MOB I

VOLVO

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Area
[SWA491056 LGL RECYCL]
Machine Id
VOLVO L180H 5766
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.

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).

CONTAMINATION

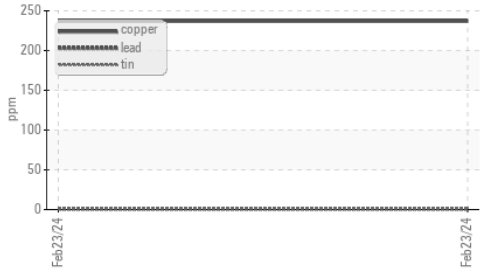
Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material.

FLUID CONDITION

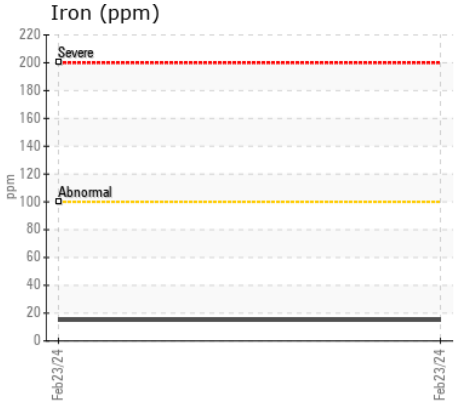
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP415881	---	---
Sample Date		Client Info		23 Feb 2024	---	---
Machine Age	hrs	Client Info		1020	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185m	>100	15	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m	>10	1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>10	2	---	---
Lead	ppm	ASTM D5185m	>20	<1	---	---
Copper	ppm	ASTM D5185m	>15	▲ 237	---	---
Tin	ppm	ASTM D5185m	>10	2	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>20	▲ 23	---	---
Potassium	ppm	ASTM D5185m	>20	6	---	---
Fuel	%	ASTM D3524	>6.0	0.3	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.2	---	---
Nitration	Abs/cm	*ASTM D7624	>20	8.7	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.5	---	---
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	>0.1	NEG	---	---
Sodium	ppm	ASTM D5185m		2	---	---
Boron	ppm	ASTM D5185m	2.5	73	---	---
Barium	ppm	ASTM D5185m	0.0	2	---	---
Molybdenum	ppm	ASTM D5185m	0.7	85	---	---
Manganese	ppm	ASTM D5185m	0.0	2	---	---
Magnesium	ppm	ASTM D5185m	256	82	---	---
Calcium	ppm	ASTM D5185m	2057	1837	---	---
Phosphorus	ppm	ASTM D5185m	935	919	---	---
Zinc	ppm	ASTM D5185m	1223	1137	---	---
Sulfur	ppm	ASTM D5185m	4079	3742	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	5.5	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	● 11.4	---	---

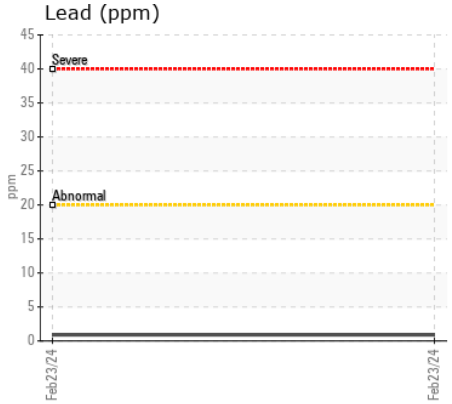
Non-ferrous Metals



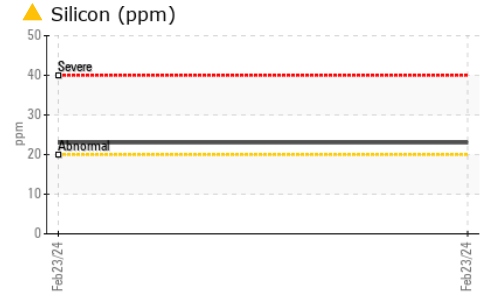
Iron (ppm)



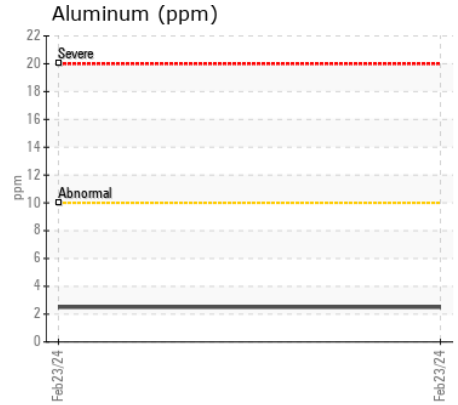
Lead (ppm)



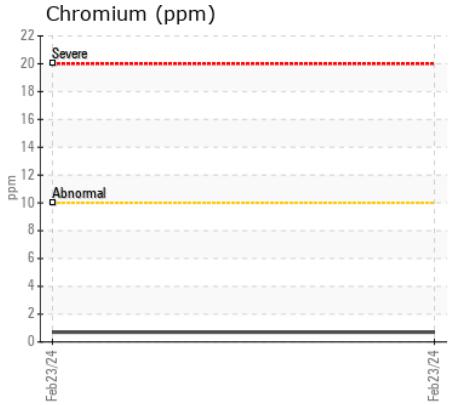
Silicon (ppm)



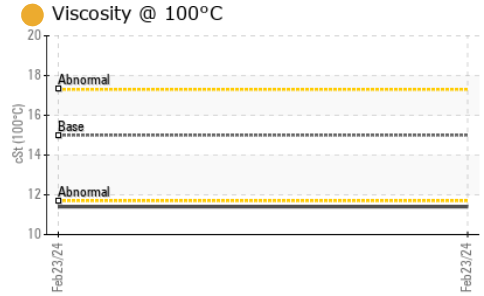
Aluminum (ppm)



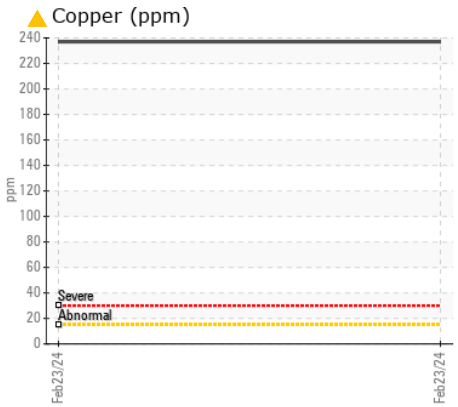
Chromium (ppm)



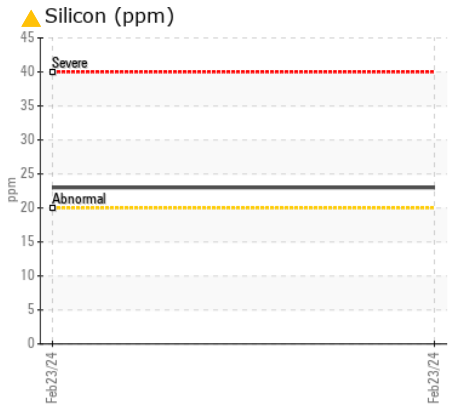
Viscosity @ 100°C



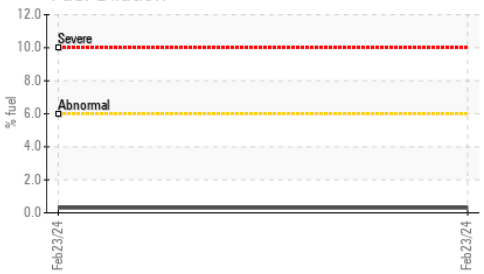
Copper (ppm)



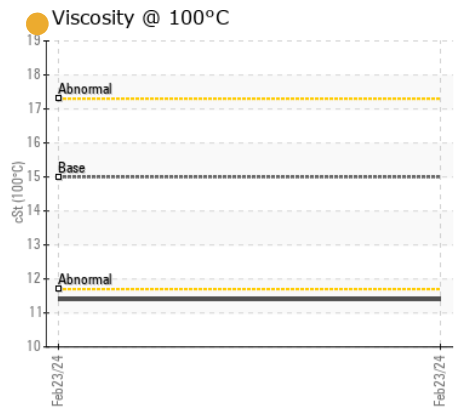
Silicon (ppm)



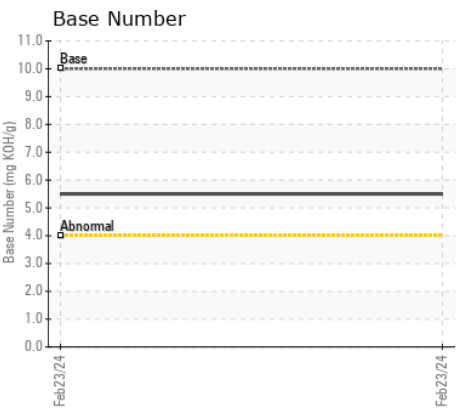
Fuel Dilution



Viscosity @ 100°C



Base Number



Base Number

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP415881
Lab Number : 06101439
Unique Number : 10899669
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 27 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 29 Feb 2024 - Jonathan Hester

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)

ALTA EQUIPMENT COMPANY
5210 REESE ROAD
DAVIE, FL
US 33314
Contact: N. FACEY
nfacey@altaequipfl.com
T: (954)581-4744
F: (954)583-0318