



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area
AMR-12th Street
Machine Id
438153 VOLVO L180H 4787
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (39 GAL)

RECOMMENDATION

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0016937	DJJ0016948	DJJ0012281
Sample Date		Client Info		02 Jan 2024	05 Jul 2023	13 Jan 2023
Machine Age	hrs	Client Info		11028	10517	9993
Oil Age	hrs	Client Info		0	0	2000
Filter Age	hrs	Client Info		0	0	2000
Oil Changed		Client Info		Not Changed	Not Changed	Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				ABNORMAL	ATTENTION	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	5	3	3
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	<1	<1
Lead	ppm	ASTM D5185m	>20	<1	<1	<1
Copper	ppm	ASTM D5185m	>20	1	<1	<1
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

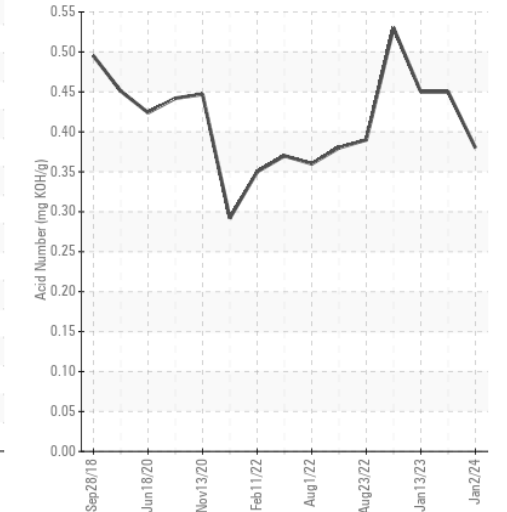
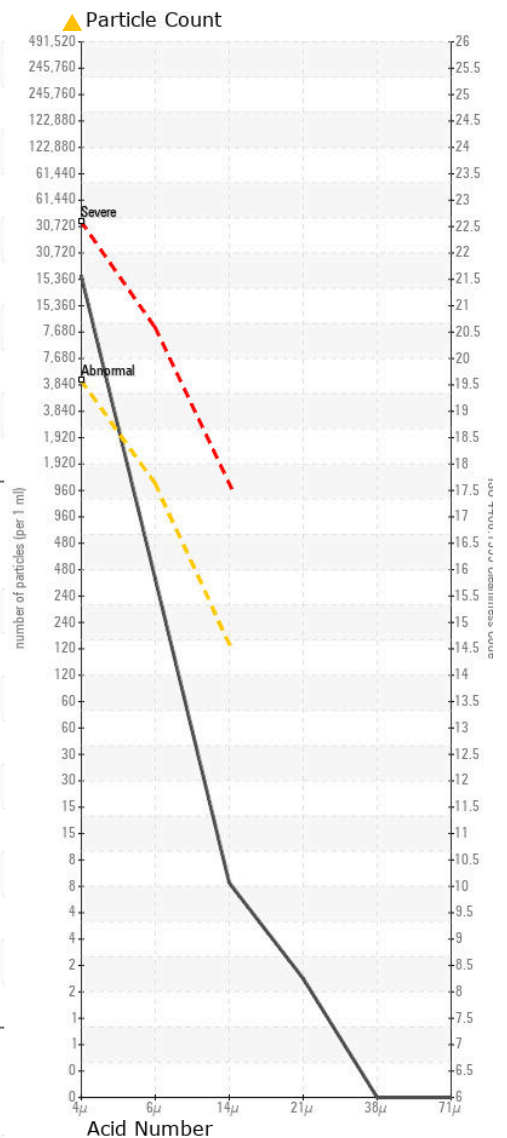
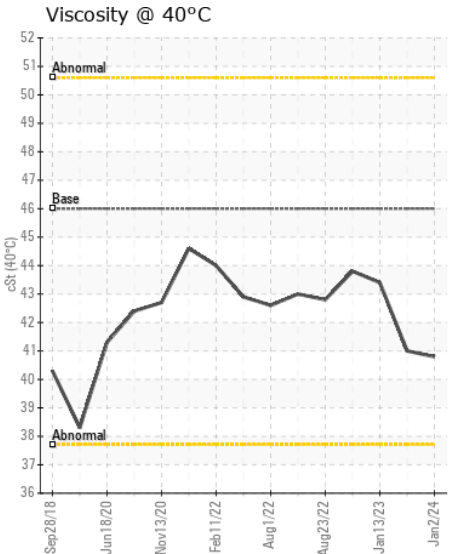
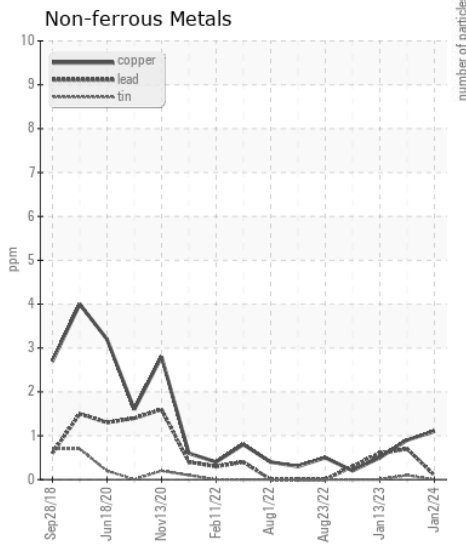
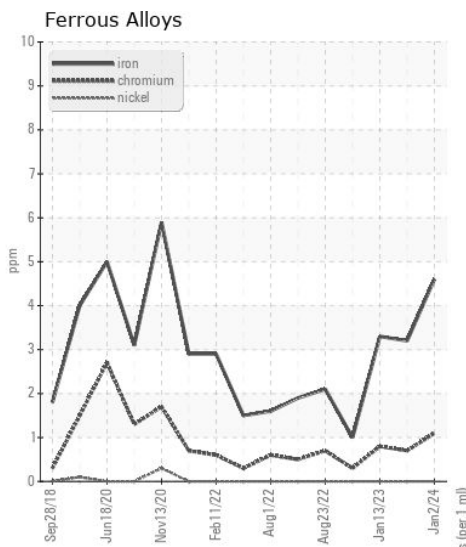
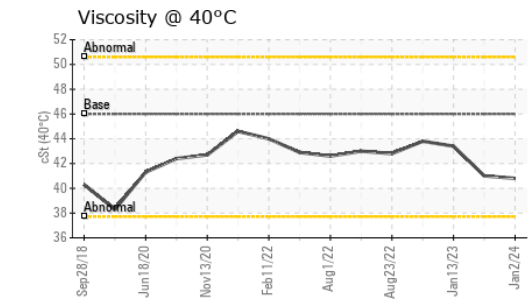
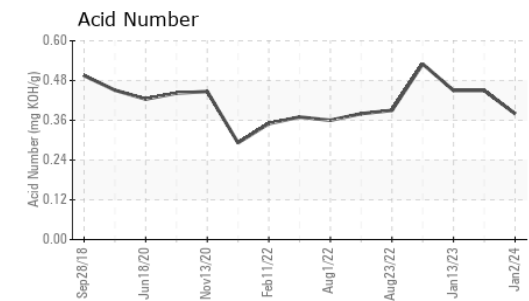
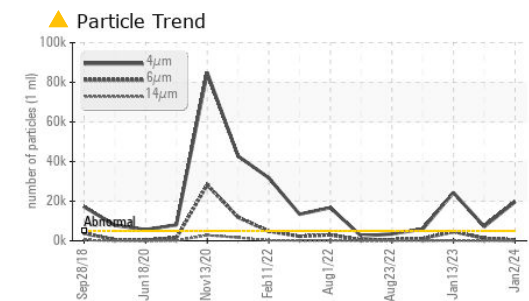
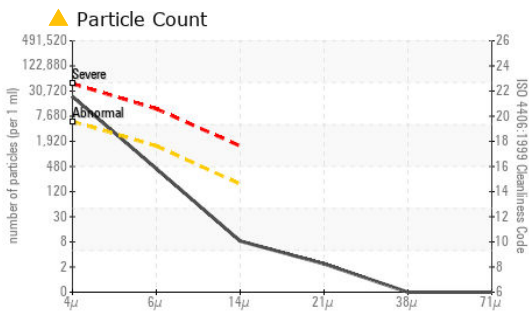
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	2	1	2
Potassium	ppm	ASTM D5185m	>20	1	1	1
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 19710	▲ 7198	▲ 24290
Particles >6µm		ASTM D7647	>1300	374	1289	▲ 4621
Particles >14µm		ASTM D7647	>160	7	77	153
Particles >21µm		ASTM D7647	>40	2	23	33
Particles >38µm		ASTM D7647	>10	0	0	2
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 21/16/10	▲ 20/17/13	▲ 22/19/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
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	NEG

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		0	2	0
Boron	ppm	ASTM D5185m	14	0	0	0
Barium	ppm	ASTM D5185m	0.0	0	0	1
Molybdenum	ppm	ASTM D5185m	0.0	<1	<1	<1
Manganese	ppm	ASTM D5185m	0.0	0	<1	0
Magnesium	ppm	ASTM D5185m	2.6	2	0	2
Calcium	ppm	ASTM D5185m	49	80	82	141
Phosphorus	ppm	ASTM D5185m	354	365	356	357
Zinc	ppm	ASTM D5185m	419	429	442	448
Sulfur	ppm	ASTM D5185m	3719	882	1058	1057
Acid Number (AN)	mg KOH/g	ASTM D8045		0.38	0.45	0.45
Visc @ 40°C	cSt	ASTM D445	46	40.8	41.0	43.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0016937
Lab Number : 06058715
Unique Number : 10830097
Test Package : CONST

ADVANTAGE METALS RECYCLING - 12 STREET
 1153 S. 12TH STREET
 KANSAS CITY, KS
 US 66105
 Contact: JOHN PEEK
 john.peek@advantagerecycling.com
 T: (660)424-9134
 F: (913)621-2766

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)