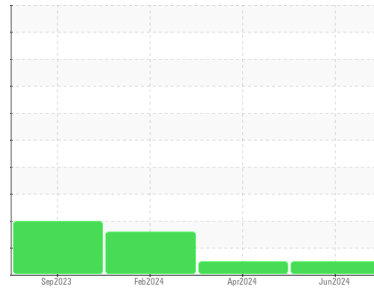




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

KENWORTH 428109-SW4836

Component

Diesel Engine

Fluid

MOBIL DELVAC ELITE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0111333	GFL0111260	GFL0111342
Sample Date	Client Info		05 Jun 2024	04 Apr 2024	09 Feb 2024
Machine Age	hrs	Client Info	15944	15430	14997
Oil Age	hrs	Client Info	514	433	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	ATTENTION

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	▲ 3.1
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	8	4	6
Chromium	ppm	ASTM D5185m >20	<1	<1	<1
Nickel	ppm	ASTM D5185m >4	0	<1	0
Titanium	ppm	ASTM D5185m	0	<1	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	3	3	3
Lead	ppm	ASTM D5185m >40	1	<1	0
Copper	ppm	ASTM D5185m >330	2	<1	<1
Tin	ppm	ASTM D5185m >15	0	<1	0
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	70	103	● 85
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	126	141	116
Manganese	ppm	ASTM D5185m	<1	<1	0
Magnesium	ppm	ASTM D5185m	660	692	627
Calcium	ppm	ASTM D5185m	1268	1323	1238
Phosphorus	ppm	ASTM D5185m	792	716	689
Zinc	ppm	ASTM D5185m	851	849	● 773
Sulfur	ppm	ASTM D5185m	3831	3253	3012

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	4	5	3
Sodium	ppm	ASTM D5185m	3	<1	2
Potassium	ppm	ASTM D5185m >20	3	3	<1

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1.1	0.8	0.8
Nitration	Abs/cm	*ASTM D7624 >20	9.3	8.7	9.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	19.2	18.4	18.4

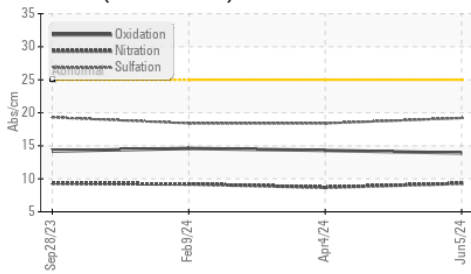
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	13.9	14.3	14.6
Base Number (BN)	mg KOH/g	ASTM D2896 10.7	6.3	6.4	6.0

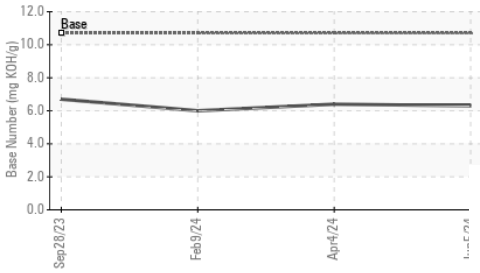


OIL ANALYSIS REPORT

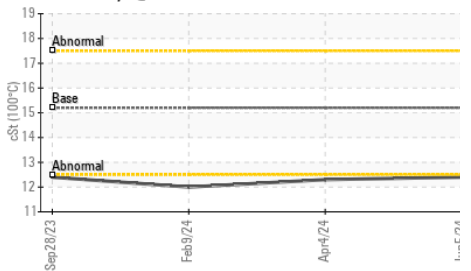
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

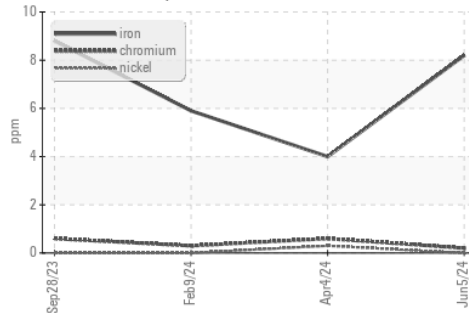


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

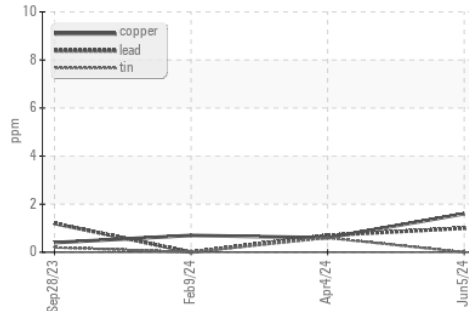
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.2	12.4	12.3

GRAPHS

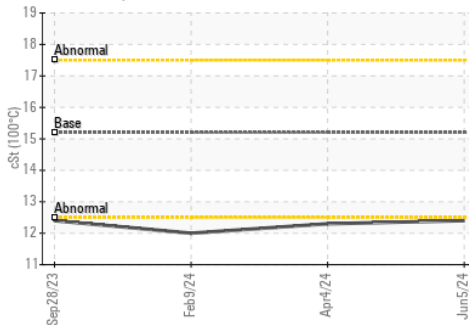
Ferrous Alloys



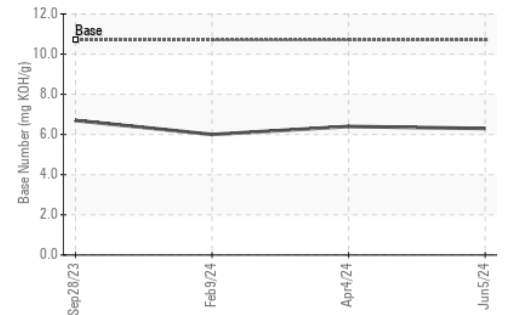
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0111333
Lab Number : 06231223
Unique Number : 11114716
Test Package : FLEET

Received : 09 Jul 2024
Tested : 10 Jul 2024
Diagnosed : 10 Jul 2024 - Wes Davis

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
 F:

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)