FLEET LUBE 360™ OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
814034
Component
Diesel Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

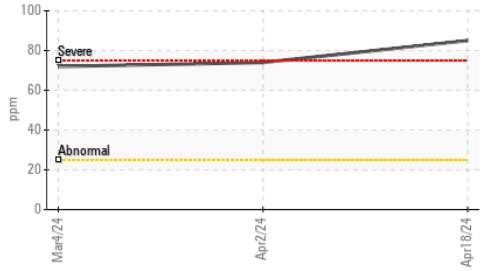
Elemental level of silicon (Si) above normal indicating ingress of seal material.

FLUID CONDITION

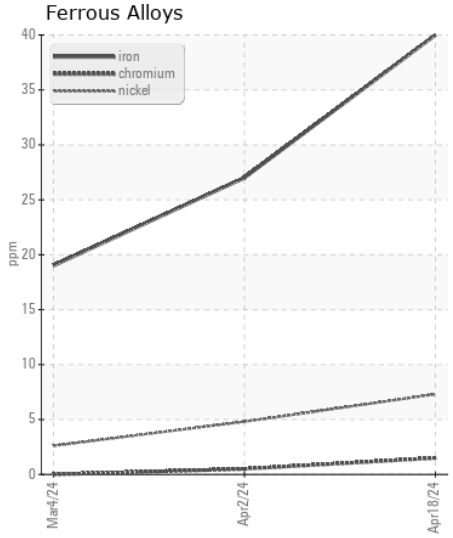
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0102949	GFL0102988	GFL0102967
Sample Date		Client Info		18 Apr 2024	02 Apr 2024	04 Mar 2024
Machine Age	hrs	Client Info		493	347	145
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>120	40	27	19
Chromium	ppm	ASTM D5185m	>20	2	<1	0
Nickel	ppm	ASTM D5185m	>5	7	5	3
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>20	8	7	6
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	195	69	2
Tin	ppm	ASTM D5185m	>15	3	2	2
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	▲ 85	▲ 74	72
Potassium	ppm	ASTM D5185m	>20	11	6	4
Fuel	%	ASTM D3524	>3.0	<1.0	<1.0	0.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.3	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	9.9	8.7	6.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.9	25.2	25.5
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		2	3	<1
Boron	ppm	ASTM D5185m		241	294	393
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		137	122	120
Manganese	ppm	ASTM D5185m		5	4	2
Magnesium	ppm	ASTM D5185m		697	676	719
Calcium	ppm	ASTM D5185m		1492	1432	1362
Phosphorus	ppm	ASTM D5185m		728	699	700
Zinc	ppm	ASTM D5185m		836	807	797
Sulfur	ppm	ASTM D5185m		2506	2618	2179
Oxidation	Abs/.1mm	*ASTM D7414	>25	23.2	22.2	20.4
Base Number (BN)	mg KOH/g	ASTM D2896		7.7	8.7	9.4
Visc @ 100°C	cSt	ASTM D445		9.9	9.7	9.6

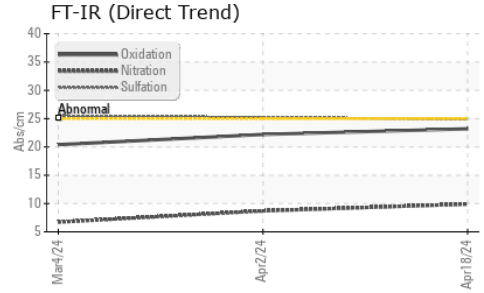
Silicon (ppm)



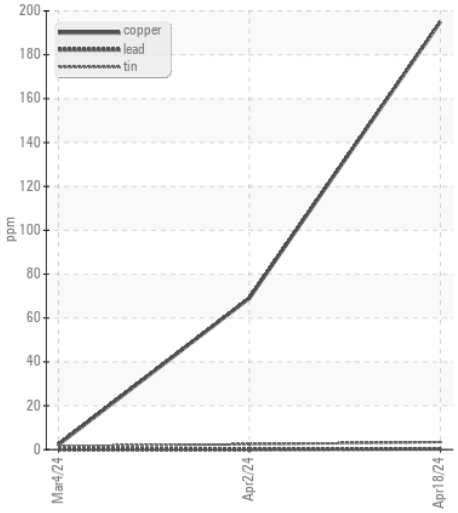
Ferrous Alloys



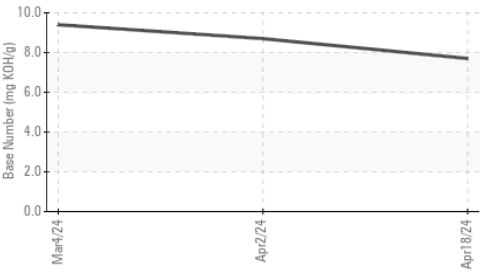
FT-IR (Direct Trend)



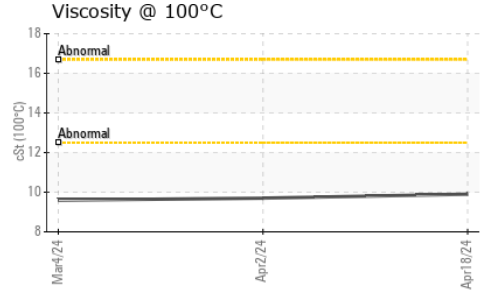
Non-ferrous Metals



Base Number



Viscosity @ 100°C



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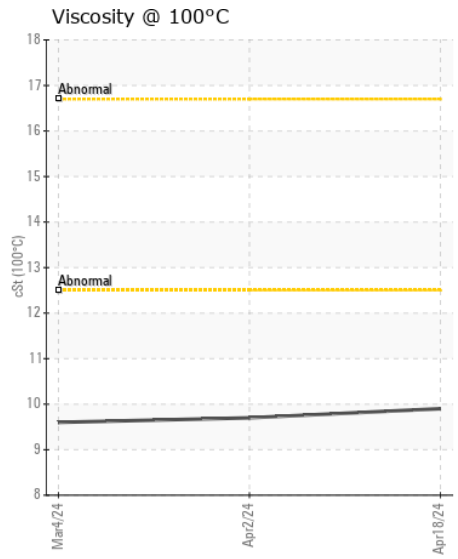

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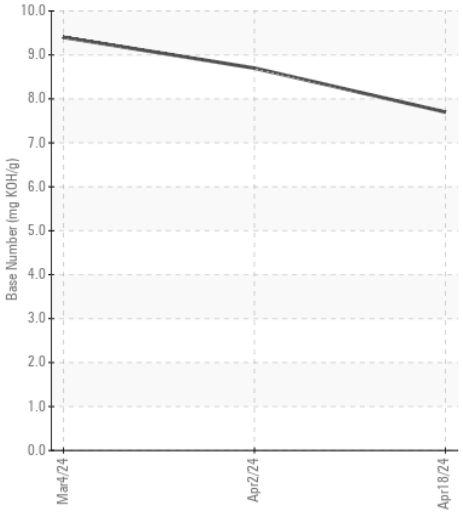
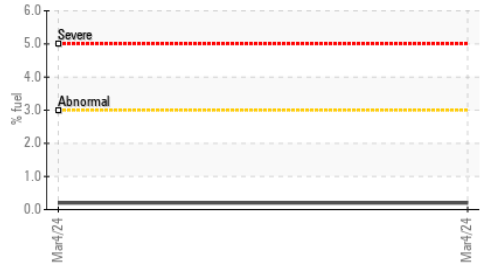


Fuel Dilution



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0102949
Lab Number : 06155141
Unique Number : 10990564
Test Package : FLEET (Additional Tests: FuelDilution)

Received : 19 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 24 Apr 2024 - Sean Felton

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)

GFL Environmental - 816 - WCA of South Arkansas
3083 Smackover Hwy
El Dorado, AR
US 71730
Contact: Mike Howell
mike.howell@gflenv.com
T:
F: