FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
814023
Component
Diesel Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. 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

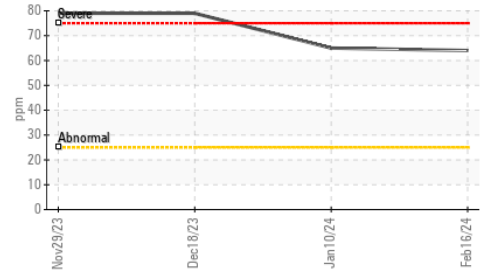
Elemental level of silicon (Si) above normal indicating ingress of seal material.

FLUID CONDITION

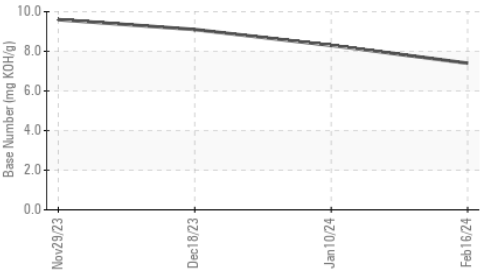
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0110887	GFL0090963	GFL0103013
Sample Date		Client Info		16 Feb 2024	10 Jan 2024	18 Dec 2023
Machine Age	hrs	Client Info		585	424	258
Oil Age	hrs	Client Info		161	166	117
Filter Age	hrs	Client Info		0	0	117
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	29	22	16
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>4	7	4	3
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	1	<1
Aluminum	ppm	ASTM D5185m	>20	6	5	6
Lead	ppm	ASTM D5185m	>40	2	<1	0
Copper	ppm	ASTM D5185m	>330	176	119	17
Tin	ppm	ASTM D5185m	>15	3	3	2
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	▲ 64	▲ 65	▲ 79
Potassium	ppm	ASTM D5185m	>20	7	5	4
Fuel	%	ASTM D3524	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	10.0	8.7	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.1	24.6	25.9
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		3	2	4
Boron	ppm	ASTM D5185m		231	267	353
Barium	ppm	ASTM D5185m		<1	0	<1
Molybdenum	ppm	ASTM D5185m		100	102	119
Manganese	ppm	ASTM D5185m		4	4	4
Magnesium	ppm	ASTM D5185m		640	630	701
Calcium	ppm	ASTM D5185m		1538	1420	1391
Phosphorus	ppm	ASTM D5185m		665	736	721
Zinc	ppm	ASTM D5185m		831	853	836
Sulfur	ppm	ASTM D5185m		2397	2418	2399
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.0	21.3	21.1
Base Number (BN)	mg KOH/g	ASTM D2896		7.4	8.3	9.1
Visc @ 100°C	cSt	ASTM D445		10.1	10.0	9.6

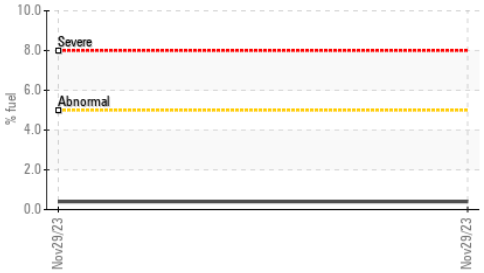
Silicon (ppm)



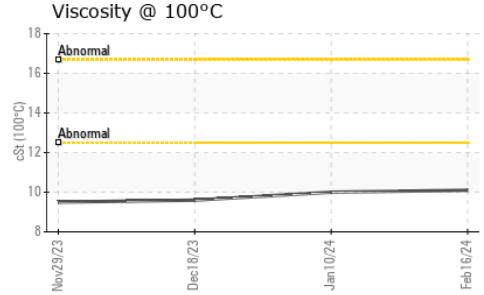
Base Number



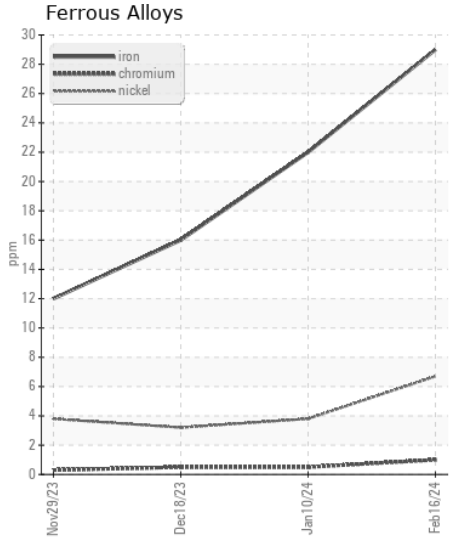
Fuel Dilution



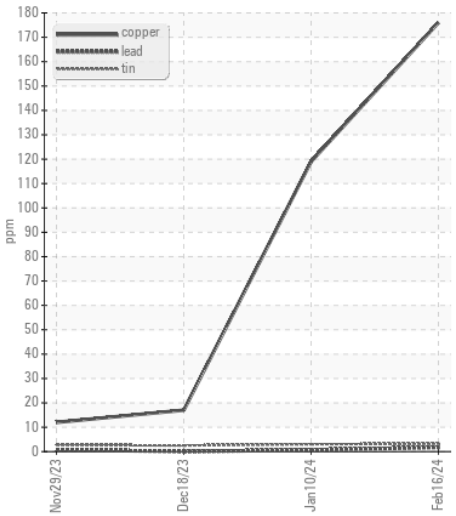
Viscosity @ 100°C



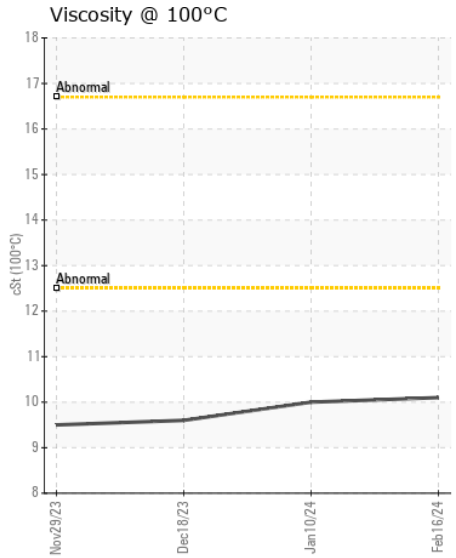
Ferrous Alloys



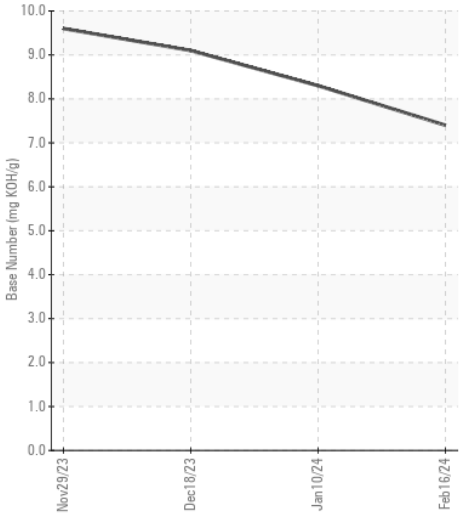
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0110887
Lab Number : 06098979
Unique Number : 10897209
Test Package : FLEET (Additional Tests: FuelDilution)

Received : 23 Feb 2024
Tested : 26 Feb 2024
Diagnosed : 26 Feb 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)

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