



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
VOLVO VCP 433447 (S/N NO INFO ON SIF/BOTTLE)

Component
Diesel Engine

Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP433447	---	---
Sample Date		Client Info		29 Jan 2024	---	---
Machine Age	hrs	Client Info		4	---	---
Oil Age	hrs	Client Info		4	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ATTENTION	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	1	---	---
Chromium	ppm	ASTM D5185m	>20	0	---	---
Nickel	ppm	ASTM D5185m	>2	<1	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>25	3	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	2	---	---
Tin	ppm	ASTM D5185m	>15	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	9	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---
Fuel	%	ASTM D3524	>6.0	0.4	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0	---	---
Nitration	Abs/cm	*ASTM D7624	>20	3.5	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.7	---	---
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

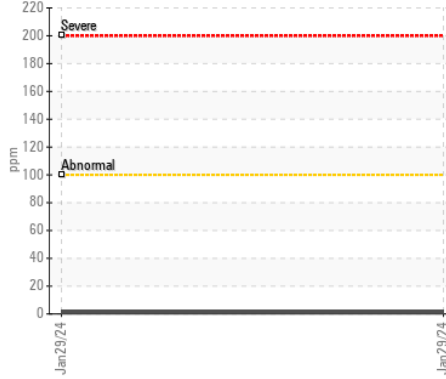
The oil viscosity is lower than normal. Additive levels indicate the addition of a different brand, or type of oil. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		1	---	---
Boron	ppm	ASTM D5185m	2.5	39	---	---
Barium	ppm	ASTM D5185m	0.0	1	---	---
Molybdenum	ppm	ASTM D5185m	0.7	17	---	---
Manganese	ppm	ASTM D5185m	0.0	2	---	---
Magnesium	ppm	ASTM D5185m	256	283	---	---
Calcium	ppm	ASTM D5185m	2057	▲ 764	---	---
Phosphorus	ppm	ASTM D5185m	935	▲ 620	---	---
Zinc	ppm	ASTM D5185m	1223	▲ 755	---	---
Sulfur	ppm	ASTM D5185m	4079	2697	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	5.9	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	▲ 10.2	---	---

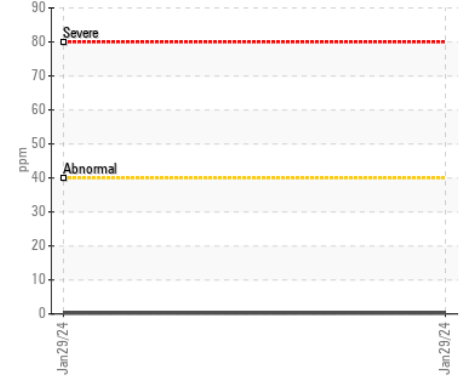
▲ Viscosity @ 100°C



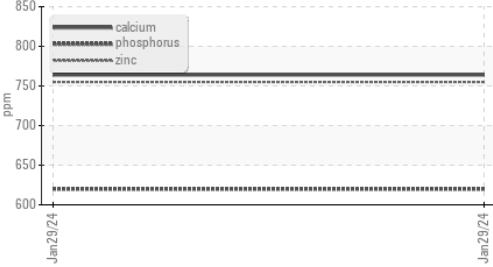
Iron (ppm)



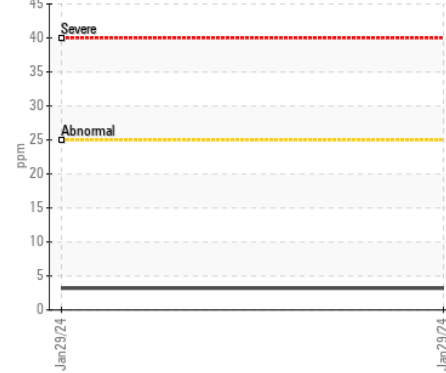
Lead (ppm)



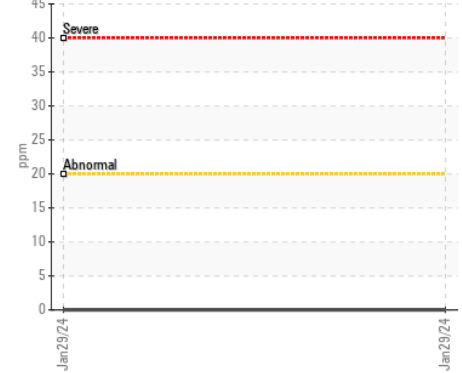
▲ Additives



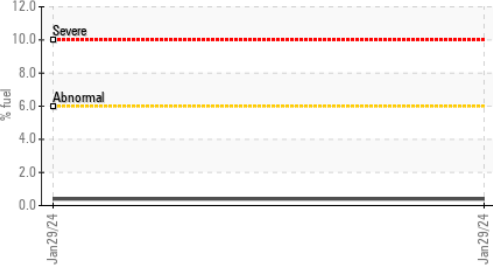
Aluminum (ppm)



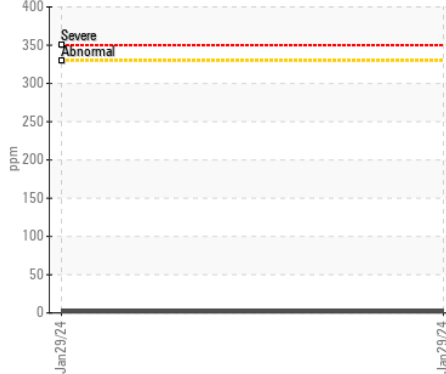
Chromium (ppm)



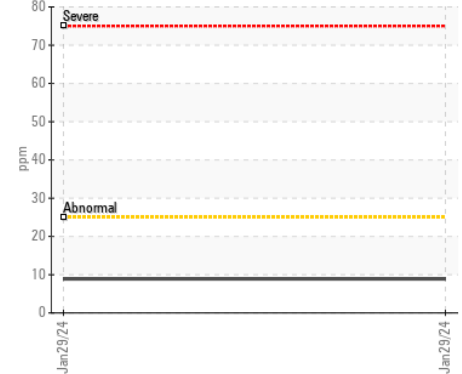
Fuel Dilution



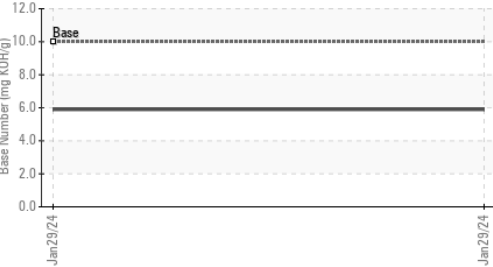
Copper (ppm)



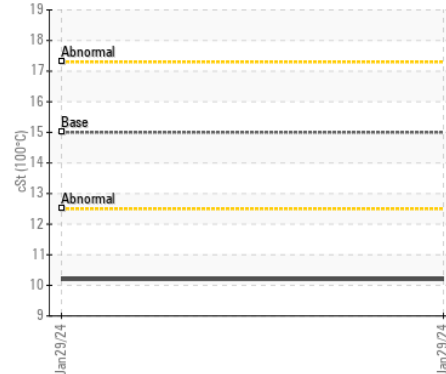
Silicon (ppm)



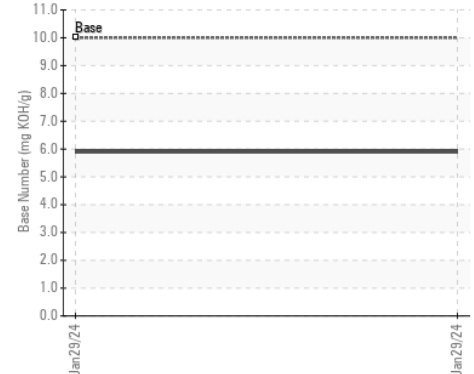
Base Number



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP433447 **Received** : 30 Jan 2024
Lab Number : 06074300 **Diagnosed** : 02 Feb 2024
Unique Number : 10856391 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

ALTA CONSTRUCTION EQUIPMENT
 613 E STEVENSON RD
 OTTAWA, IL
 US 61350
 Contact: ALEX MARCO
 ALEXANDER.MARCO@ALTG.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)

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F: