



OIL ANALYSIS REPORT

Sample Rating Trend

FUEL



Machine Id
550245
Component
Diesel Engine
Fluid
{not provided} (--- LTR)



DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring.

Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0102606	---	---
Sample Date	Client Info		12 Feb 2024	---	---
Machine Age	hrs	Client Info	4450	---	---
Oil Age	hrs	Client Info	500	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	4	---	---
Chromium	ppm	ASTM D5185(m) >20	0	---	---
Nickel	ppm	ASTM D5185(m) >2	<1	---	---
Titanium	ppm	ASTM D5185(m) >2	0	---	---
Silver	ppm	ASTM D5185(m) >2	0	---	---
Aluminum	ppm	ASTM D5185(m) >25	2	---	---
Lead	ppm	ASTM D5185(m) >40	0	---	---
Copper	ppm	ASTM D5185(m) >330	<1	---	---
Tin	ppm	ASTM D5185(m) >15	0	---	---
Antimony	ppm	ASTM D5185(m)	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	3	---	---
Barium	ppm	ASTM D5185(m)	0	---	---
Molybdenum	ppm	ASTM D5185(m)	57	---	---
Manganese	ppm	ASTM D5185(m)	0	---	---
Magnesium	ppm	ASTM D5185(m)	927	---	---
Calcium	ppm	ASTM D5185(m)	1035	---	---
Phosphorus	ppm	ASTM D5185(m)	990	---	---
Zinc	ppm	ASTM D5185(m)	1133	---	---
Sulfur	ppm	ASTM D5185(m)	2658	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

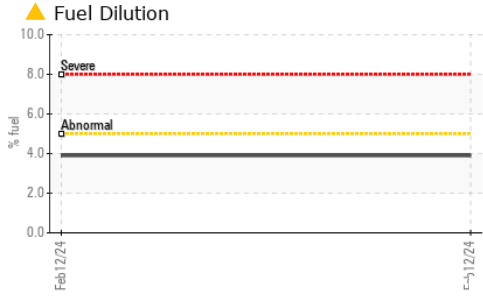
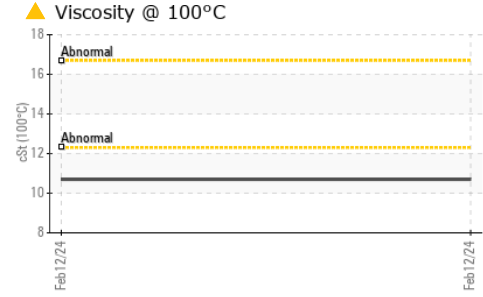
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	3	---	---
Sodium	ppm	ASTM D5185(m)	1	---	---
Potassium	ppm	ASTM D5185(m) >20	<1	---	---
Fuel	%	ASTM D7593* >5	▲ 3.9	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0	---	---
Nitration	Abs/cm	ASTM D7624* >20	6.8	---	---
Sulfation	Abs./1mm	ASTM D7415* >30	19.1	---	---



OIL ANALYSIS REPORT



FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	15.5	---	---

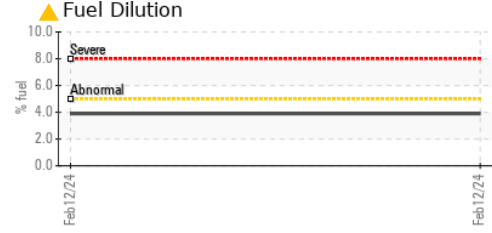
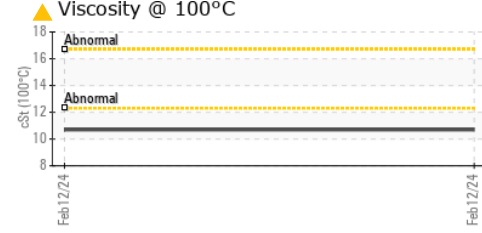
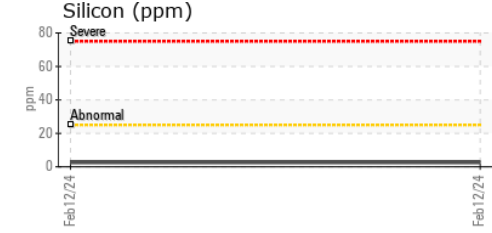
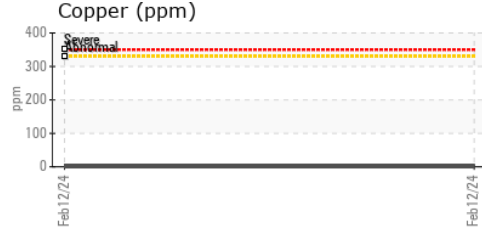
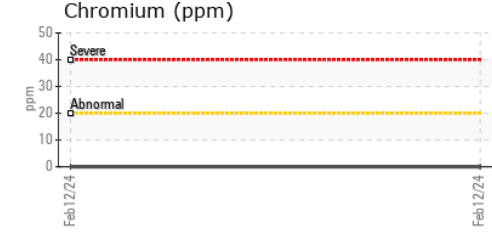
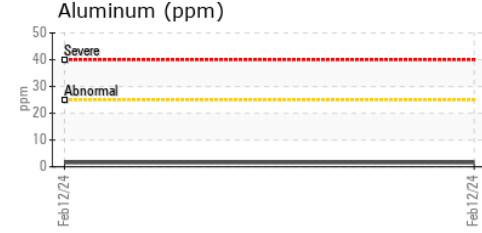
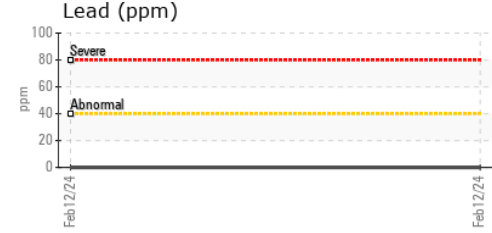
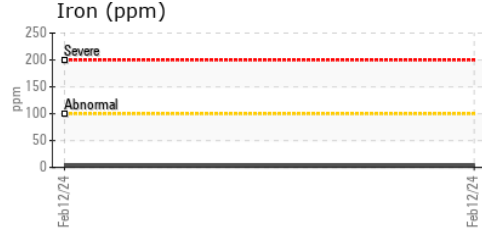
VISUAL

	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	VLITE	---	---
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 D7279(m)	▲ 10.7	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0102606
Lab Number : 02616559
Unique Number : 5733669
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, Visual)

GFL Environmental - 554 - Edmonton SW
 8409 -15th Street NW
 Edmonton, AB
 CA T6P 0B8
 Contact: Tim Greig
 tgreig@gflenv.com
 T: (780)231-0521
 F:

Received : 20 Feb 2024
 Tested : 22 Feb 2024
 Diagnosed : 22 Feb 2024 - Wes Davis
 To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.