



VOLVO

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[SPM659962-10]
 Machine Id
VOLVO A45G 752124
 Component
Diesel Engine
 Fluid
{not provided} (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP421350	---	---
Sample Date		Client Info		17 Jan 2024	---	---
Machine Age	hrs	Client Info		579	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	18	---	---
Chromium	ppm	ASTM D5185m	>20	2	---	---
Nickel	ppm	ASTM D5185m	>2	4	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>2	<1	---	---
Aluminum	ppm	ASTM D5185m	>25	4	---	---
Lead	ppm	ASTM D5185m	>40	2	---	---
Copper	ppm	ASTM D5185m	>330	▲ 359	---	---
Tin	ppm	ASTM D5185m	>15	5	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material.

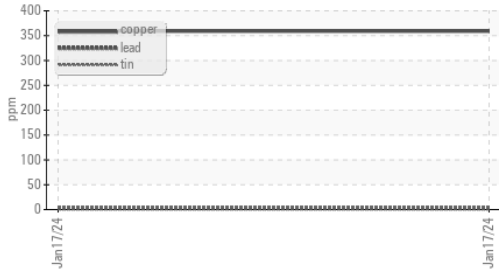
Silicon	ppm	ASTM D5185m	>25	24	---	---
Potassium	ppm	ASTM D5185m	>20	4	---	---
Fuel	%	ASTM D3524	>6.0	1.2	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	9.9	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.6	---	---
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	---	---

FLUID CONDITION

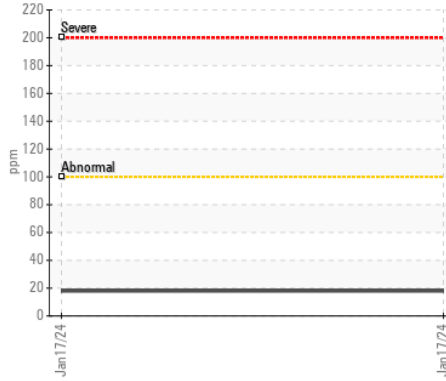
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		3	---	---
Boron	ppm	ASTM D5185m		26	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		82	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m		51	---	---
Calcium	ppm	ASTM D5185m		2059	---	---
Phosphorus	ppm	ASTM D5185m		1045	---	---
Zinc	ppm	ASTM D5185m		1176	---	---
Sulfur	ppm	ASTM D5185m		3705	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.5	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		5.3	---	---
Visc @ 100°C	cSt	ASTM D445		10.8	---	---

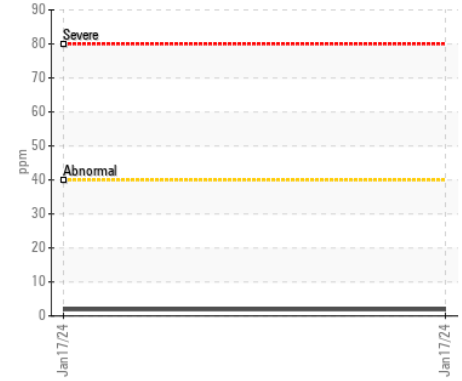
▲ Non-ferrous Metals



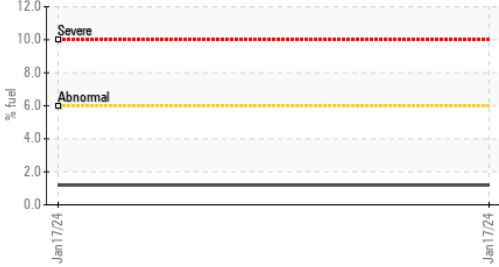
Iron (ppm)



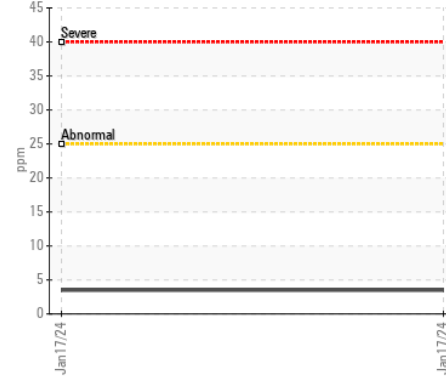
Lead (ppm)



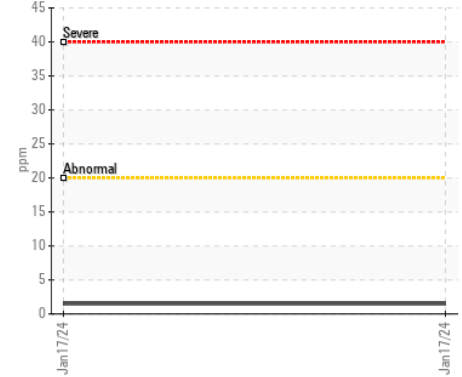
Fuel Dilution



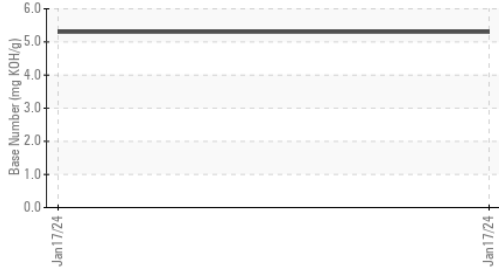
Aluminum (ppm)



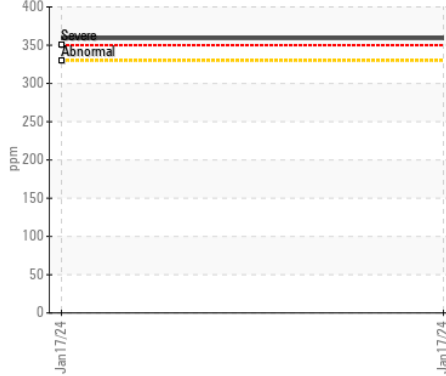
Chromium (ppm)



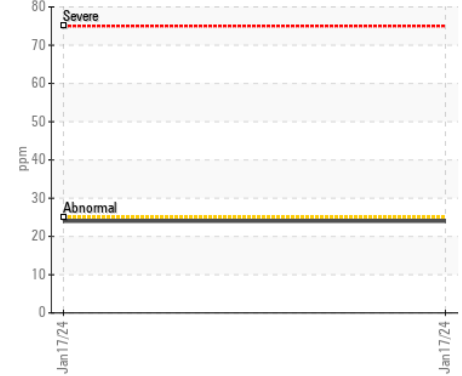
Base Number



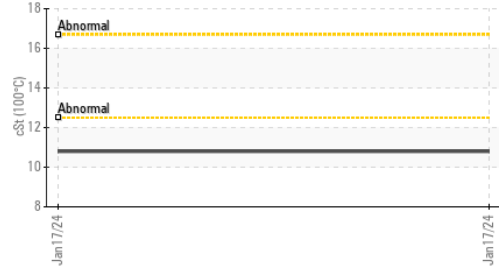
▲ Copper (ppm)



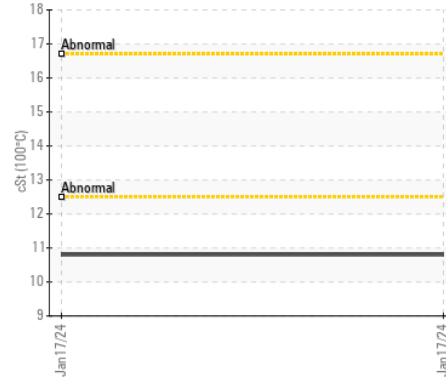
Silicon (ppm)



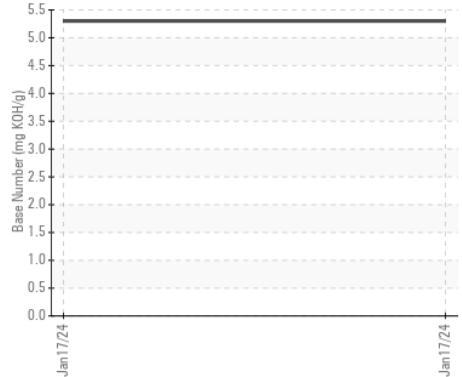
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP421350 **Received** : 31 Jan 2024
Lab Number : 06075482 **Diagnosed** : 02 Feb 2024
Unique Number : 10857573 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

ALTA EQUIPMENT COMPANY
 5151 DR MARTIN LUTHER KING BLVD
 FORT MYERS, FL
 US 33905
 Contact: TODD LARK
 tlark@altaequipfl.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)

T: (239)481-3302