



PROBLEM SUMMARY

Sample Rating Trend

DIRT

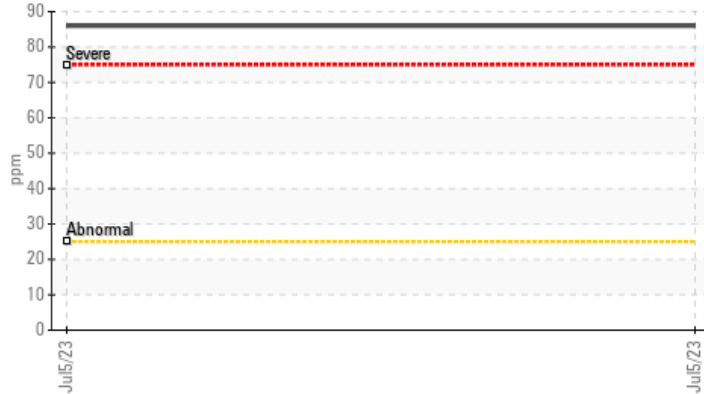


Machine Id
414059
Component
Front Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- LTR)

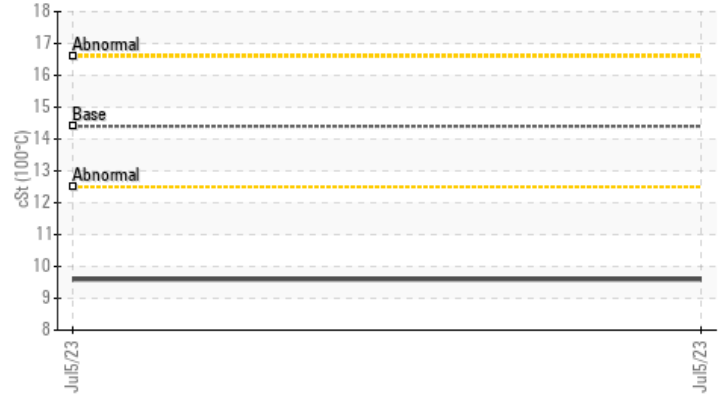


COMPONENT CONDITION SUMMARY

▲ Silicon (ppm)



▲ Viscosity @ 100°C



RECOMMENDATION

No corrective action is recommended at this time.
Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	---	---
Silicon	ppm	ASTM D5185m	>25	▲ 86	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 9.6	---	---

Customer Id: GFL166
Sample No.: GFL0087845
Lab Number: 05897148
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

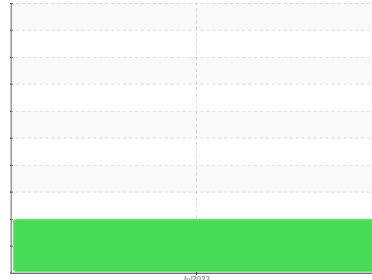
There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id
414059
 Component
Front Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- LTR)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

▲ Contamination

Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material.

▲ 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		GFL0087845	---	---
Sample Date	Client Info		05 Jul 2023	---	---
Machine Age	hrs	Client Info	3124	---	---
Oil Age	hrs	Client Info	600	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >120	24	---	---
Chromium	ppm	ASTM D5185m >20	<1	---	---
Nickel	ppm	ASTM D5185m >5	<1	---	---
Titanium	ppm	ASTM D5185m >2	<1	---	---
Silver	ppm	ASTM D5185m >2	<1	---	---
Aluminum	ppm	ASTM D5185m >20	9	---	---
Lead	ppm	ASTM D5185m >40	<1	---	---
Copper	ppm	ASTM D5185m >330	21	---	---
Tin	ppm	ASTM D5185m >15	2	---	---
Vanadium	ppm	ASTM D5185m	<1	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	370	---	---
Barium	ppm	ASTM D5185m 10	0	---	---
Molybdenum	ppm	ASTM D5185m 100	109	---	---
Manganese	ppm	ASTM D5185m	3	---	---
Magnesium	ppm	ASTM D5185m 450	633	---	---
Calcium	ppm	ASTM D5185m 3000	1497	---	---
Phosphorus	ppm	ASTM D5185m 1150	685	---	---
Zinc	ppm	ASTM D5185m 1350	826	---	---
Sulfur	ppm	ASTM D5185m 4250	2909	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	▲ 86	---	---
Sodium	ppm	ASTM D5185m >158	5	---	---
Potassium	ppm	ASTM D5185m >20	23	---	---
Fuel	%	ASTM D3524 >3.0	0.5	---	---

INFRA-RED

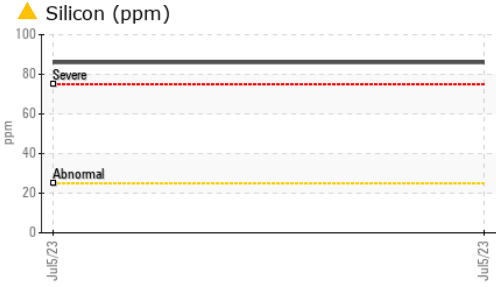
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	0.1	---	---
Nitration	Abs/cm	*ASTM D7624 >20	6.9	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	25.6	---	---

FLUID DEGRADATION

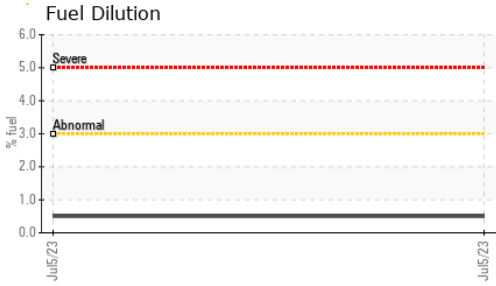
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	20.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	9.9	---	---



OIL ANALYSIS REPORT

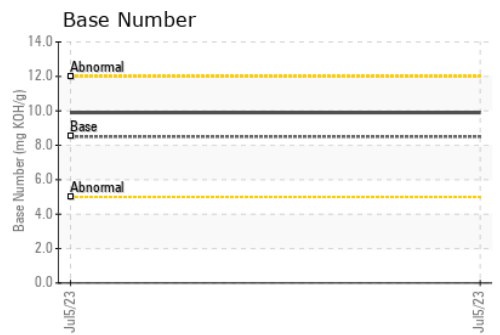
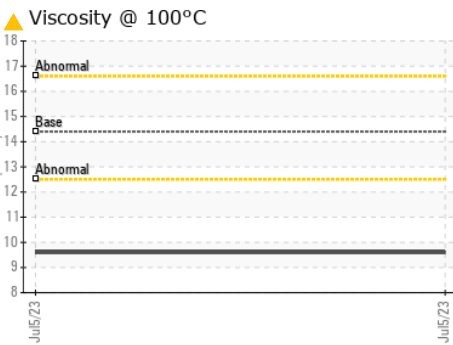
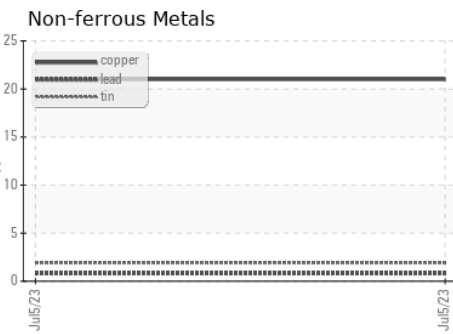
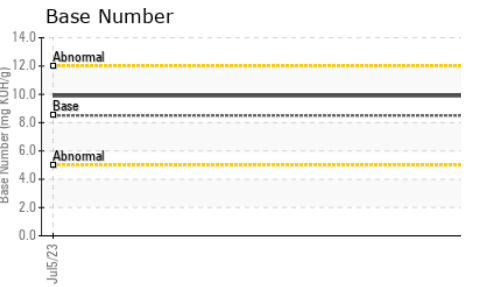
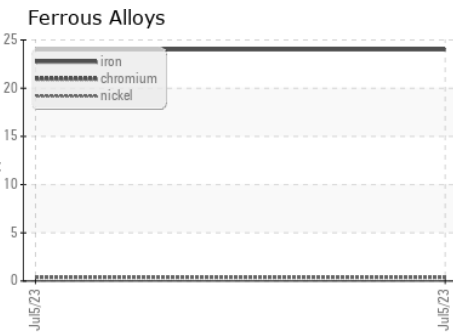
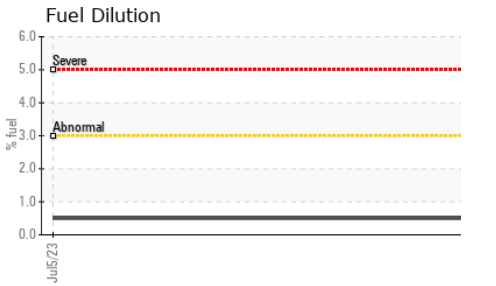


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	14.4	▲ 9.6	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0087845 **Received** : 13 Jul 2023
Lab Number : 05897148 **Diagnosed** : 17 Jul 2023
Unique Number : 10552958 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 166 - Phenix City
 18 Old Brickyard Rd
 Phenix City, AL
 US 36869
 Contact: DEAN PEACE JR
 dean.peace@gflenv.com

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)

T:
F: