



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area

TMR-Tampa Port

Machine Id

579182 VOLVO L110F 61672

Component

Hydraulic System

Fluid

VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0016991	DJJ0005166	DJJ0017027
Sample Date		Client Info		13 May 2024	04 Dec 2023	09 Jan 2023
Machine Age	hrs	Client Info		12212	7850	5036
Oil Age	hrs	Client Info		0	500	2000
Filter Age	hrs	Client Info		0	1000	1000
Oil Changed		Client Info		N/A	Not Changd	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				ATTENTION	ATTENTION	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<1	0	4
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	0	0
Lead	ppm	ASTM D5185m	>20	<1	0	0
Copper	ppm	ASTM D5185m	>150	0	0	<1
Tin	ppm	ASTM D5185m	>20	<1	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

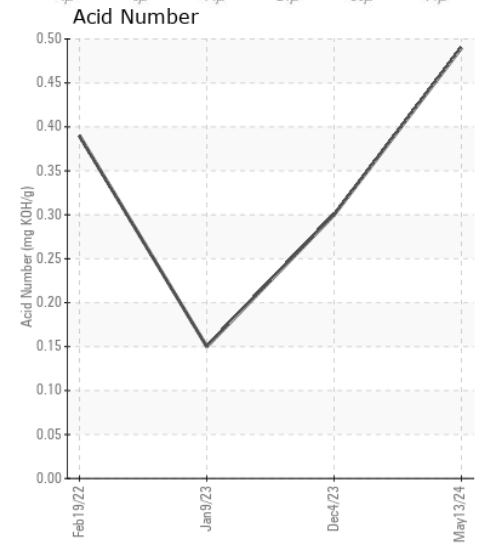
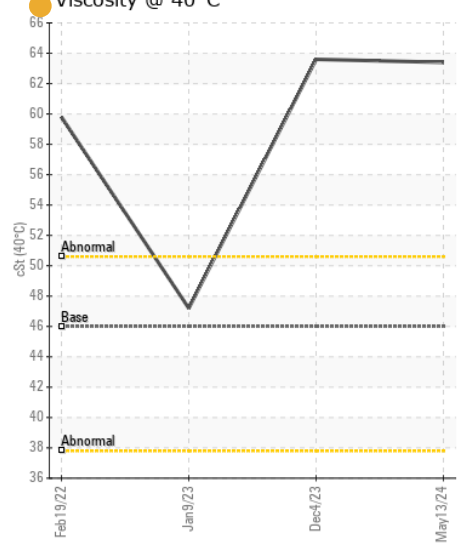
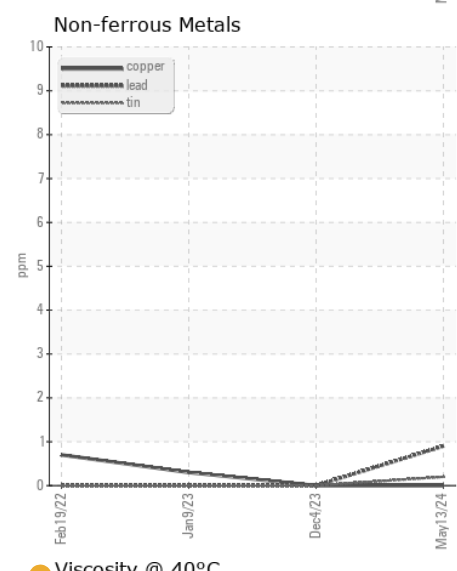
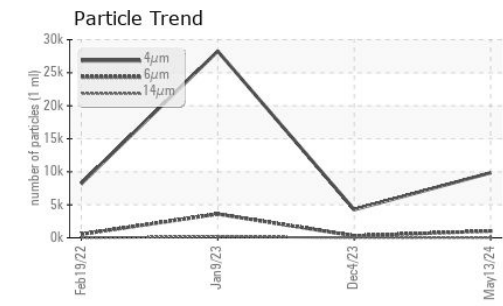
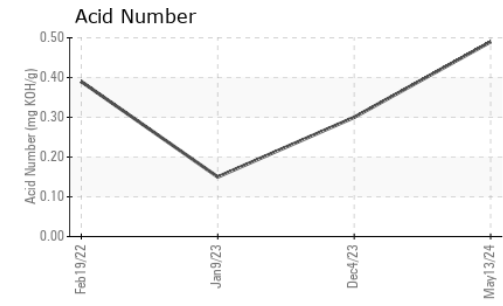
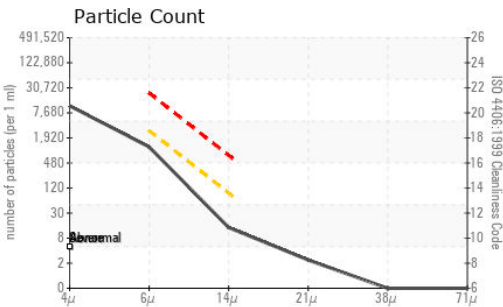
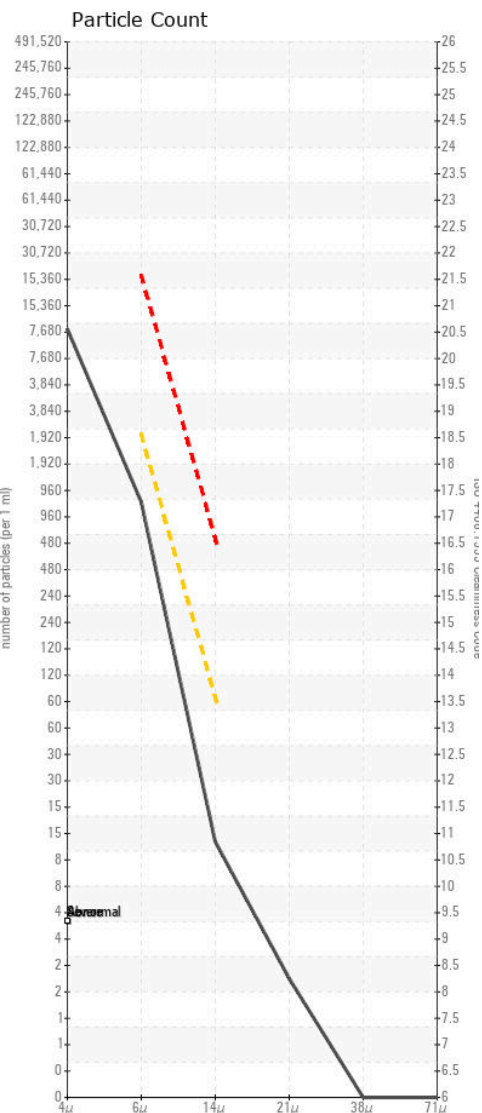
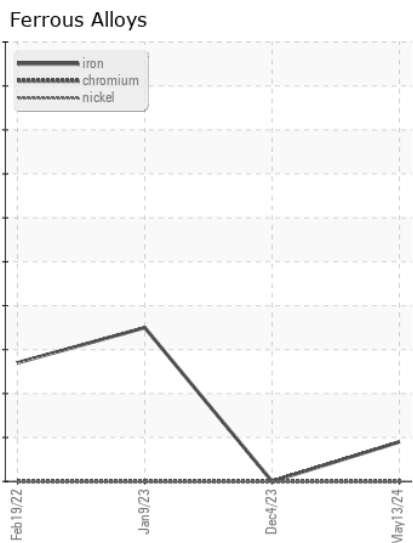
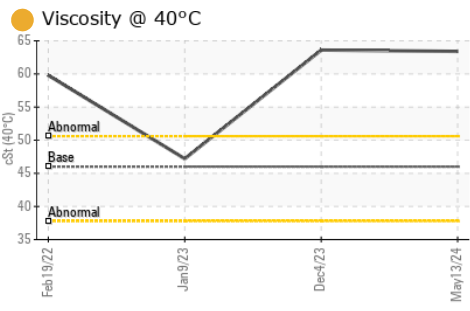
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	1	<1	1
Potassium	ppm	ASTM D5185m	>20	0	1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		9855	4266	28252
Particles >6µm		ASTM D7647	>2500	1021	301	▲ 3602
Particles >14µm		ASTM D7647	>80	12	17	▲ 165
Particles >21µm		ASTM D7647	>20	2	4	▲ 39
Particles >38µm		ASTM D7647	>4	0	0	2
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	20/17/11	19/15/11	▲ 22/19/15
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

Viscosity of sample indicates oil is within ISO 68 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		<1	1	0
Boron	ppm	ASTM D5185m	14	4	6	0
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	4	5	<1
Manganese	ppm	ASTM D5185m	0.0	<1	<1	0
Magnesium	ppm	ASTM D5185m	2.6	25	30	8
Calcium	ppm	ASTM D5185m	49	85	70	30
Phosphorus	ppm	ASTM D5185m	354	367	330	511
Zinc	ppm	ASTM D5185m	419	439	435	75
Sulfur	ppm	ASTM D5185m	3719	994	938	1504
Acid Number (AN)	mg KOH/g	ASTM D8045		0.49	0.30	0.15
Visc @ 40°C	cSt	ASTM D445	46	63.4	63.6	47.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0016991 **Received** : 21 May 2024
Lab Number : 06186067 **Tested** : 22 May 2024
Unique Number : 11042819 **Diagnosed** : 23 May 2024 - Don Baldrige
Test Package : CONST

TRADEMARK METALS RECYCLING - SUTTON
 5220 DOVER STREET
 TAMPA, FL
 US 33619
 Contact: RYAN BOWDEN

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)