MOB I

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area
Sandy Creek NC
Machine Id
KENWORTH TRUCK 146
Component
Diesel Engine
Fluid
GUARD PLUS 15W40 CFG (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

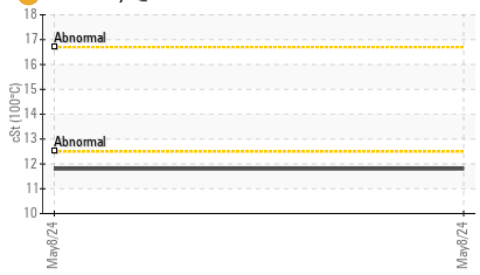
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

FLUID CONDITION

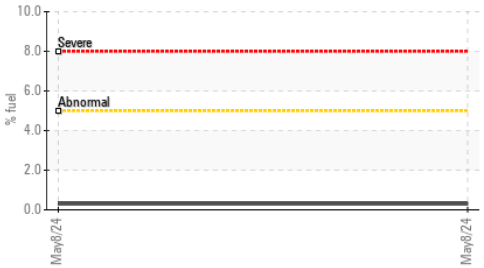
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0917087	---	---
Sample Date		Client Info		08 May 2024	---	---
Machine Age	mls	Client Info		22754	---	---
Oil Age	mls	Client Info		22754	---	---
Filter Age	mls	Client Info		22754	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ATTENTION	---	---
Iron	ppm	ASTM D5185m	>100	42	---	---
Chromium	ppm	ASTM D5185m	>20	3	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	<1	---	---
Aluminum	ppm	ASTM D5185m	>20	59	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	14	---	---
Tin	ppm	ASTM D5185m	>15	2	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>25	14	---	---
Potassium	ppm	ASTM D5185m	>20	196	---	---
Fuel	%	ASTM D3524	>5	0.3	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	9.4	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	---	---
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	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185m		1	---	---
Boron	ppm	ASTM D5185m		47	---	---
Barium	ppm	ASTM D5185m		4	---	---
Molybdenum	ppm	ASTM D5185m		22	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m		690	---	---
Calcium	ppm	ASTM D5185m		1321	---	---
Phosphorus	ppm	ASTM D5185m		745	---	---
Zinc	ppm	ASTM D5185m		798	---	---
Sulfur	ppm	ASTM D5185m		3019	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		5.6	---	---
Visc @ 100°C	cSt	ASTM D445		11.8	---	---

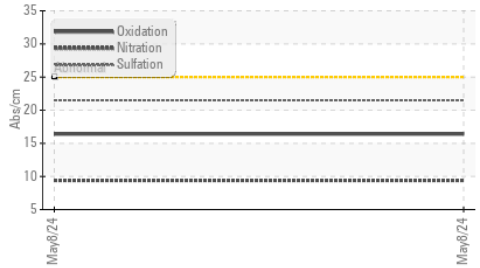
Viscosity @ 100°C



Fuel Dilution

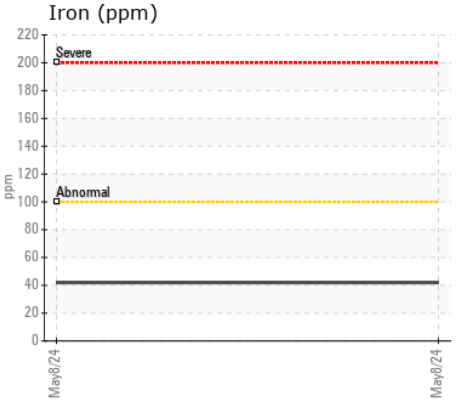


FT-IR (Direct Trend)

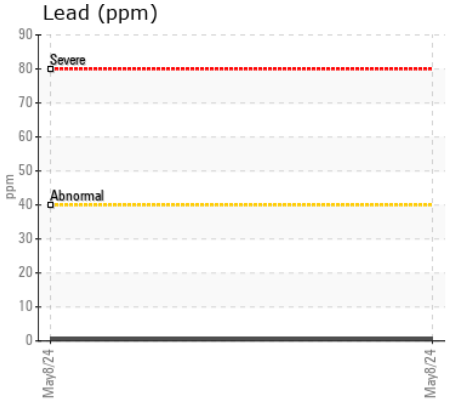


Base Number

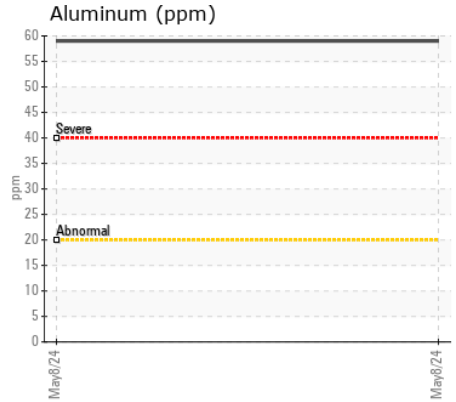
Iron (ppm)



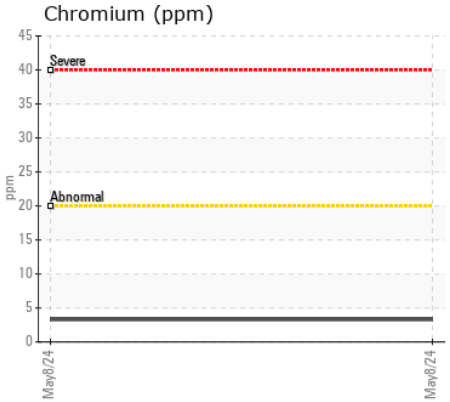
Lead (ppm)



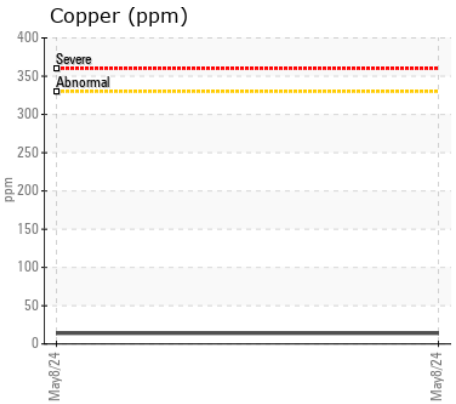
Aluminum (ppm)



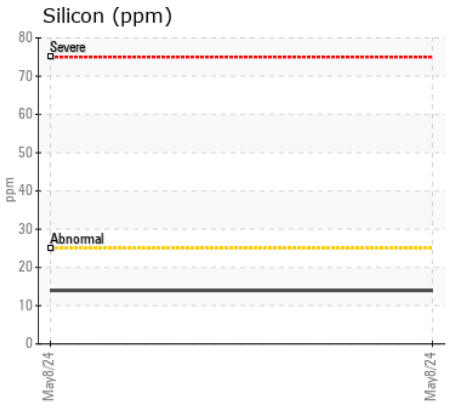
Chromium (ppm)



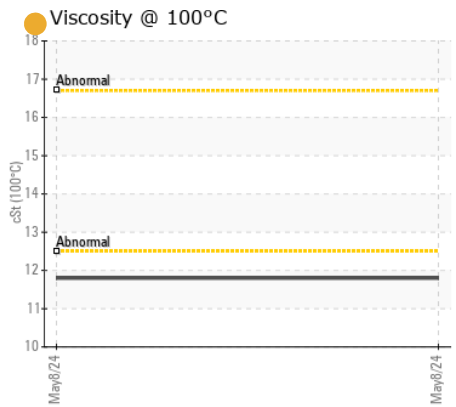
Copper (ppm)



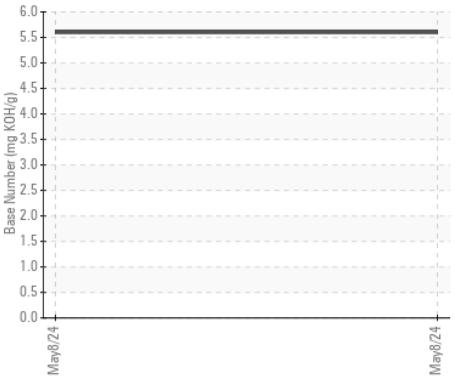
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0917087 **Received** : 10 May 2024
Lab Number : 06176533 **Tested** : 15 May 2024
Unique Number : 11022586 **Diagnosed** : 15 May 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)

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Report Id: WOLELI [WUSCAR] 06176533 (Generated: 05/15/2024 18:18:50) Rev: 1

Submitted By: WESLEY SASSER