FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
434029
Component
Natural Gas Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

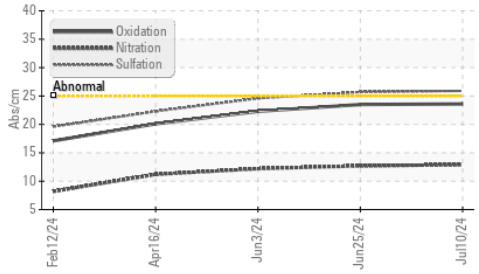
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

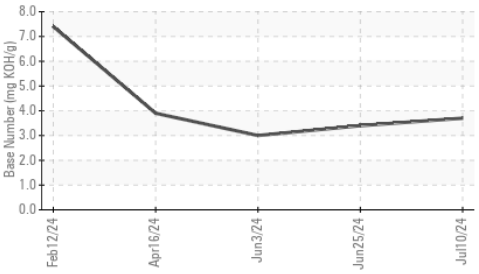
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**GFL0127217**	GFL0122014	GFL0116584
Sample Date		Client Info		**10 Jul 2024**	25 Jun 2024	03 Jun 2024
Machine Age	hrs	Client Info		**1225**	1117	947
Oil Age	hrs	Client Info		**1055**	170	947
Filter Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Not Changd	Changed
Filter Changed		Client Info		**Changed**	Not Changd	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>50	**41**	38	37
Chromium	ppm	ASTM D5185m	>4	**2**	2	1
Nickel	ppm	ASTM D5185m	>2	**<1**	<1	0
Titanium	ppm	ASTM D5185m		**<1**	<1	0
Silver	ppm	ASTM D5185m	>3	**<1**	0	0
Aluminum	ppm	ASTM D5185m	>9	**28**	26	24
Lead	ppm	ASTM D5185m	>30	**11**	9	4
Copper	ppm	ASTM D5185m	>35	**14**	12	12
Tin	ppm	ASTM D5185m	>4	**1**	1	2
Vanadium	ppm	ASTM D5185m		**<1**	0	0
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>+100	**88**	80	91
Potassium	ppm	ASTM D5185m	>20	**93**	81	80
Water		WC Method	>0.1	**NEG**	NEG	NEG
Soot %	%	*ASTM D7844		**0**	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	**12.9**	12.7	12.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	**25.9**	25.7	24.6
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	>0.1	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185m		**3**	6	7
Boron	ppm	ASTM D5185m		**8**	5	9
Barium	ppm	ASTM D5185m		**7**	6	7
Molybdenum	ppm	ASTM D5185m		**57**	50	52
Manganese	ppm	ASTM D5185m		**4**	4	4
Magnesium	ppm	ASTM D5185m		**804**	754	809
Calcium	ppm	ASTM D5185m		**1321**	1181	1194
Phosphorus	ppm	ASTM D5185m		**702**	722	727
Zinc	ppm	ASTM D5185m		**942**	898	881
Sulfur	ppm	ASTM D5185m		**2233**	2360	2501
Oxidation	Abs/.1mm	*ASTM D7414	>25	**23.6**	23.5	22.3
Base Number (BN)	mg KOH/g	ASTM D2896		**3.7**	3.4	3.0
Visc @ 100°C	cSt	ASTM D445		**11.9**	11.7	11.7

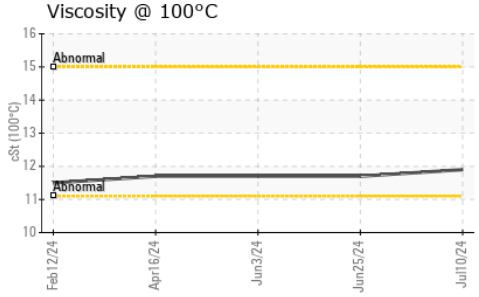
FT-IR (Direct Trend)



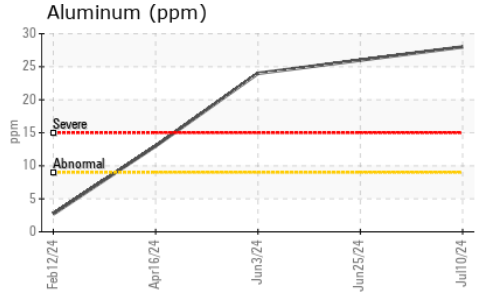
Base Number



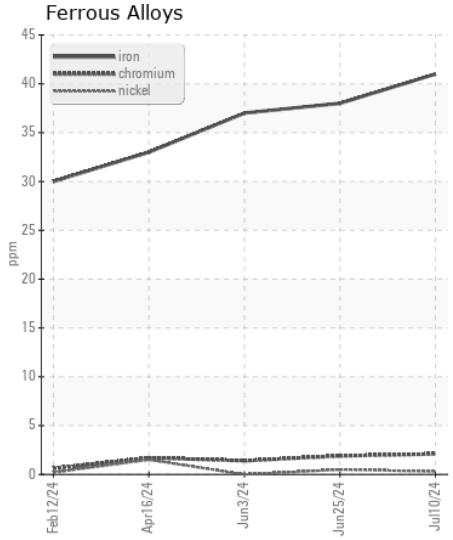
Viscosity @ 100°C



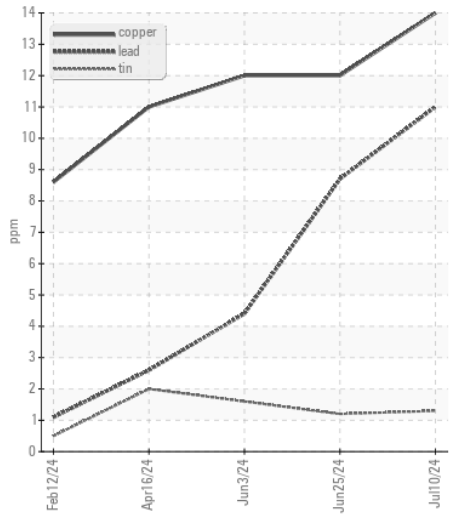
Aluminum (ppm)



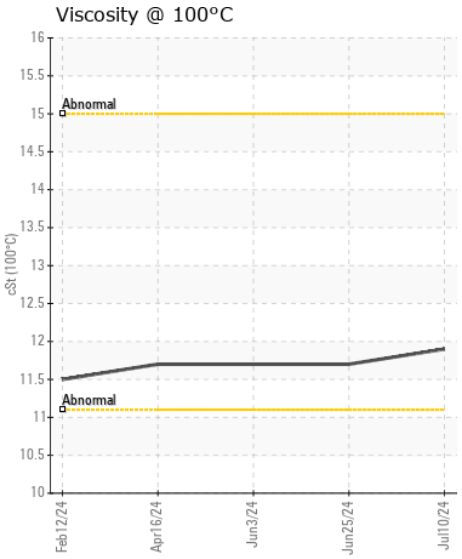
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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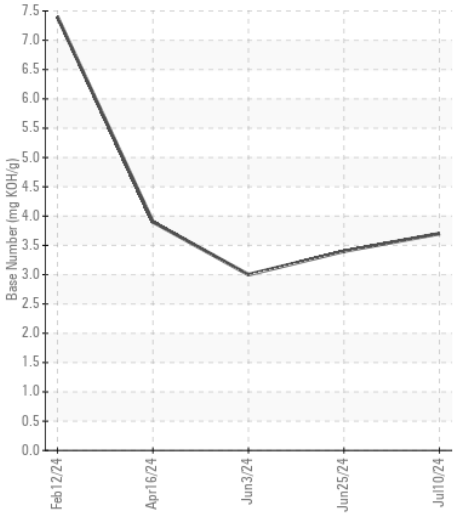

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0127217
Lab Number : 06235537
Unique Number : 11124371
Test Package : FLEET

Received : 15 Jul 2024
Tested : 15 Jul 2024
Diagnosed : 15 Jul 2024 - Wes Davis

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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