



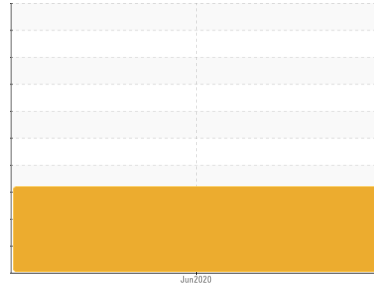
OIL ANALYSIS REPORT

Sample Rating Trend

SOOT



Area
NASHVILLE 085
 Machine Id
2360
 Component
Diesel Engine
 Fluid
NOT GIVEN (--- GAL)



DIAGNOSIS

Recommendation

We advise that you check for faulty combustion, plugged air filters, or aftercoolers. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: High solids (carbon/soot) in the sample have limited the accuracy of Infra-Red data including Total Base Number (TBN) value.

Wear

All component wear rates are normal.

Contamination

There is an abnormal amount of solids and carbon present in the oil.

Fluid Condition

The BN level is low.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0005733	---	---
Sample Date	Client Info	14 Jun 2020	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		SEVERE	---	---

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	63	---	---
Chromium	ppm ASTM D5185m >20	1	---	---
Nickel	ppm ASTM D5185m >4	<1	---	---
Titanium	ppm ASTM D5185m >3	0	---	---
Silver	ppm ASTM D5185m >3	0	---	---
Aluminum	ppm ASTM D5185m >20	2	---	---
Lead	ppm ASTM D5185m >40	3	---	---
Copper	ppm ASTM D5185m >330	7	---	---
Tin	ppm ASTM D5185m >15	1	---	---
Antimony	ppm ASTM D5185m	0	---	---
Vanadium	ppm ASTM D5185m	0	---	---
Cadmium	ppm ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	15	---	---
Barium	ppm ASTM D5185m	0	---	---
Molybdenum	ppm ASTM D5185m	52	---	---
Manganese	ppm ASTM D5185m	<1	---	---
Magnesium	ppm ASTM D5185m	774	---	---
Calcium	ppm ASTM D5185m	968	---	---
Phosphorus	ppm ASTM D5185m	835	---	---
Zinc	ppm ASTM D5185m	950	---	---
Sulfur	ppm ASTM D5185m	2088	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	2	---	---
Sodium	ppm ASTM D5185m	2	---	---
Potassium	ppm ASTM D5185m >20	<1	---	---
Fuel	% ASTM D3524 >5	<1.0	---	---

INFRA-RED

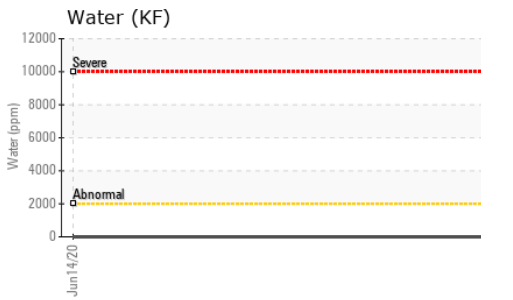
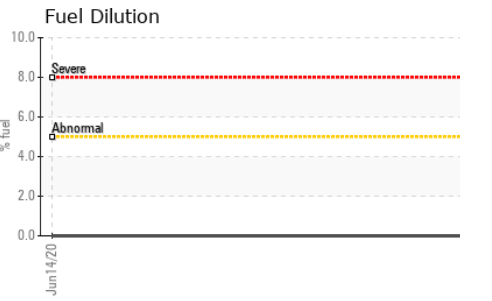
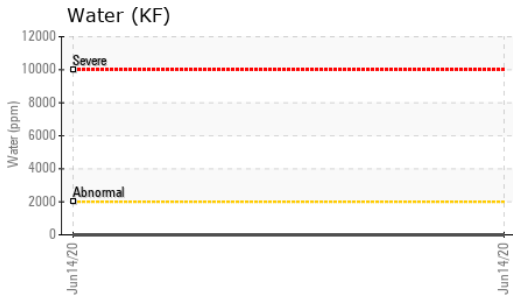
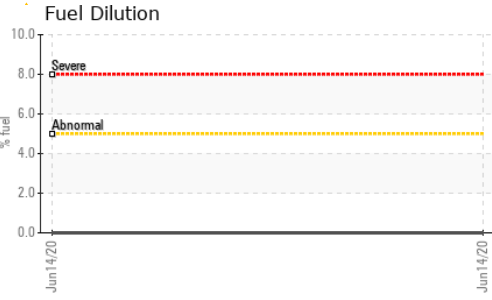
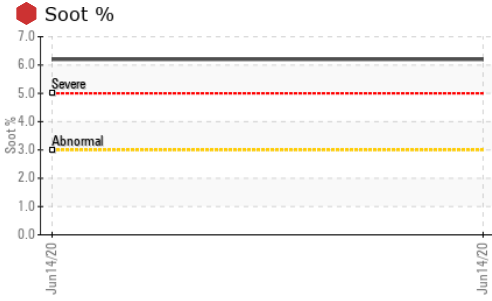
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	6.2	---	---
Nitration	Abs/cm *ASTM D7624 >20	12.7	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	31.4	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	17.4	---	---
Base Number (BN)	mg KOH/g ASTM D2896	0.0	---	---



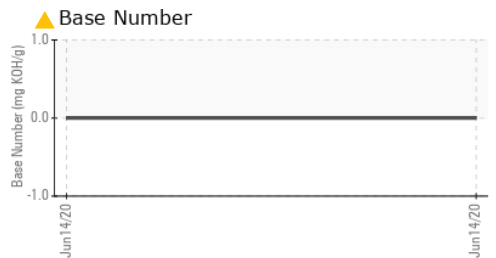
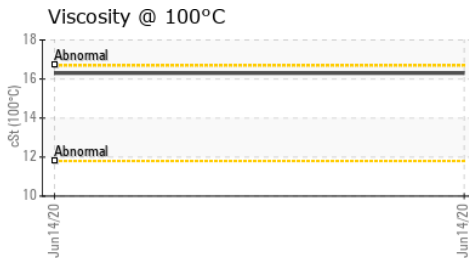
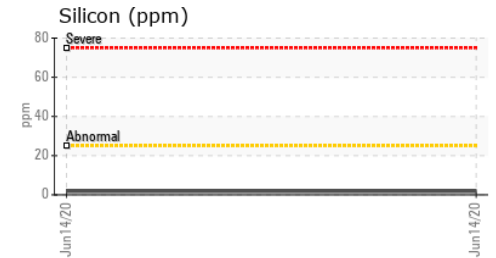
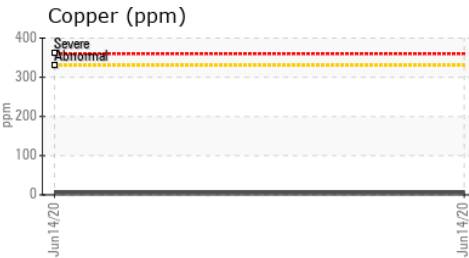
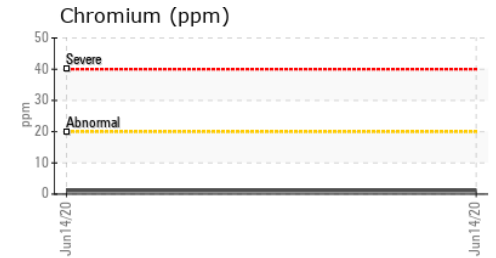
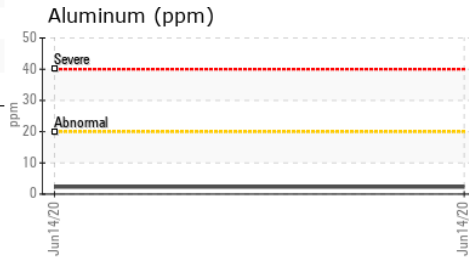
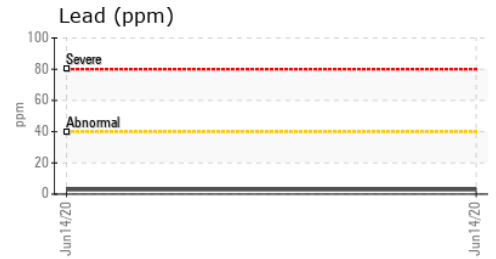
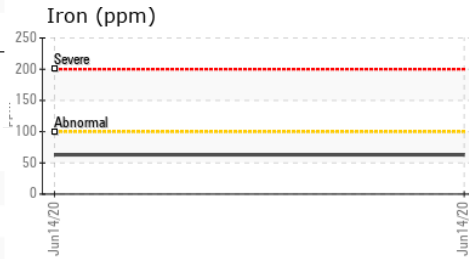
OIL ANALYSIS REPORT



VISUAL	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	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	16.3	---	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0005733 **Received** : 12 Jun 2020
Lab Number : 04998469 **Diagnosed** : 15 Jun 2020
Unique Number : 9063622 **Diagnostician** : Don Baldrige
Test Package : MOB 2 (Additional Tests: FuelDilution, KF)

GFL Environmental - 9999 - Moved No Longer Used Units

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)

US
Contact:

T:
F: