



Machine Id
KENWORTH 428109-SW4836
 Component
Diesel Engine
 Fluid
MOBIL DELVAC ELITE 15W40 (--- GAL)

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0111342	GFL0095442	---
Sample Date		Client Info		09 Feb 2024	28 Sep 2023	---
Machine Age	hrs	Client Info		14997	14213	---
Oil Age	hrs	Client Info		0	500	---
Filter Age	hrs	Client Info		0	500	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ATTENTION	ATTENTION	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	6	9	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>4	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	3	2	---
Lead	ppm	ASTM D5185m	>40	0	1	---
Copper	ppm	ASTM D5185m	>330	<1	<1	---
Tin	ppm	ASTM D5185m	>15	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

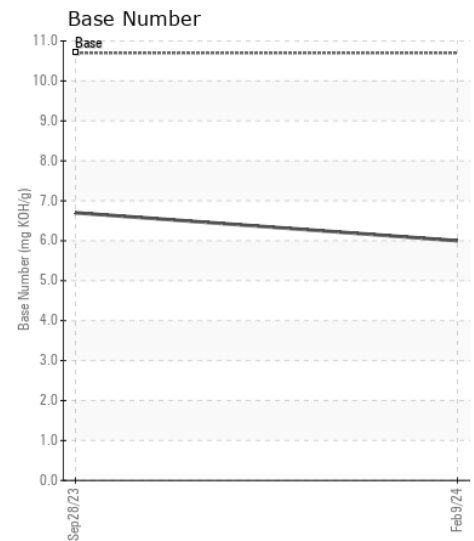
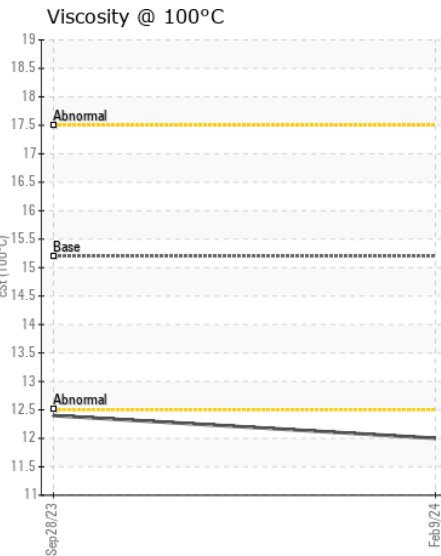
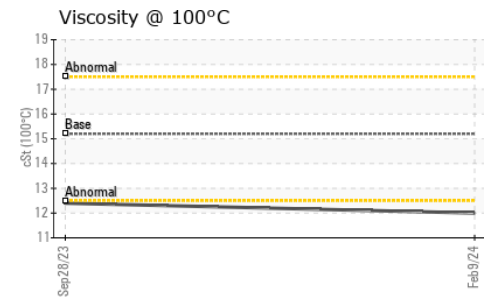
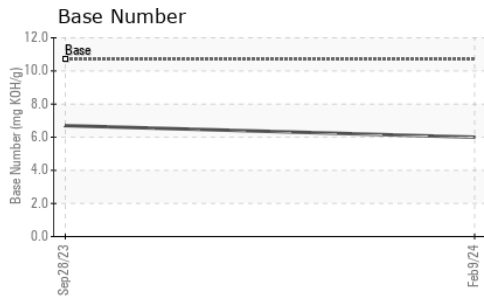
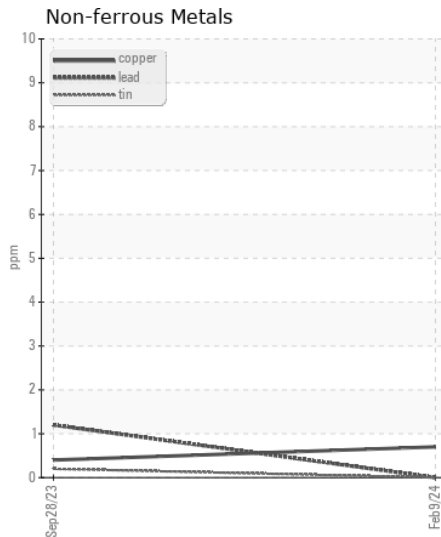
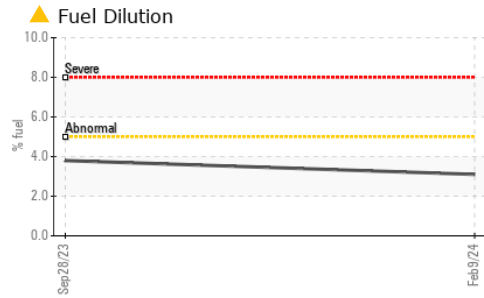
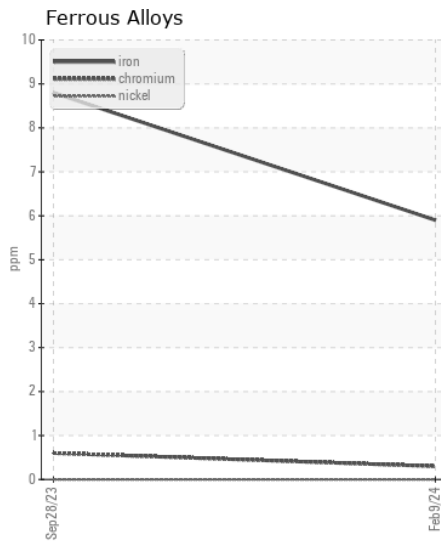
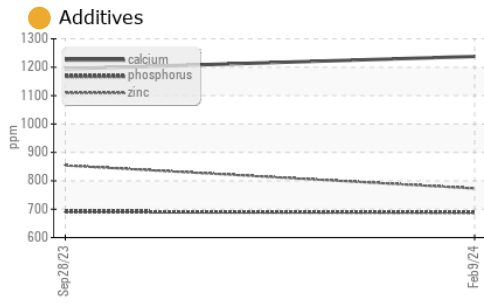
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	3	4	---
Potassium	ppm	ASTM D5185m	>20	<1	2	---
Fuel	%	ASTM D3524	>5	▲ 3.1	▲ 3.8	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.8	1.3	---
Nitration	Abs/cm	*ASTM D7624	>20	9.2	9.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.4	19.3	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---

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.

Sodium	ppm	ASTM D5185m		2	2	---
Boron	ppm	ASTM D5185m		● 85	68	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		116	115	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		627	● 636	---
Calcium	ppm	ASTM D5185m		1238	1194	---
Phosphorus	ppm	ASTM D5185m		689	● 691	---
Zinc	ppm	ASTM D5185m		● 773	● 854	---
Sulfur	ppm	ASTM D5185m		3012	3035	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.6	14.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	6.0	6.7	---
Visc @ 100°C	cSt	ASTM D445	15.2	12.0	12.4	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0111342
Lab Number : 06101344
Unique Number : 10899574
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 27 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 29 Feb 2024 - Wes Davis

GFL Environmental - 981 - Port Arthur Hauling
 1000 S Business Park Dr
 Port Arthur, TX
 US 77640

Contact: MICHAEL KAY
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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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