

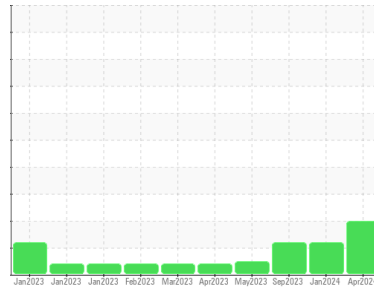


OIL ANALYSIS REPORT



Area
(62A0X0D) TALLASSEE
 Machine Id
425027-345507
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- LTR)

Sample Rating Trend



DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

Aluminum ppm levels are abnormal. Piston wear is indicated.

Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0080699	GFL0081857	GFL0078464
Sample Date	Client Info		11 Apr 2024	25 Jan 2024	29 Sep 2023
Machine Age	hrs	Client Info	17874	17584	17245
Oil Age	hrs	Client Info	1305	1015	676
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >120	29	20	11
Chromium	ppm	ASTM D5185m >20	<1	<1	<1
Nickel	ppm	ASTM D5185m >5	<1	<1	1
Titanium	ppm	ASTM D5185m >2	<1	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >20	▲ 22	15	9
Lead	ppm	ASTM D5185m >40	<1	<1	<1
Copper	ppm	ASTM D5185m >330	6	4	3
Tin	ppm	ASTM D5185m >15	<1	<1	1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	1	3	9
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	61	62	64
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 0	735	794	826
Calcium	ppm	ASTM D5185m	1071	1048	1076
Phosphorus	ppm	ASTM D5185m	787	837	900
Zinc	ppm	ASTM D5185m	1003	1109	1126
Sulfur	ppm	ASTM D5185m	2849	2843	2871

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	11	10	7
Sodium	ppm	ASTM D5185m	9	4	4
Potassium	ppm	ASTM D5185m >20	21	4	3
Fuel	%	ASTM D3524 >3.0	▲ 4.3	▲ 3.5	▲ 3.9

INFRA-RED

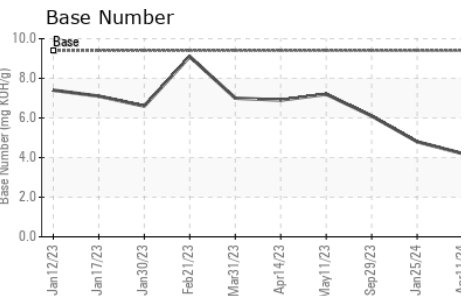
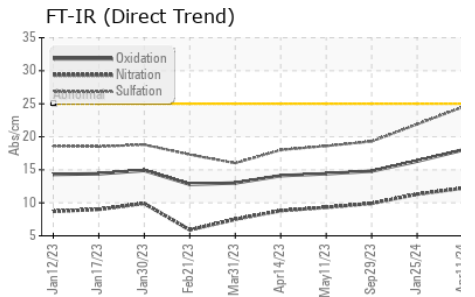
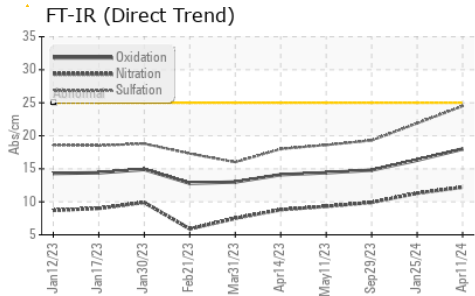
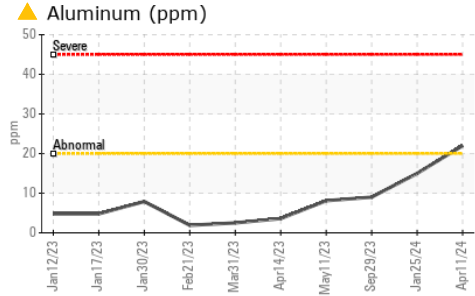
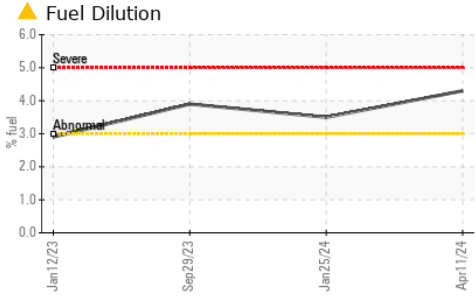
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	1.3	1	0.7
Nitration	Abs/cm	*ASTM D7624 >20	12.2	11.3	9.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	24.5	21.9	19.3

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.0	16.3	14.8
Base Number (BN)	mg KOH/g	ASTM D2896 9.4	4.2	4.8	6.1



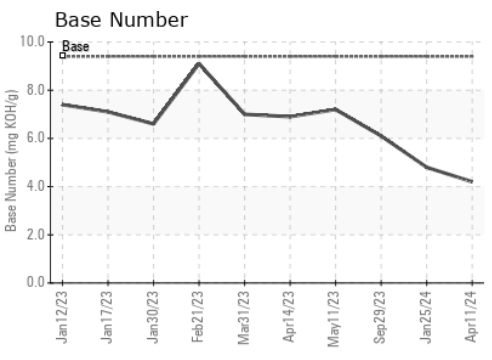
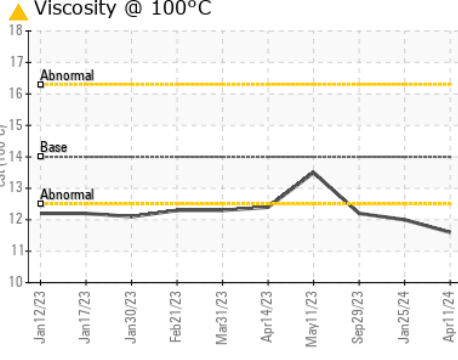
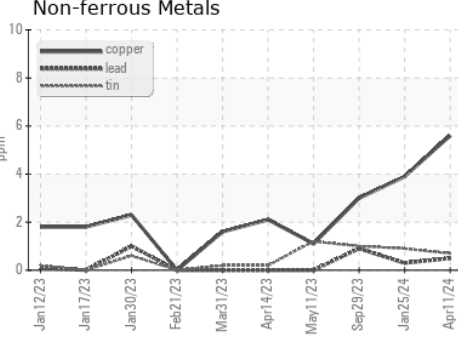
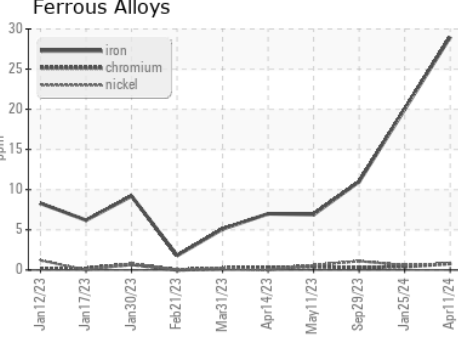
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	▲ 11.6	▲ 12.0

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0080699 **Received** : 16 Apr 2024
Lab Number : 06150986 **Tested** : 19 Apr 2024
Unique Number : 10981064 **Diagnosed** : 19 Apr 2024 - Wes Davis
Test Package : FLEET (Additional Tests: PercentFuel)

GFL Environmental - 172 - Montgomery-Alexander City-Tallahassee
 Multiple Sites
 Montgomery, AL
 US 36108
 Contact: RICHARD HATFIELD
 rhatfield@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)