



PROBLEM SUMMARY

Sample Rating Trend



FUEL



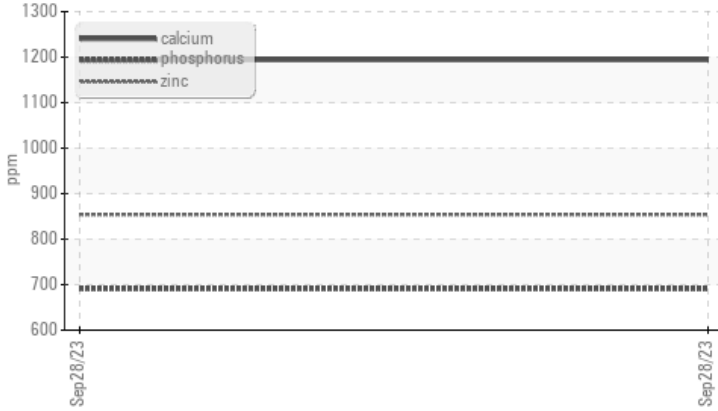
Machine Id
KENWORTH 428109-SW4836

Component
Diesel Engine

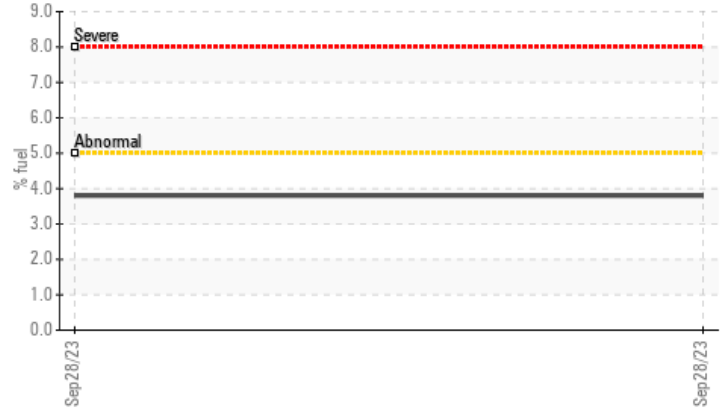
Fluid
MOBIL DELVAC ELITE 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Additives



▲ Fuel Dilution



RECOMMENDATION

The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	---	---
Magnesium	ppm	ASTM D5185m	▲ 636	---	---
Phosphorus	ppm	ASTM D5185m	▲ 691	---	---
Zinc	ppm	ASTM D5185m	▲ 854	---	---
Fuel	%	ASTM D3524 >5	▲ 3.8	---	---

Customer Id: GFL981
Sample No.: GFL0095442
Lab Number: 06006119
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

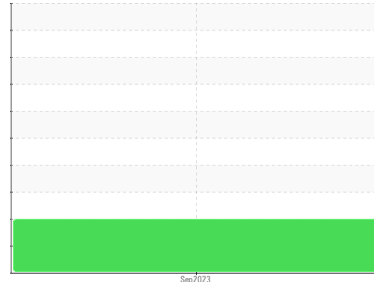
Action	Status	Date	Done By	Description
Check Fluid Source	---	---	?	Confirm the source of the lubricant being utilized for top-up/fill.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



FUEL

Machine Id

KENWORTH 428109-SW4836

Component

Diesel Engine

Fluid

MOBIL DELVAC ELITE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

Fluid Condition

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. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0095442	---	---
Sample Date	Client Info	28 Sep 2023	---	---
Machine Age	hrs	Client Info	14213	---
Oil Age	hrs	Client Info	500	---
Oil Changed	Client Info	Changed	---	---
Sample Status		ATTENTION	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	9	---
Chromium	ppm	ASTM D5185m >20	<1	---
Nickel	ppm	ASTM D5185m >4	0	---
Titanium	ppm	ASTM D5185m	0	---
Silver	ppm	ASTM D5185m >3	0	---
Aluminum	ppm	ASTM D5185m >20	2	---
Lead	ppm	ASTM D5185m >40	1	---
Copper	ppm	ASTM D5185m >330	<1	---
Tin	ppm	ASTM D5185m >15	<1	---
Vanadium	ppm	ASTM D5185m	0	---
Cadmium	ppm	ASTM D5185m	0	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	68	---
Barium	ppm	ASTM D5185m	0	---
Molybdenum	ppm	ASTM D5185m	115	---
Manganese	ppm	ASTM D5185m	<1	---
Magnesium	ppm	ASTM D5185m	▲ 636	---
Calcium	ppm	ASTM D5185m	1194	---
Phosphorus	ppm	ASTM D5185m	▲ 691	---
Zinc	ppm	ASTM D5185m	▲ 854	---
Sulfur	ppm	ASTM D5185m	3035	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	4	---
Sodium	ppm	ASTM D5185m	2	---
Potassium	ppm	ASTM D5185m >20	2	---
Fuel	%	ASTM D3524 >5	▲ 3.8	---

INFRA-RED

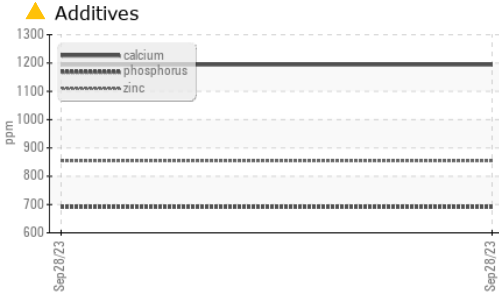
method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1.3	---
Nitration	Abs/cm	*ASTM D7624 >20	9.3	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	19.3	---

FLUID DEGRADATION

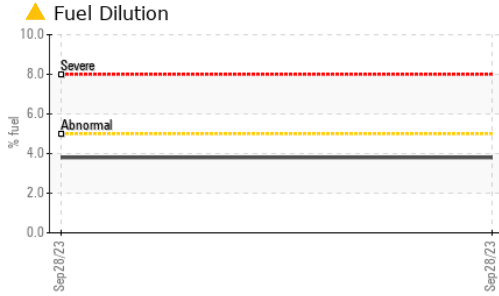
method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	14.2	---
Base Number (BN)	mg KOH/g	ASTM D2896 10.7	6.7	---



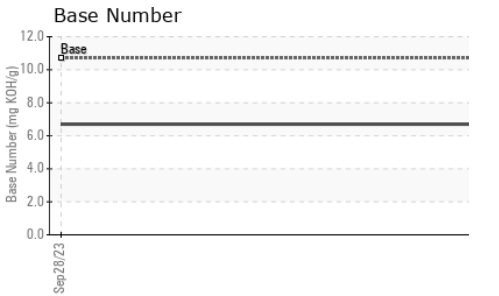
OIL ANALYSIS REPORT



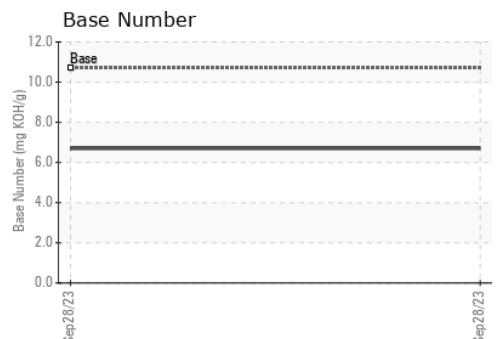
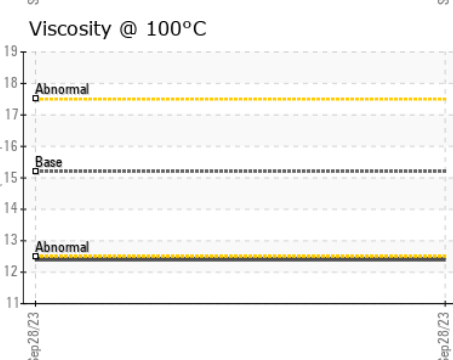
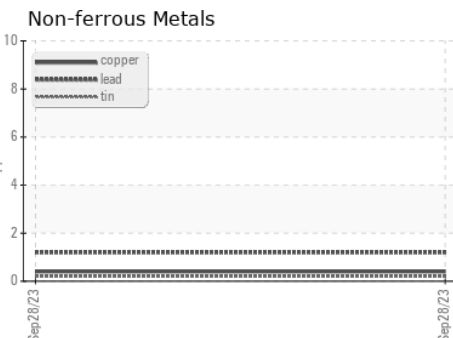
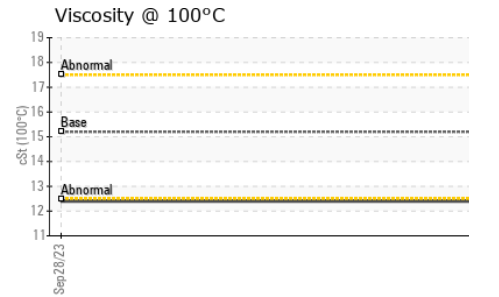
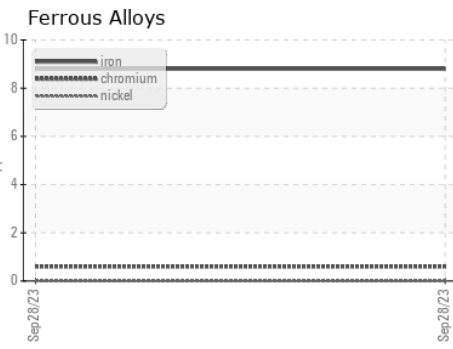
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---



PARAMETER	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.2	12.4	---



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0095442 **Received** : 13 Nov 2023
Lab Number : 06006119 **Diagnosed** : 15 Nov 2023
Unique Number : 10739881 **Diagnostician** : Wes Davis
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 981 - Port Arthur Hauling
 1000 S Business Park Dr
 Port Arthur, TX
 US 77640
 Contact: MICHAEL KAY
 mkay@gflenv.com
 T: (336)660-9331
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Certificate L2367
 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)