



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area

Ascendum Machinery

Machine Id

VOLVO L180H 5674

Component

Hydraulic System

Fluid

VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0000550	ASC0009557	ASC0007637
Sample Date		Client Info		16 Jul 2024	24 May 2024	18 Mar 2024
Machine Age	hrs	Client Info		2086	1488	997
Oil Age	hrs	Client Info		2086	1488	997
Filter Age	hrs	Client Info		0	0	997
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Not Changed	Not Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<1	0	1
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>20	4	0	0
Lead	ppm	ASTM D5185m	>20	1	<1	<1
Copper	ppm	ASTM D5185m	>20	3	2	3
Tin	ppm	ASTM D5185m	>20	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

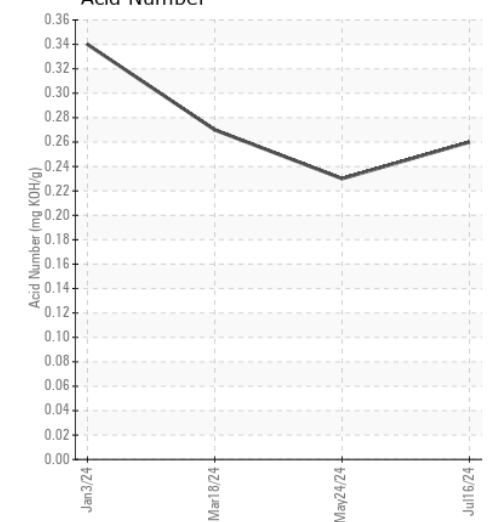
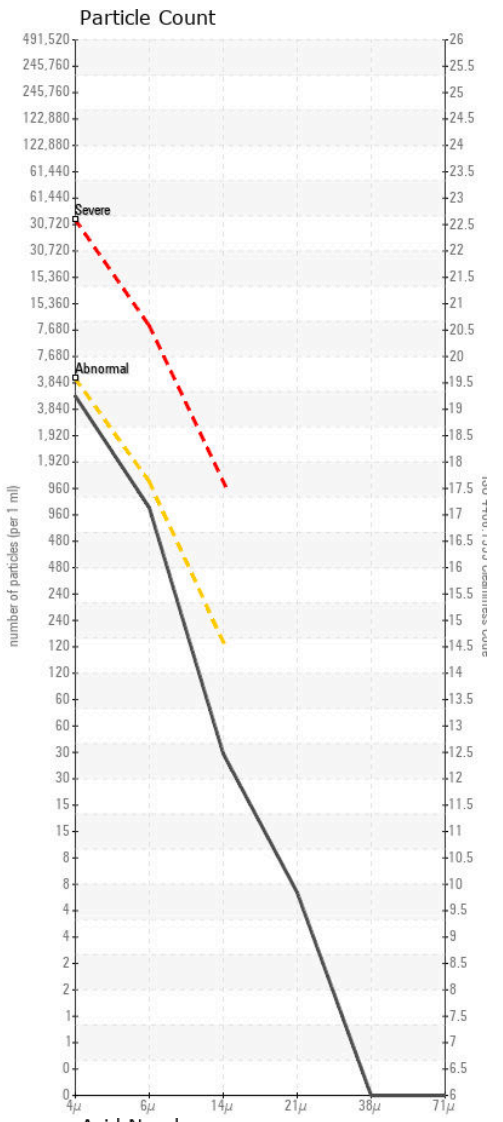
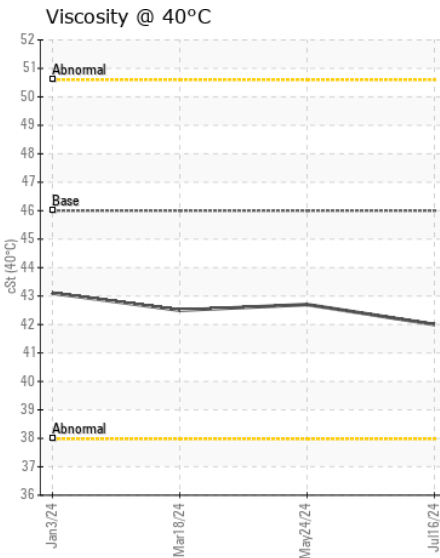
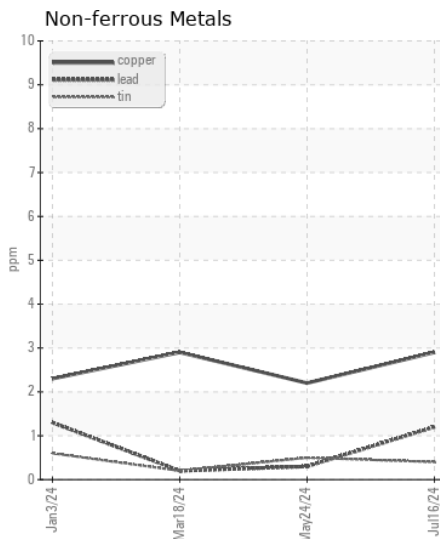
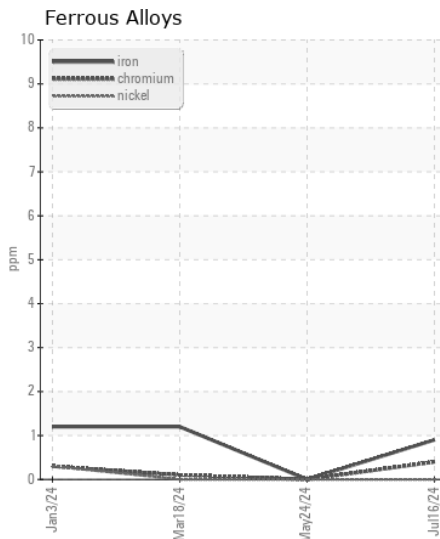
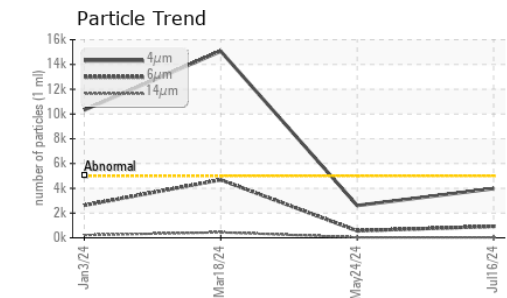
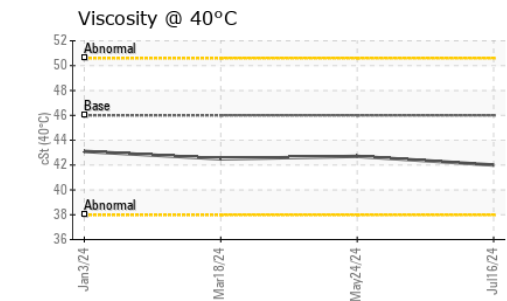
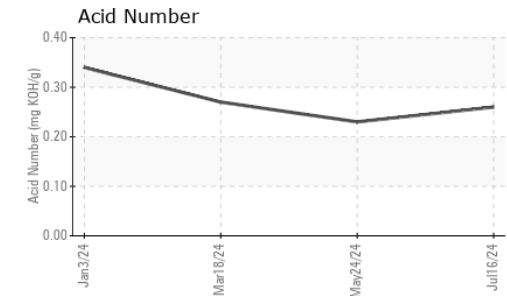
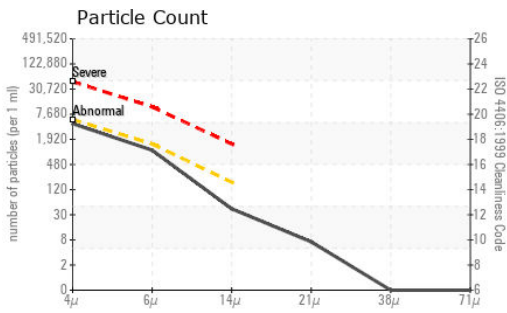
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<1	1	1
Potassium	ppm	ASTM D5185m	>20	1	1	0
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	3979	2606	▲ 15068
Particles >6µm		ASTM D7647	>1300	925	568	▲ 4682
Particles >14µm		ASTM D7647	>160	37	37	▲ 442
Particles >21µm		ASTM D7647	>40	6	10	▲ 131
Particles >38µm		ASTM D7647	>10	0	1	10
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/17/12	19/16/12	▲ 21/19/16
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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 condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	1	1
Boron	ppm	ASTM D5185m	14	0	0	0
Barium	ppm	ASTM D5185m	0.0	0	<1	0
Molybdenum	ppm	ASTM D5185m	0.0	<1	0	<1
Manganese	ppm	ASTM D5185m	0.0	0	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	<1	0	0
Calcium	ppm	ASTM D5185m	49	49	56	52
Phosphorus	ppm	ASTM D5185m	354	300	355	321
Zinc	ppm	ASTM D5185m	419	443	444	433
Sulfur	ppm	ASTM D5185m	3719	1353	1559	1482
Acid Number (AN)	mg KOH/g	ASTM D8045		0.26	0.23	0.27
Visc @ 40°C	cSt	ASTM D445	46	42.0	42.7	42.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : ASC0000550
 Lab Number : 06240248
 Unique Number : 11129082
 Test Package : MOBCE

Received : 18 Jul 2024
 Tested : 19 Jul 2024
 Diagnosed : 19 Jul 2024 - Wes Davis

METAL RECYCLING SERVICES - MONROE
 P.O. BOX 812
 MONROE, NC
 US 28111
 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)

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