FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
(CX20397)
Machine Id
811070
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- LTR)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

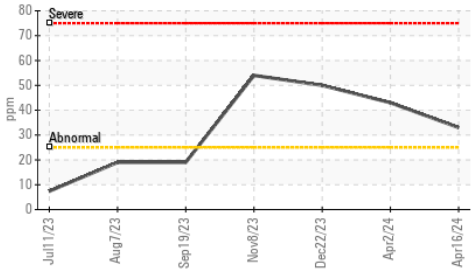
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

FLUID CONDITION

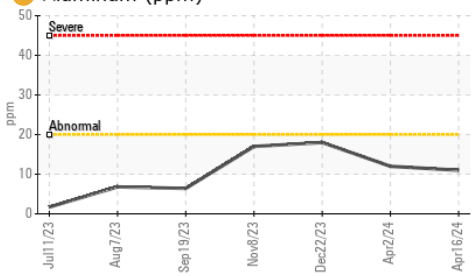
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0111507	GFL0111515	GFL0083097
Sample Date		Client Info		16 Apr 2024	02 Apr 2024	22 Dec 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>120	48	69	70
Chromium	ppm	ASTM D5185m	>20	3	4	4
Nickel	ppm	ASTM D5185m	>5	<1	<1	<1
Titanium	ppm	ASTM D5185m	>2	1	<1	1
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	11	12	18
Lead	ppm	ASTM D5185m	>40	4	4	4
Copper	ppm	ASTM D5185m	>330	5	4	4
Tin	ppm	ASTM D5185m	>15	2	1	3
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	▲ 33	▲ 43	▲ 50
Potassium	ppm	ASTM D5185m	>20	4	0	1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.5	0.5	0.8
Nitration	Abs/cm	*ASTM D7624	>20	10.9	10.3	10.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	22.5	23.4
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	>216	4	3	2
Boron	ppm	ASTM D5185m	250	10	8	11
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	61	62	65
Manganese	ppm	ASTM D5185m		<1	2	1
Magnesium	ppm	ASTM D5185m	450	745	864	871
Calcium	ppm	ASTM D5185m	3000	1365	1555	1324
Phosphorus	ppm	ASTM D5185m	1150	879	1000	933
Zinc	ppm	ASTM D5185m	1350	1078	1199	1123
Sulfur	ppm	ASTM D5185m	4250	2594	3126	2308
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.2	19.3	20.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	5.9	6.1	5.2
Visc @ 100°C	cSt	ASTM D445	14.4	14.3	14.2	14.2

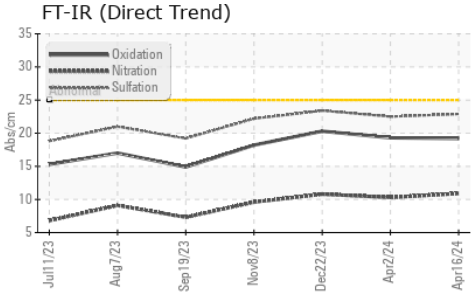
Silicon (ppm)



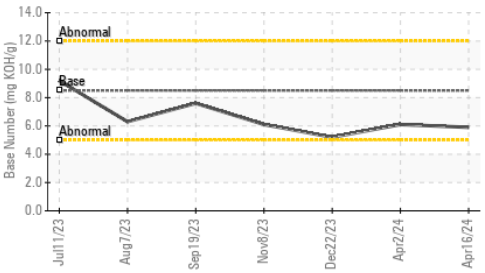
Aluminum (ppm)



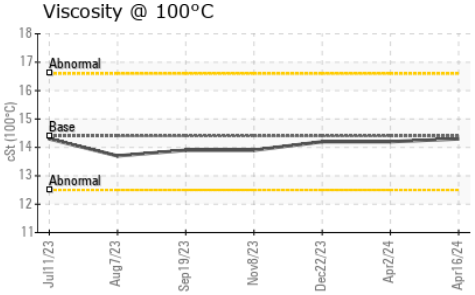
FT-IR (Direct Trend)



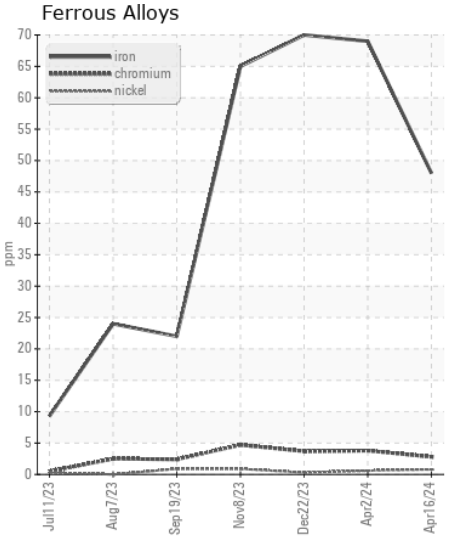
Base Number



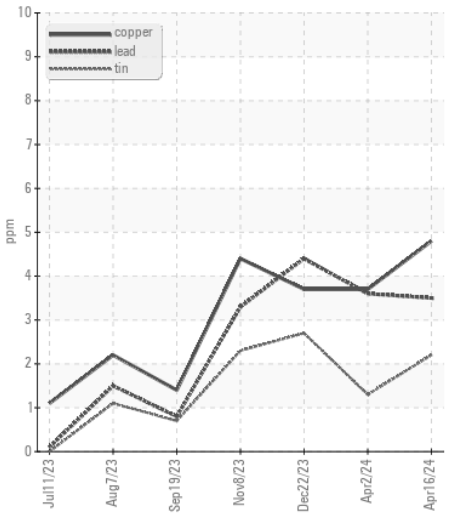
Viscosity @ 100°C



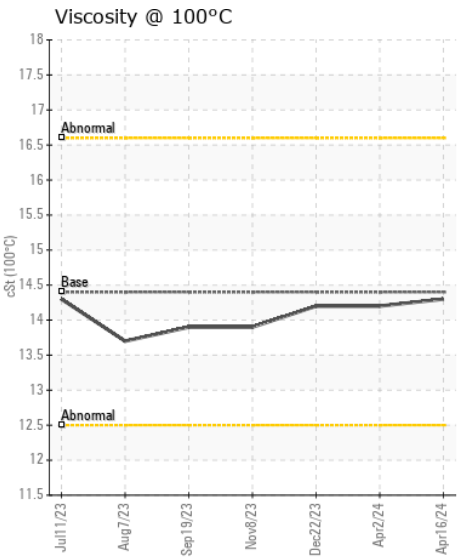
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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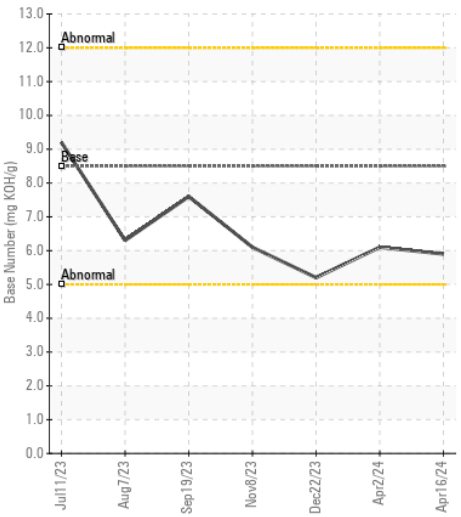

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0111507
Lab Number : 06153990
Unique Number : 10989413
Test Package : FLEET

Received : 19 Apr 2024
Tested : 22 Apr 2024
Diagnosed : 23 Apr 2024 - Don Baldridge

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 - 074 - Douglas - Transwaste
1219 Landfill Road
Douglas, GA
US 31533
Contact: CURTIS JACOBS
CURTIS.JACOBS@GFLENV.COM
T: (912)384-6001
F: