



PROBLEM SUMMARY

Sample Rating Trend

DIRT

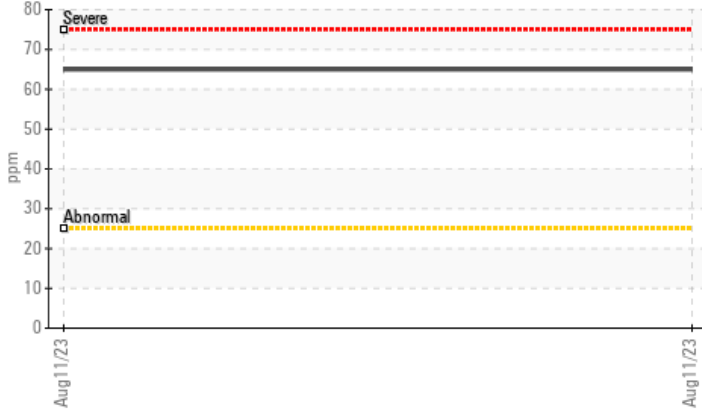


Area
166
 Machine Id
414061
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)



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	▲ 65	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 9.6	---	---

Customer Id: GFL166
 Sample No.: GFL0091205
 Lab Number: 05926984
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

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.

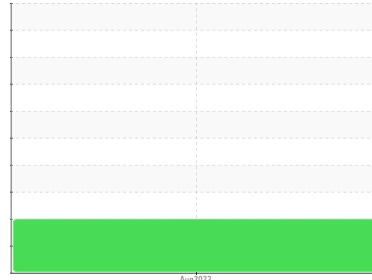
HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Area
166
 Machine Id
414061
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

Sample Rating Trend



DIRT



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	GFL0091205	---	---
Sample Date	Client Info	11 Aug 2023	---	---
Machine Age	hrs Client Info	142	---	---
Oil Age	hrs Client Info	142	---	---
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	20	---	---
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	7	---	---
Lead	ppm ASTM D5185m >40	1	---	---
Copper	ppm ASTM D5185m >330	45	---	---
Tin	ppm ASTM D5185m >15	2	---	---
Vanadium	ppm ASTM D5185m	<1	---	---
Cadmium	ppm ASTM D5185m	<1	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 250	404	---	---
Barium	ppm ASTM D5185m 10	0	---	---
Molybdenum	ppm ASTM D5185m 100	116	---	---
Manganese	ppm ASTM D5185m	4	---	---
Magnesium	ppm ASTM D5185m 450	695	---	---
Calcium	ppm ASTM D5185m 3000	1462	---	---
Phosphorus	ppm ASTM D5185m 1150	663	---	---
Zinc	ppm ASTM D5185m 1350	793	---	---
Sulfur	ppm ASTM D5185m 4250	2783	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	▲ 65	---	---
Sodium	ppm ASTM D5185m >158	6	---	---
Potassium	ppm ASTM D5185m >20	18	---	---
Fuel	% ASTM D3524 >3.0	0.3	---	---

INFRA-RED

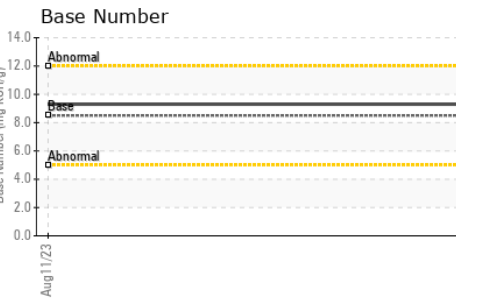
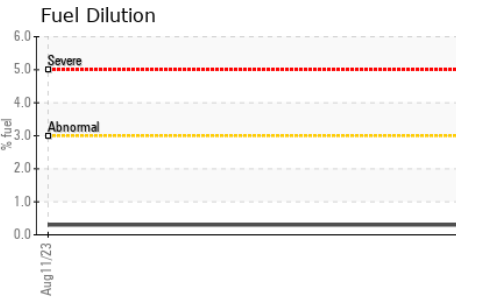
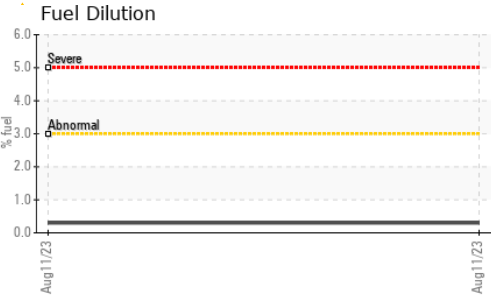
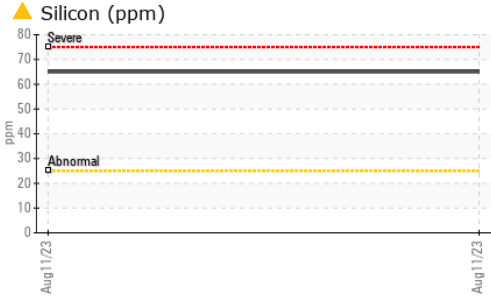
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >4	0.1	---	---
Nitration	Abs/cm *ASTM D7624 >20	6.1	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	24.9	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	19.9	---	---
Base Number (BN)	mg KOH/g ASTM D2896 8.5	9.3	---	---



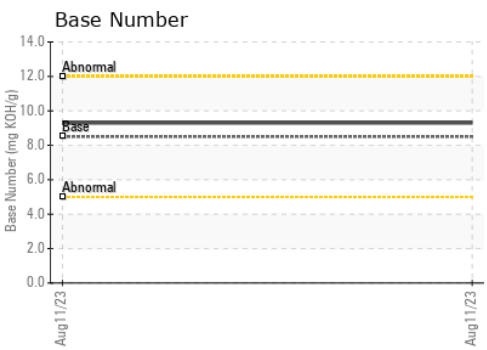
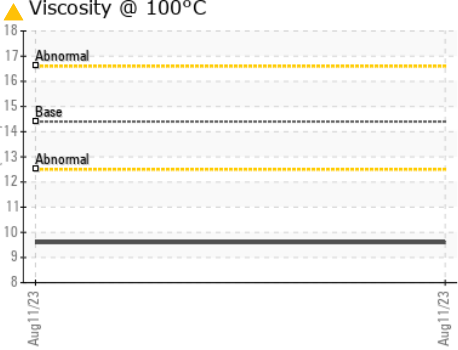
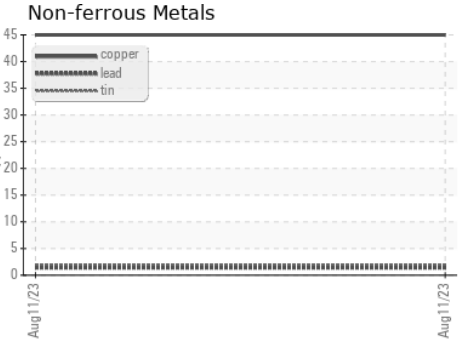
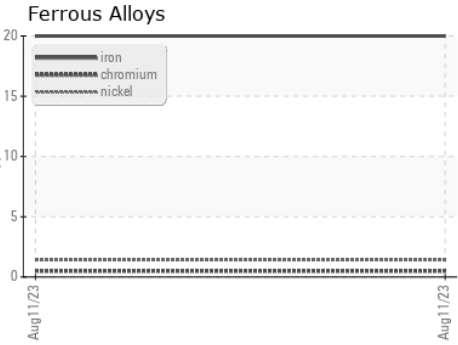
OIL ANALYSIS REPORT



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. : GFL0091205 **Received** : 17 Aug 2023
Lab Number : 05926984 **Diagnosed** : 18 Aug 2023
Unique Number : 10606931 **Diagnostician** : Don Baldrige
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: