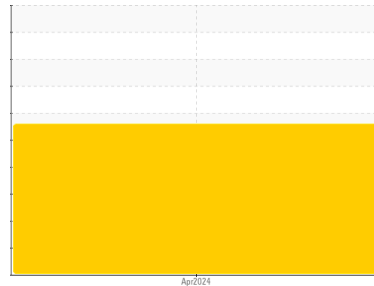


PROBLEM SUMMARY

Sample Rating Trend

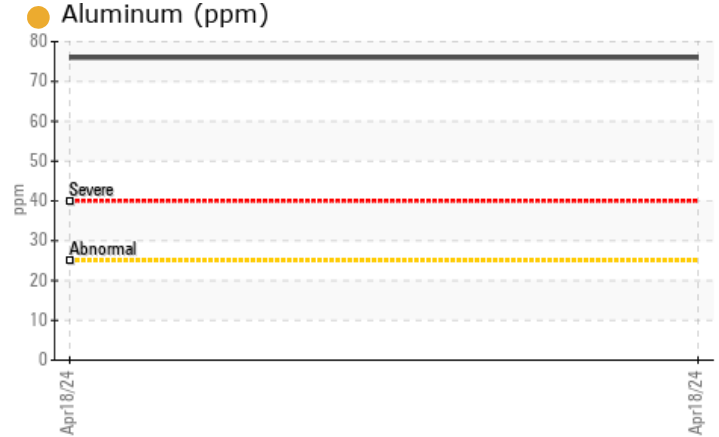
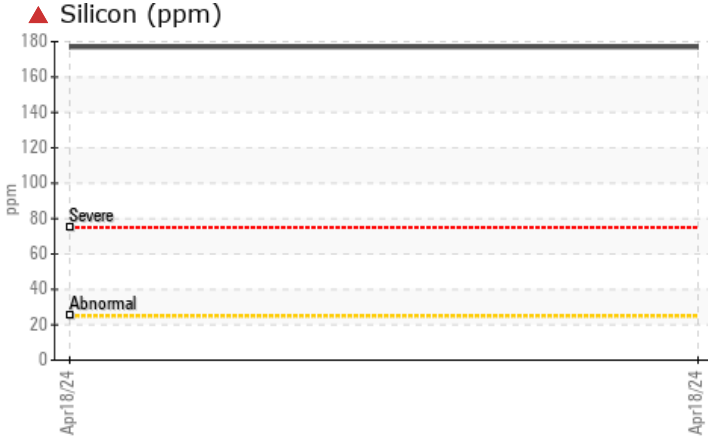


DIRT



Machine Id
VOLVO A30G 752477
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status	SEVERE	---	---
Silicon	▲ 177	---	---

Customer Id: WILCHA
 Sample No.: ML0001406
 Lab Number: 06160058
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Sean Felton +1 919-379-4092
sfelton@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check the air filter, air induction system, and any areas where dirt may enter the component.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
VOLVO A30G 752477
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

DIAGNOSIS

▲ Recommendation
 We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

● Wear
 All component wear rates are normal.

▲ Contamination
 Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition
 The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		ML0001406	---	---
Sample Date	Client Info		18 Apr 2024	---	---
Machine Age	hrs	Client Info	3475	---	---
Oil Age	hrs	Client Info	3475	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>6.0	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	99	---	---
Chromium	ppm	ASTM D5185m >20	2	---	---
Nickel	ppm	ASTM D5185m >2	5	---	---
Titanium	ppm	ASTM D5185m	4	---	---
Silver	ppm	ASTM D5185m >2	0	---	---
Aluminum	ppm	ASTM D5185m >25	76	---	---
Lead	ppm	ASTM D5185m >40	18	---	---
Copper	ppm	ASTM D5185m >330	137	---	---
Tin	ppm	ASTM D5185m >15	12	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	31	---	---
Barium	ppm	ASTM D5185m 10	<1	---	---
Molybdenum	ppm	ASTM D5185m 100	46	---	---
Manganese	ppm	ASTM D5185m	3	---	---
Magnesium	ppm	ASTM D5185m 450	558	---	---
Calcium	ppm	ASTM D5185m 3000	1840	---	---
Phosphorus	ppm	ASTM D5185m 1150	801	---	---
Zinc	ppm	ASTM D5185m 1350	941	---	---
Sulfur	ppm	ASTM D5185m 4250	2975	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	▲ 177	---	---
Sodium	ppm	ASTM D5185m >216	19	---	---
Potassium	ppm	ASTM D5185m >20	10	---	---

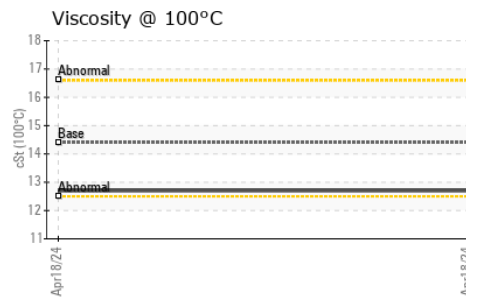
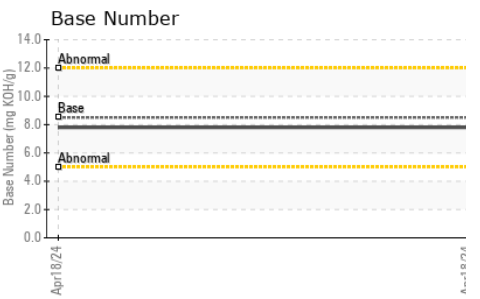
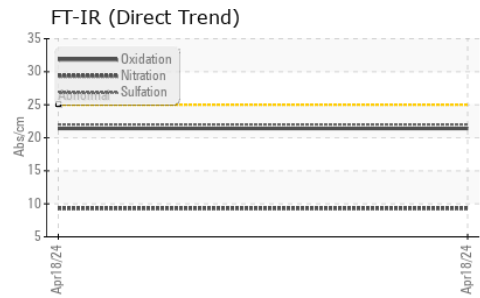
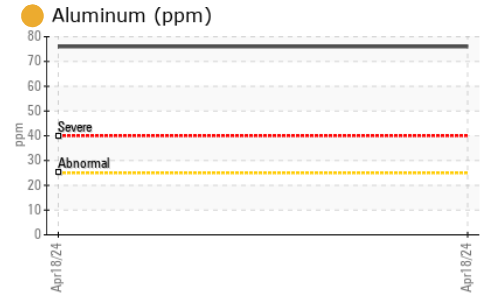
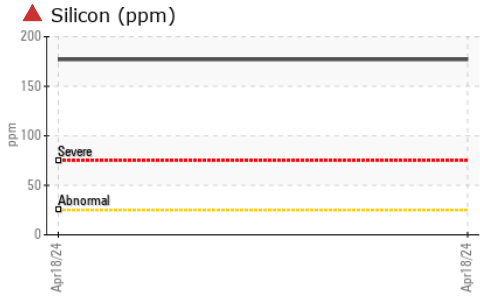
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624 >20	9.3	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.0	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	21.4	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	7.8	---	---

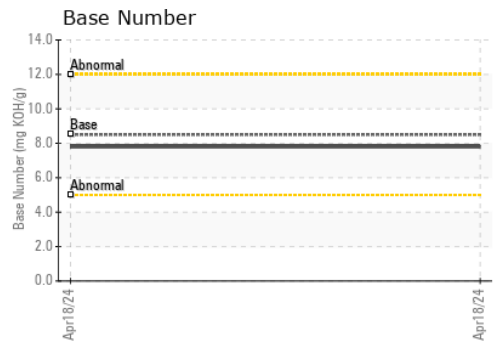
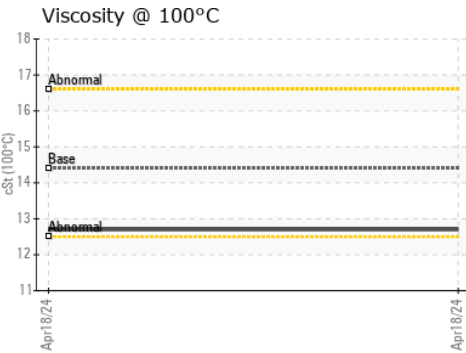
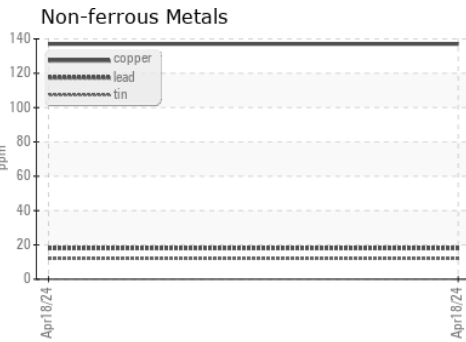
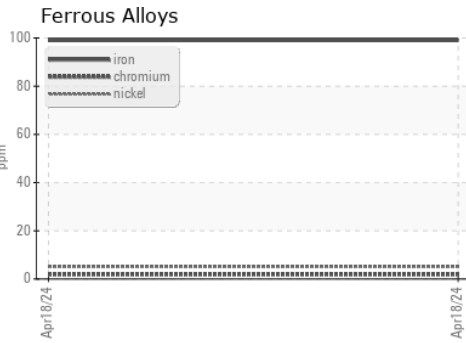
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	12.7	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0001406 **Received** : 25 Apr 2024
Lab Number : 06160058 **Tested** : 25 Apr 2024
Unique Number : 10995481 **Diagnosed** : 26 Apr 2024 - Sean Felton
Test Package : CONST (Additional Tests: TBN)

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 CHANTILLY, VA
 US 20153
 Contact: SERVICE MANAGER
 jimmy_elswick@wahazel.com
 T: (703)378-8300
 F:

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)