



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Columbus County NC
 Machine Id
KENWORTH TRUCK 111
 Component
Diesel Engine
 Fluid
GUARD PLUS 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: Guard plus 15-40)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0917088	---	---
Sample Date		Client Info		08 May 2024	---	---
Machine Age	mls	Client Info		2530112	---	---
Oil Age	mls	Client Info		20000	---	---
Filter Age	mls	Client Info		20000	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	18	---	---
Chromium	ppm	ASTM D5185m	>20	2	---	---
Nickel	ppm	ASTM D5185m	>4	2	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	4	---	---
Lead	ppm	ASTM D5185m	>40	8	---	---
Copper	ppm	ASTM D5185m	>330	1	---	---
Tin	ppm	ASTM D5185m	>15	1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

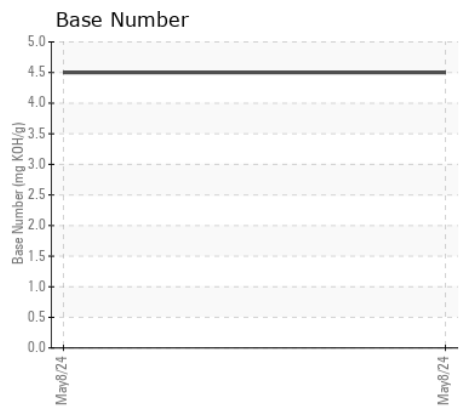
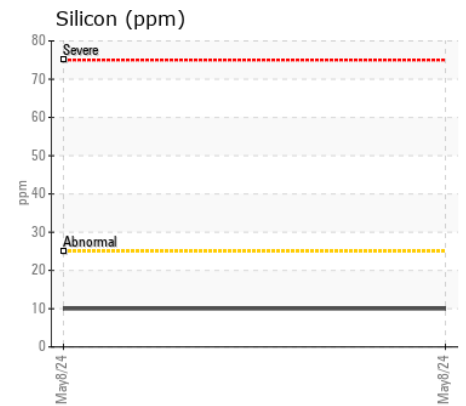
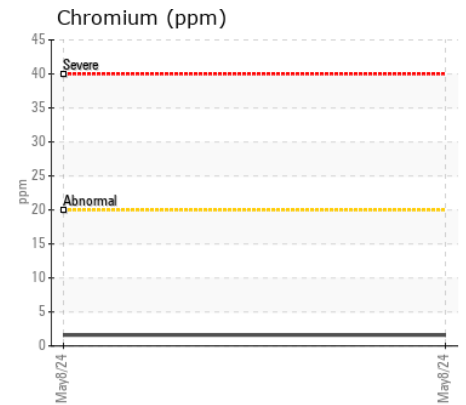
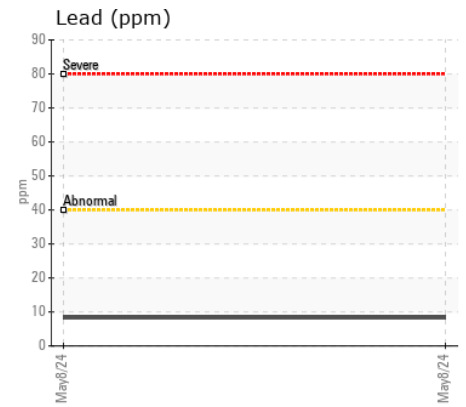
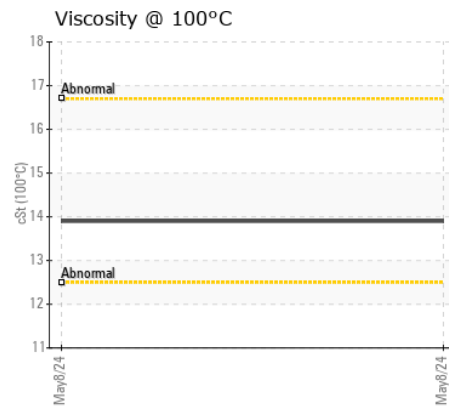
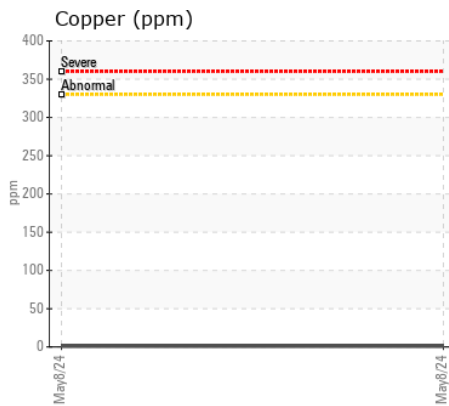
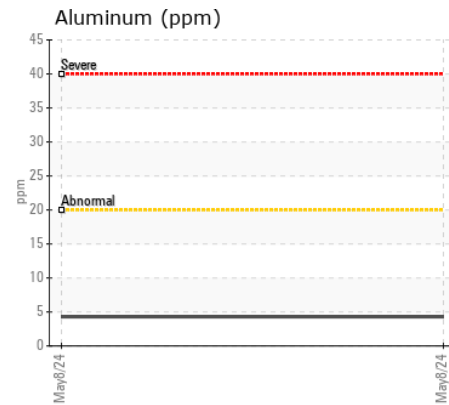
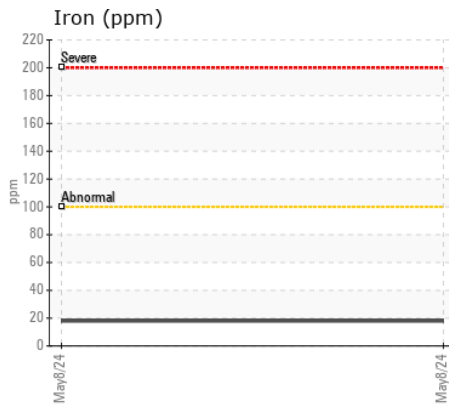
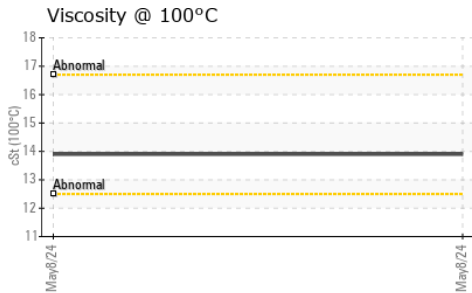
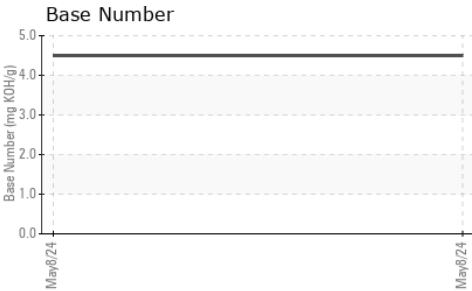
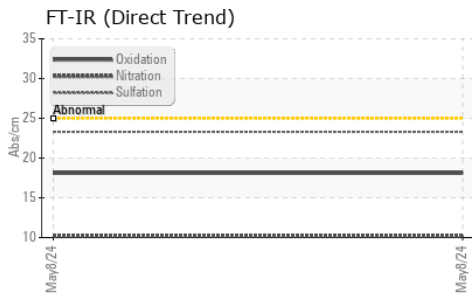
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	10	---	---
Potassium	ppm	ASTM D5185m	>20	6	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	10.2	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.3	---	---
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 suitable for further service.

Sodium	ppm	ASTM D5185m		0	---	---
Boron	ppm	ASTM D5185m		14	---	---
Barium	ppm	ASTM D5185m		2	---	---
Molybdenum	ppm	ASTM D5185m		93	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		60	---	---
Calcium	ppm	ASTM D5185m		2200	---	---
Phosphorus	ppm	ASTM D5185m		1054	---	---
Zinc	ppm	ASTM D5185m		1186	---	---
Sulfur	ppm	ASTM D5185m		3584	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		4.5	---	---
Visc @ 100°C	cSt	ASTM D445		13.9	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0917088 **Received** : 10 May 2024
Lab Number : 06176572 **Tested** : 13 May 2024
Unique Number : 11022625 **Diagnosed** : 14 May 2024 - Sean Felton
Test Package : MOB 1 (Additional Tests: 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)

WOLFPACK TRANSPORTATION
 664 BEN GREEN INDUSTRIAL PARK DRIVE
 ELIZABETHTOWN, NC
 US 28337
 Contact: WESLEY SASSER
 wesley.sasser@wolfpacktransportation.com
 T: (910)874-4046
 F: