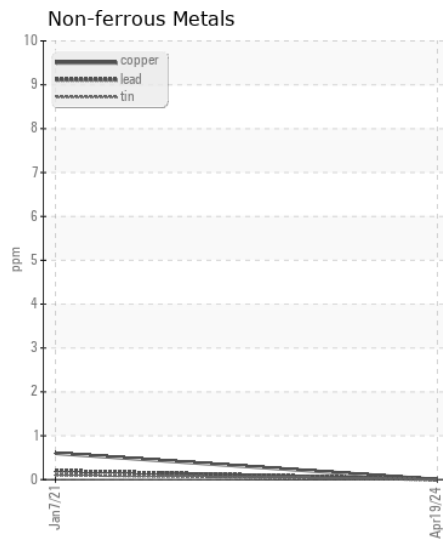
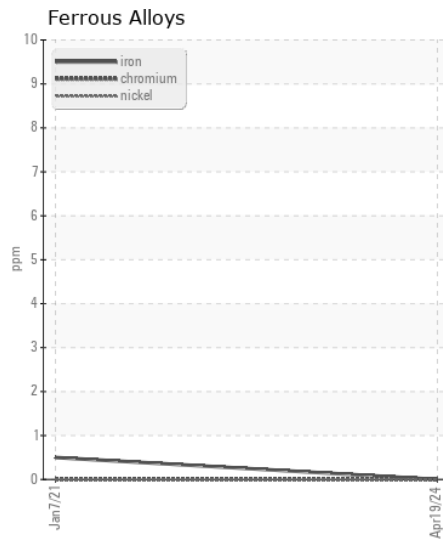
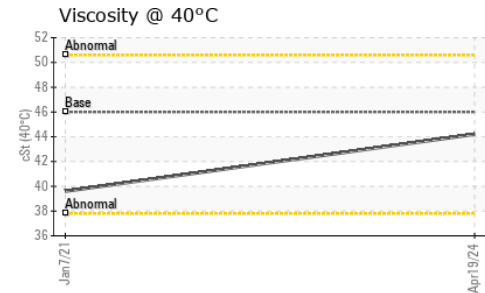
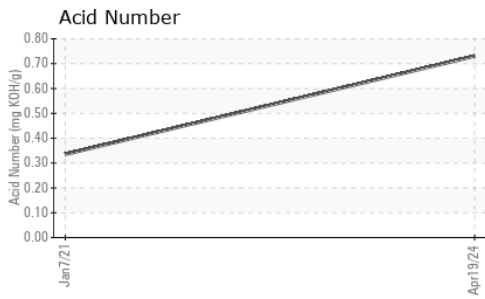
Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>20	13	▲ 85	---
Potassium	ppm	ASTM D5185m	>20	0	0	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647		---	2267	---
Particles >6µm		ASTM D7647	>2500	---	245	---
Particles >14µm		ASTM D7647	>80	---	17	---
Particles >21µm		ASTM D7647	>20	---	5	---
Particles >38µm		ASTM D7647	>4	---	0	---
Particles >71µm		ASTM D7647	>3	---	0	---
Oil Cleanliness		ISO 4406 (c)	>-/18/13	---	18/15/11	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	▲ MODER	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	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		2	<1	---
Boron	ppm	ASTM D5185m	14	11	3	---
Barium	ppm	ASTM D5185m	0.0	0	0	---
Molybdenum	ppm	ASTM D5185m	0.0	10	2	---
Manganese	ppm	ASTM D5185m	0.0	0	0	---
Magnesium	ppm	ASTM D5185m	2.6	74	5	---
Calcium	ppm	ASTM D5185m	49	208	81	---
Phosphorus	ppm	ASTM D5185m	354	276	281	---
Zinc	ppm	ASTM D5185m	419	348	352	---
Sulfur	ppm	ASTM D5185m	3719	1600	1391	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.73	0.335	---
Visc @ 40°C	cSt	ASTM D445	46	44.2	39.6	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0004782
Lab Number : 06161388
Unique Number : 10996811
Test Package : CONST

Received : 26 Apr 2024
Tested : 29 Apr 2024
Diagnosed : 29 Apr 2024 - Don Baldrige

365 - ASCENDUM MACHINERY INC - SAVANNAH
 54 MEDLINE DR
 RICHMOND HILL, GA
 US 31324
 Contact: JESSE WILSON
 jesse.wilson@ascendummachinery.com

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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