



OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Machine Id
834024

Component
Natural Gas Engine

Fluid
DIESEL ENGINE OIL SAE 15W30 (--- GAL)



DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Cylinder, crank, or cam shaft wear is indicated. All other metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0103427	---	---
Sample Date	Client Info	07 Mar 2024	---	---
Machine Age	hrs	Client Info	1184	---
Oil Age	hrs	Client Info	1184	---
Oil Changed	Client Info	Changed	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	---

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>50	▲ 90	---
Chromium	ppm	ASTM D5185m	>5	2	---
Nickel	ppm	ASTM D5185m	>4	3	---
Titanium	ppm	ASTM D5185m	>5	<1	---
Silver	ppm	ASTM D5185m	>3	<1	---
Aluminum	ppm	ASTM D5185m	>25	8	---
Lead	ppm	ASTM D5185m	>40	4	---
Copper	ppm	ASTM D5185m	>150	15	---
Tin	ppm	ASTM D5185m	>4	2	---
Vanadium	ppm	ASTM D5185m		<1	---
Cadmium	ppm	ASTM D5185m		<1	---

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	250	6	---
Barium	ppm	ASTM D5185m	10	0	---
Molybdenum	ppm	ASTM D5185m	100	72	---
Manganese	ppm	ASTM D5185m		14	---
Magnesium	ppm	ASTM D5185m	450	989	---
Calcium	ppm	ASTM D5185m	3000	1353	---
Phosphorus	ppm	ASTM D5185m	1150	1023	---
Zinc	ppm	ASTM D5185m	1350	1153	---
Sulfur	ppm	ASTM D5185m	4250	2950	---

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	25	---
Sodium	ppm	ASTM D5185m	>25	6	---
Potassium	ppm	ASTM D5185m	>20	10	---

INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0	---
Nitration	Abs/cm	*ASTM D7624	>20	12.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.1	---

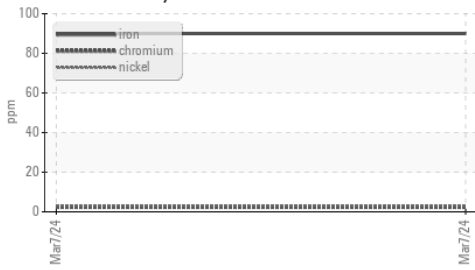
FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	4.6	---

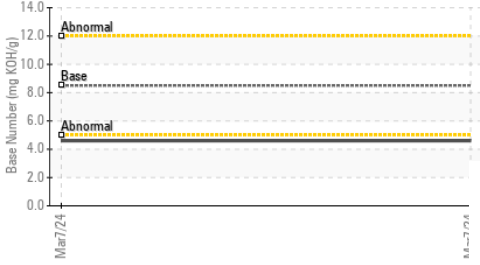


OIL ANALYSIS REPORT

▲ Ferrous Alloys



Base Number



Viscosity @ 100°C

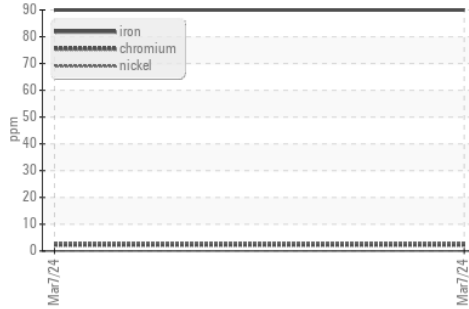


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

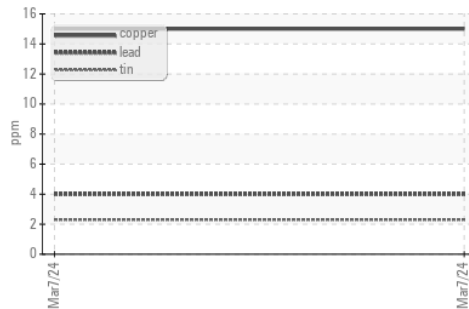
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	10.9	13.8	---

GRAPHS

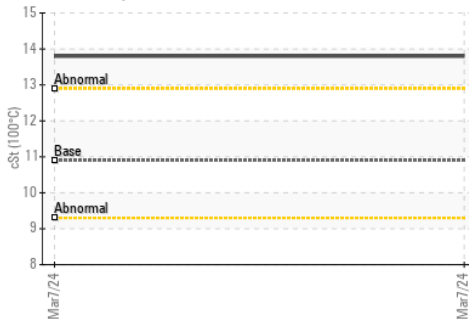
▲ Ferrous Alloys



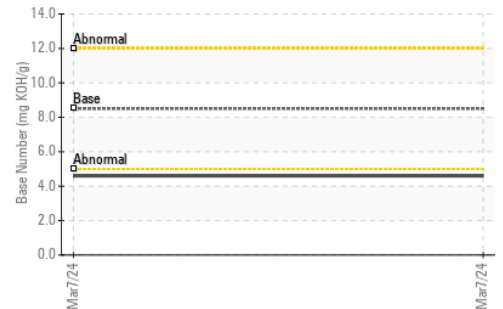
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0103427
 Lab Number : 06114056
 Unique Number : 10922889
 Test Package : FLEET

Received : 11 Mar 2024
 Tested : 12 Mar 2024
 Diagnosed : 12 Mar 2024 - Don Baldrige

GFL Environmental - 095 - Atlanta West
 2699 Cochran Industrial Blvd
 Douglasville, GA
 US 30127-1332
 Contact: Darrell Welch
 darrell.welch@gflenv.com
 T: (800)207-6618
 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)