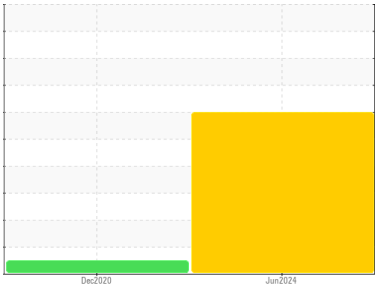
PROBLEM SUMMARY

Sample Rating Trend

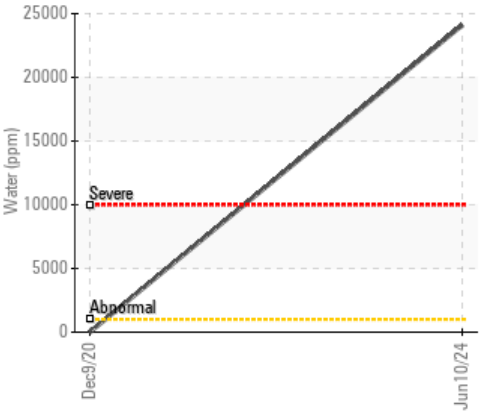


WATER

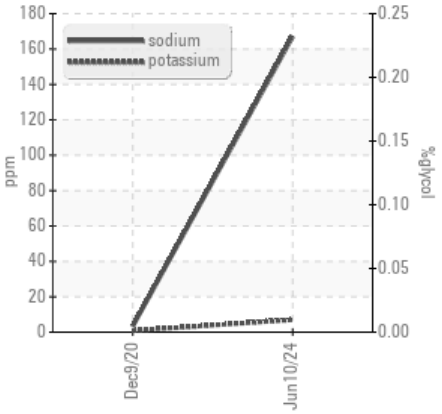
Machine Id
700990
Component
Natural Gas Engine
Fluid
IRVING 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY

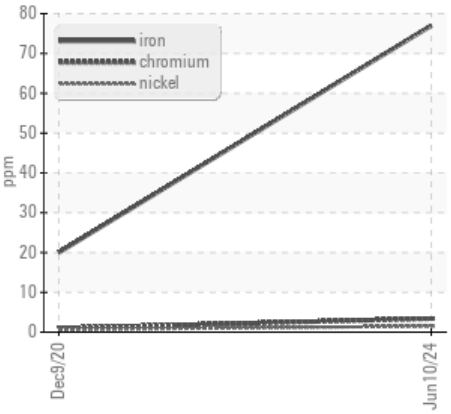
▲ Water (KF)



▲ Glycol Contamination



▲ Ferrous Alloys



RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	---
Iron	ppm	ASTM D5185m	>50	▲ **77**	20	---
Sodium	ppm	ASTM D5185m	>101	▲ **167**	3	---
Water	%	ASTM D6304	>0.1	▲ **2.41**	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ **24100**	---	---
Emulsified Water	scalar	*Visual	>0.1	▲ **0.2%**	NEG	---

Customer Id: GFL007
Sample No.: GFL0123441
Lab Number: 06215584
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Glycol Access	---	---	?	We advise that you check for the source of the coolant leak.

HISTORICAL DIAGNOSIS

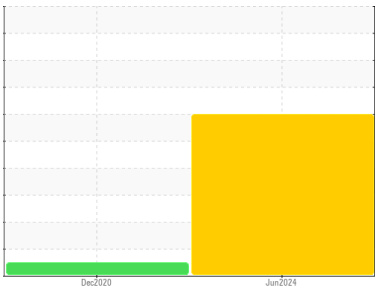
NORMAL

09 Dec 2020 Diag: Bill Quesnel
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
700990
Component
Natural Gas Engine
Fluid
IRVING 15W40 (--- GAL)

DIAGNOSIS

Recommendation
We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear
Cylinder, crank, or cam shaft wear is indicated.

Contamination
Sodium and/or potassium levels are high. There is a high concentration of water present in the oil.

Fluid Condition
The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0123441**	GFL0011110	---
Sample Date		Client Info		**10 Jun 2024**	09 Dec 2020	---
Machine Age	hrs	Client Info		**0**	8673	---
Oil Age	hrs	Client Info		**250**	1200	---
Oil Changed		Client Info		**Changed**	Changed	---
Sample Status				**SEVERE**	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	▲ **77**	20	---
Chromium	ppm	ASTM D5185m	>4	**3**	1	---
Nickel	ppm	ASTM D5185m	>2	**2**	<1	---
Titanium	ppm	ASTM D5185m		**<1**	<1	---
Silver	ppm	ASTM D5185m	>3	**<1**	<1	---
Aluminum	ppm	ASTM D5185m	>9	**4**	2	---
Lead	ppm	ASTM D5185m	>30	**16**	5	---
Copper	ppm	ASTM D5185m	>35	**6**	6	---
Tin	ppm	ASTM D5185m	>4	**3**	<1	---
Antimony	ppm	ASTM D5185m		**---**	0	---
Vanadium	ppm	ASTM D5185m		**<1**	0	---
Beryllium	ppm	ASTM D5185m		**---**	0	---
Cadmium	ppm	ASTM D5185m		**0**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**64**	38	---
Barium	ppm	ASTM D5185m		**<1**	0	---
Molybdenum	ppm	ASTM D5185m		**30**	52	---
Manganese	ppm	ASTM D5185m		**4**	1	---
Magnesium	ppm	ASTM D5185m		**224**	32	---
Calcium	ppm	ASTM D5185m		**1982**	1882	---
Phosphorus	ppm	ASTM D5185m		**932**	737	---
Zinc	ppm	ASTM D5185m		**1166**	944	---
Sulfur	ppm	ASTM D5185m		**3154**	2169	---
Lithium	ppm	ASTM D5185m		**---**	<1	---

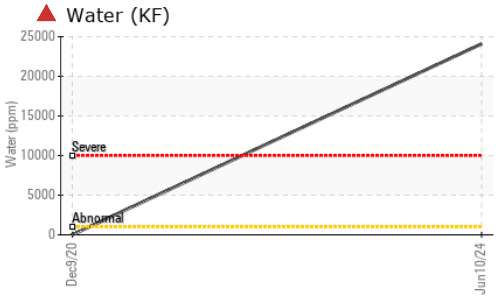
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	**21**	8	---
Sodium	ppm	ASTM D5185m	>101	▲ **167**	3	---
Potassium	ppm	ASTM D5185m	>20	**7**	<1	---
Water	%	ASTM D6304	>0.1	▲ **2.41**	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ **24100**	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		**0.1**	0	---
Nitration	Abs/cm	*ASTM D7624	>20	**16.2**	10.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	**12.5**	23.1	---

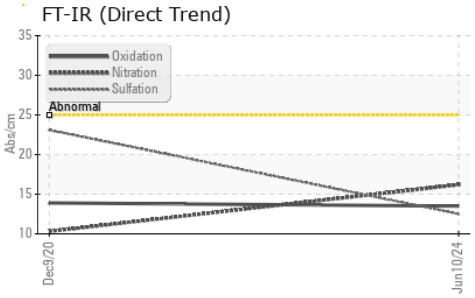
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**13.5**	13.9	---
Base Number (BN)	mg KOH/g	ASTM D2896		**21.6**	---	---

OIL ANALYSIS REPORT

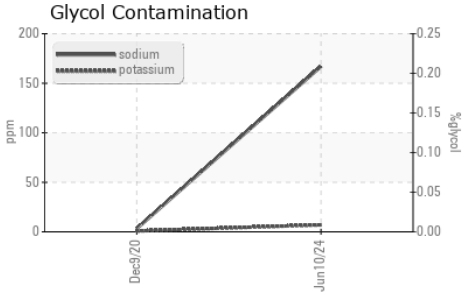
Water (KF)



FT-IR (Direct Trend)

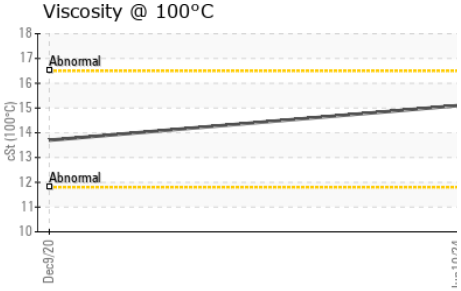


Glycol Contamination



Base Number

Viscosity @ 100°C

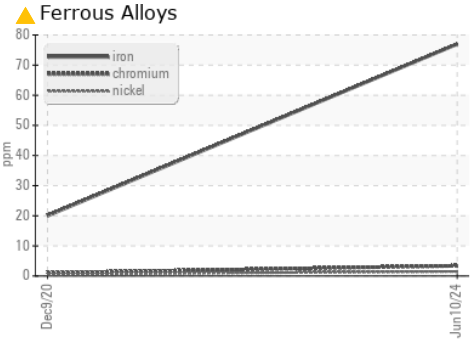


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	VLITE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**MILKY**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.1	**0.2%**	NEG	---
Free Water	scalar	*Visual		**NEG**	NEG	---

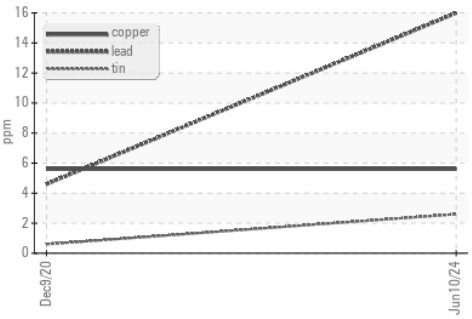
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445		**15.1**	13.7	---

GRAPHS

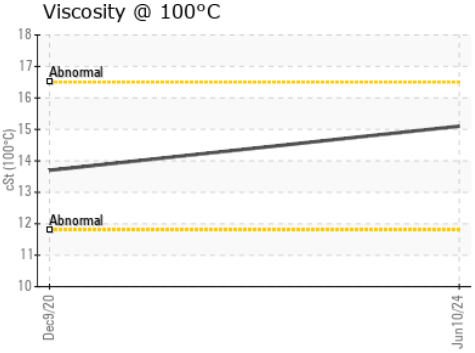
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0123441
Lab Number : 06215584
Unique Number : 11088448
Test Package : FLEET (Additional Tests: Glycol, KF)

Received : 20 Jun 2024
Tested : 24 Jun 2024
Diagnosed : 24 Jun 2024 - Jonathan Hester

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)

GFL Environmental - 007 - Brunswick
2809 Galloway Road
Bolivia, NC
US 28422
Contact: DONALD CRAVEN
dcraven@gflenv.com
T:
F: (910)253-4179

Report Id: GFL007 [WUSCAR] 06215584 (Generated: 06/24/2024 17:29:22) Rev: 1
Contact/Location: DONALD CRAVEN - GFL007