OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
RO 91038
Component
Front Diesel Engine
Fluid
MOBIL 15W40 (28 QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

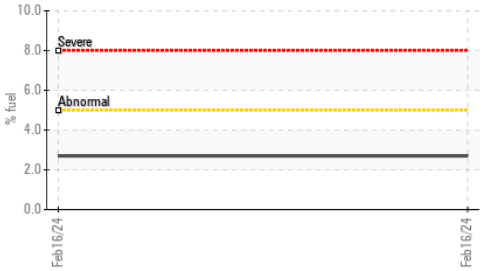
Elemental level of silicon (Si) above normal indicating ingress of seal material. Light fuel dilution occurring.

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

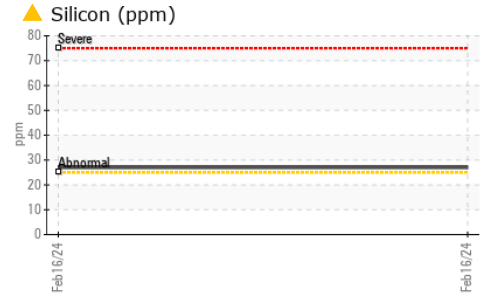
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0824090	---	---
Sample Date		Client Info		16 Feb 2024	---	---
Machine Age	mls	Client Info		146760	---	---
Oil Age	mls	Client Info		5500	---	---
Filter Age	mls	Client Info		5500	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185m	>100	19	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>50	0	---	---
Titanium	ppm	ASTM D5185m	>2	21	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>50	4	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	3	---	---
Tin	ppm	ASTM D5185m	>15	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>25	▲ 27	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Fuel	%	ASTM D3524	>5	▲ 2.7	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	6.3	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.0	---	---
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	---	---
Sodium	ppm	ASTM D5185m	>118	<1	---	---
Boron	ppm	ASTM D5185m		125	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		34	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		541	---	---
Calcium	ppm	ASTM D5185m		1032	---	---
Phosphorus	ppm	ASTM D5185m		677	---	---
Zinc	ppm	ASTM D5185m		789	---	---
Sulfur	ppm	ASTM D5185m		2622	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.4	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		6.7	---	---
Visc @ 100°C	cSt	ASTM D445		▲ 9.1	---	---

Fuel Dilution

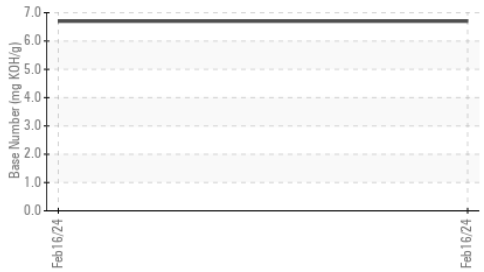


Viscosity @ 100°C

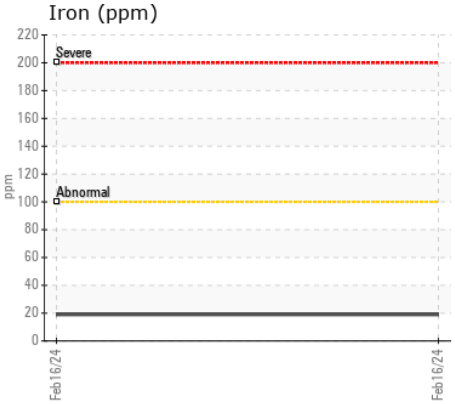
Silicon (ppm)



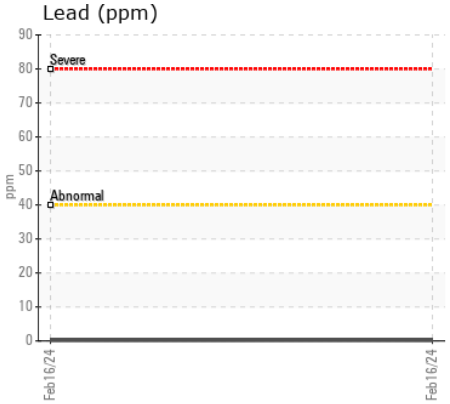
Base Number



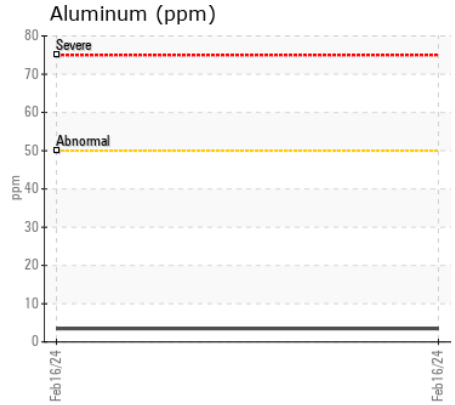
Iron (ppm)



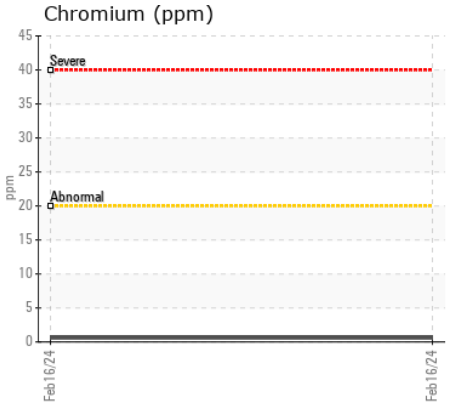
Lead (ppm)



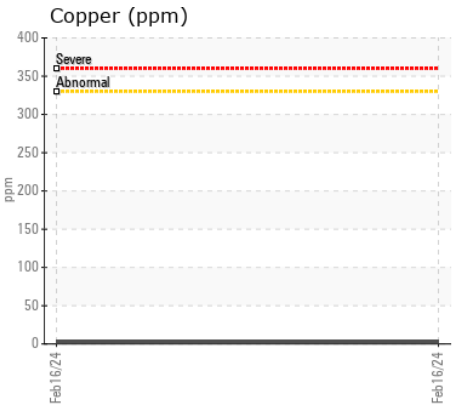
Aluminum (ppm)



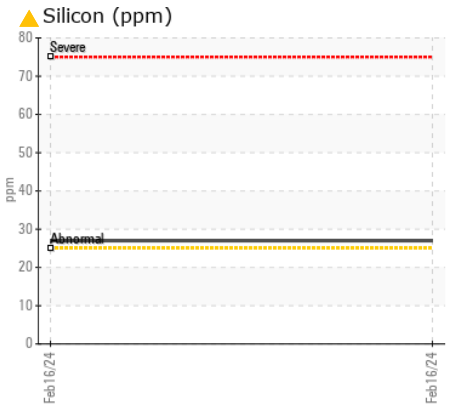
Chromium (ppm)



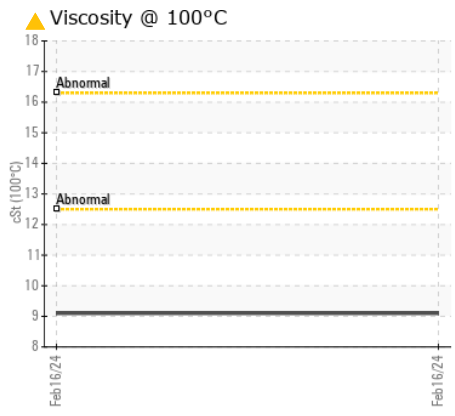
Copper (ppm)



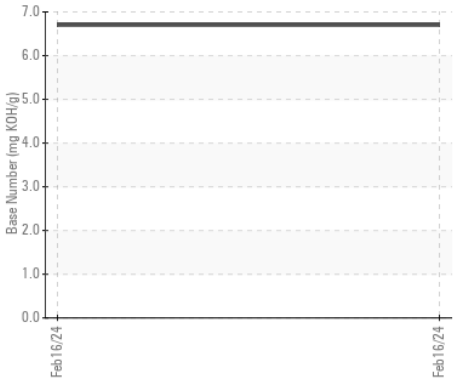
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0824090 **Received** : 22 Feb 2024
Lab Number : 06097391 **Tested** : 26 Feb 2024
Unique Number : 10890244 **Diagnosed** : 26 Feb 2024 - Sean Felton
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

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)

ATEL BUS & TRUCK
12120 CONWAY RD
BELTSVILLE, MD
US 20705
Contact: BRIAN CONNOLLY
bconnolly@atelbus.com
T: (301)210-5100
F: (301)210-5102