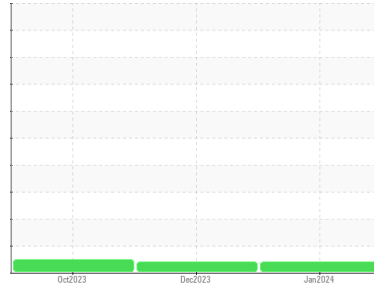




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
KENWORTH 427205-SW4831

Component
Diesel Engine

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

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			GFL0111346	GFL0095485	GFL0095444
Sample Date	Client Info			30 Jan 2024	26 Dec 2023	02 Oct 2023
Machine Age	hrs	Client Info		13034	12863	12357
Oil Age	hrs	Client Info		500	500	500
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ATTENTION	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	1.3	<1.0
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	1	7	6
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	3	3
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	<1	<1	0
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		130	82	101
Barium	ppm	ASTM D5185m		<1	0	<1
Molybdenum	ppm	ASTM D5185m		120	108	119
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		616	620	662
Calcium	ppm	ASTM D5185m		1140	1116	1259
Phosphorus	ppm	ASTM D5185m		674	657	750
Zinc	ppm	ASTM D5185m		749	729	880
Sulfur	ppm	ASTM D5185m		2868	2798	3307

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	4	6	6
Sodium	ppm	ASTM D5185m		2	2	2
Potassium	ppm	ASTM D5185m	>20	0	2	3

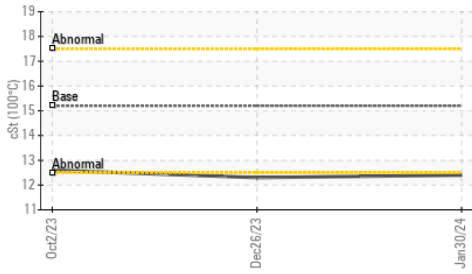
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.2	0.7	0.4
Nitration	Abs/cm	*ASTM D7624	>20	7.6	8.9	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.3	18.4	19.5

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.7	14.4	15.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	6.8	6.1	9.1

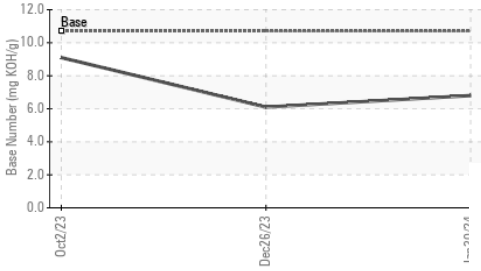


OIL ANALYSIS REPORT

▲ Viscosity @ 100°C



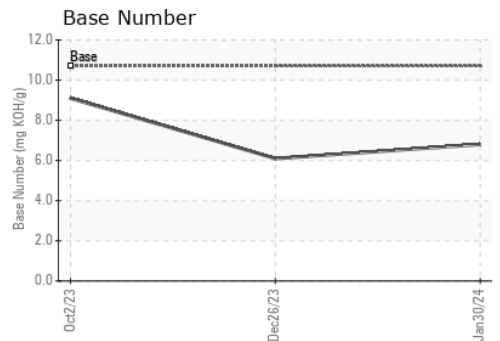
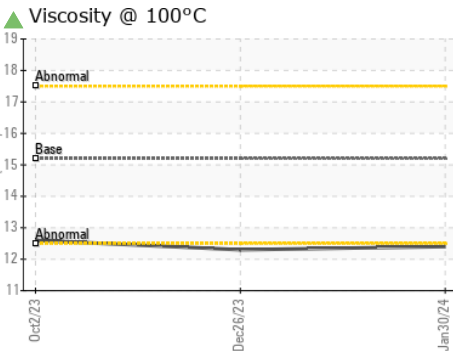
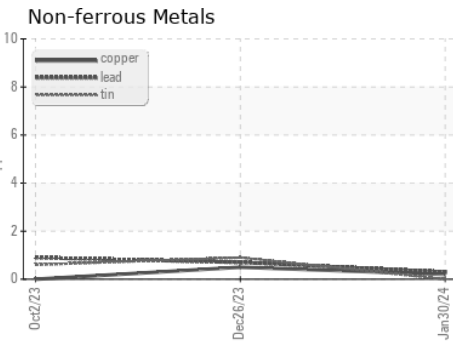
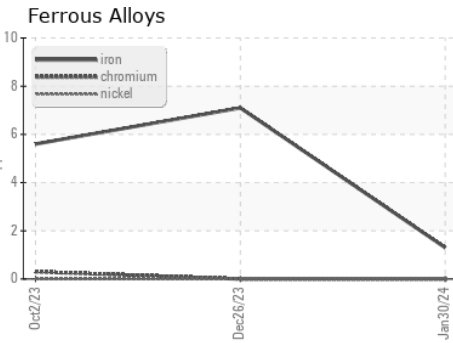
Base Number



PARAMETER	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	12.6

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0111346
 Lab Number : 06099804
 Unique Number : 10898034
 Test Package : FLEET

Received : 26 Feb 2024
 Tested : 27 Feb 2024
 Diagnosed : 27 Feb 2024 - Don Baldrige

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)