FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
(413UA)
Machine Id
813012
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

An increase in the iron level is noted. All other component wear rates are normal.

CONTAMINATION

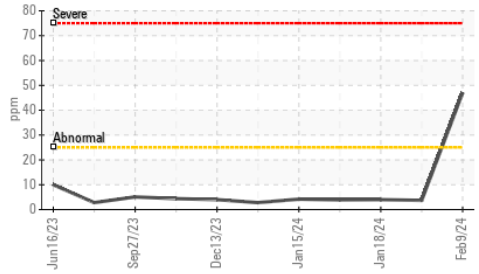
Elemental level of silicon (Si) above normal indicating ingress of seal material.

FLUID CONDITION

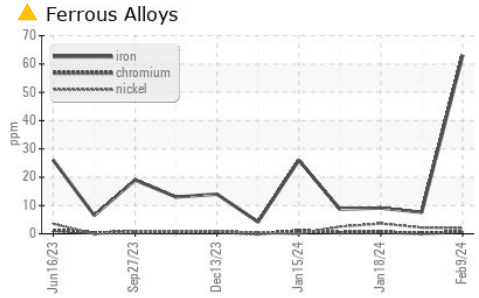
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0108253	GFL0108273	GFL0108324
Sample Date		Client Info		09 Feb 2024	05 Feb 2024	18 Jan 2024
Machine Age	hrs	Client Info		3469	3468	3351
Oil Age	hrs	Client Info		3469	3468	3351
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>120	▲ 63	8	9
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	2	2	4
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	<1	<1	<1
Aluminum	ppm	ASTM D5185m	>20	3	1	2
Lead	ppm	ASTM D5185m	>40	2	0	1
Copper	ppm	ASTM D5185m	>330	28	1	2
Tin	ppm	ASTM D5185m	>15	2	<1	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	▲ 47	4	4
Potassium	ppm	ASTM D5185m	>20	4	0	2
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	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.3	7.9	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1	18.7	18.5
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	>216	6	<1	0
Boron	ppm	ASTM D5185m	250	38	11	10
Barium	ppm	ASTM D5185m	10	18	0	1
Molybdenum	ppm	ASTM D5185m	100	70	56	58
Manganese	ppm	ASTM D5185m		24	<1	1
Magnesium	ppm	ASTM D5185m	450	1022	904	926
Calcium	ppm	ASTM D5185m	3000	1561	1012	1068
Phosphorus	ppm	ASTM D5185m	1150	1056	1013	925
Zinc	ppm	ASTM D5185m	1350	1170	1217	1207
Sulfur	ppm	ASTM D5185m	4250	3859	2879	3121
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.2	14.4	13.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.2	7.9	8.3
Visc @ 100°C	cSt	ASTM D445	14.4	13.9	13.9	13.9

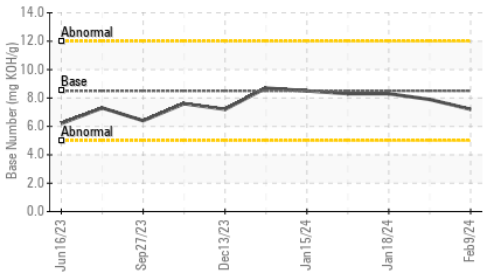
Silicon (ppm)



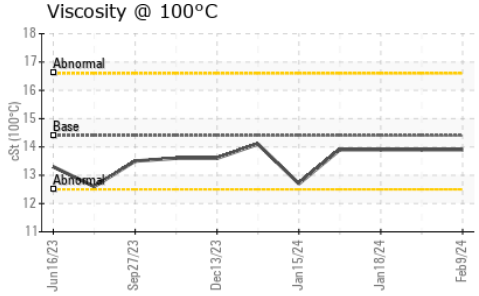
Ferrous Alloys



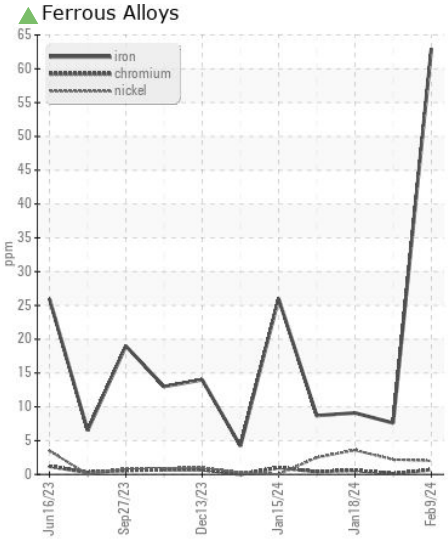
Base Number



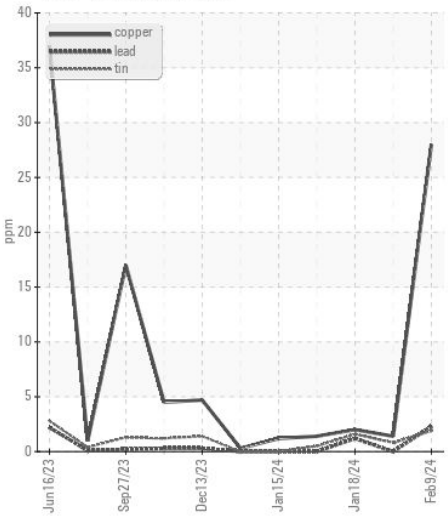
Viscosity @ 100°C



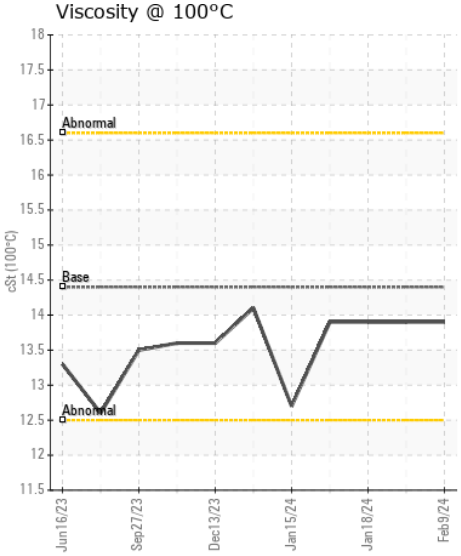
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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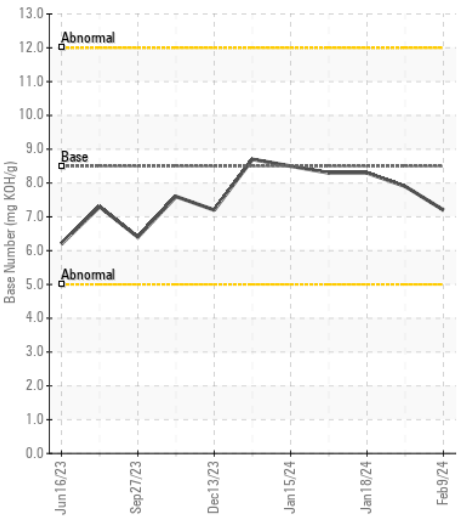

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0108253
Lab Number : 06085676
Unique Number : 10873121
Test Package : FLEET

Received : 12 Feb 2024
Tested : 12 Feb 2024
Diagnosed : 13 Feb 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)

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