



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
124006-869
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 XLE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0122751	GFL0060820	GFL0042782
Sample Date		Client Info		10 Jul 2024	01 Dec 2022	21 Jan 2022
Machine Age	hrs	Client Info		14100	12910	12937
Oil Age	hrs	Client Info		1163	600	601
Filter Age	hrs	Client Info		1163	600	601
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	18	36	39
Chromium	ppm	ASTM D5185m	>20	1	5	4
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		14	2	12
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	3	8	10
Lead	ppm	ASTM D5185m	>40	0	1	1
Copper	ppm	ASTM D5185m	>330	1	1	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

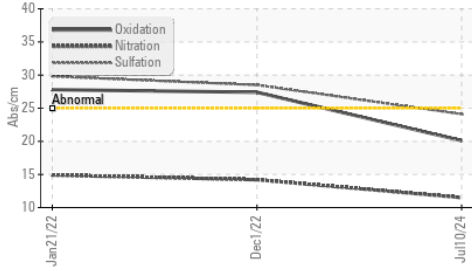
Silicon	ppm	ASTM D5185m	>25	5	5	8
Potassium	ppm	ASTM D5185m	>20	10	11	24
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.7	0.9
Nitration	Abs/cm	*ASTM D7624	>20	11.5	14.2	14.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.1	28.5	29.8
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

FLUID CONDITION

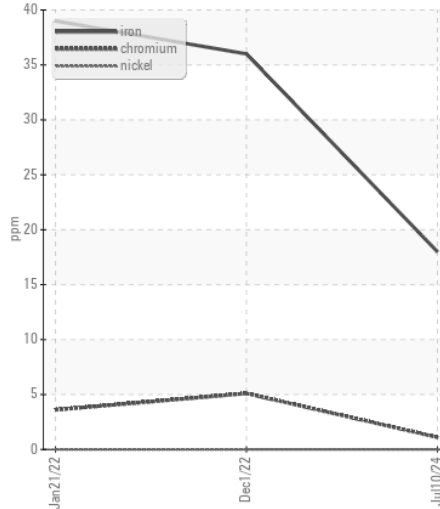
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		4	7	6
Boron	ppm	ASTM D5185m		111	183	70
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		60	108	59
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		679	661	716
Calcium	ppm	ASTM D5185m		1572	1608	1563
Phosphorus	ppm	ASTM D5185m	760	683	719	716
Zinc	ppm	ASTM D5185m	830	901	879	862
Sulfur	ppm	ASTM D5185m	2770	2851	3065	2593
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.1	27.4	27.8
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	6.4	8.0	6.5
Visc @ 100°C	cSt	ASTM D445	14.9	14.3	14.1	14.5

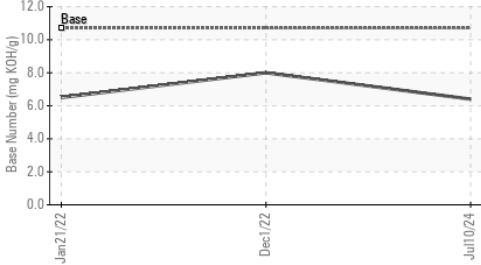
FT-IR (Direct Trend)



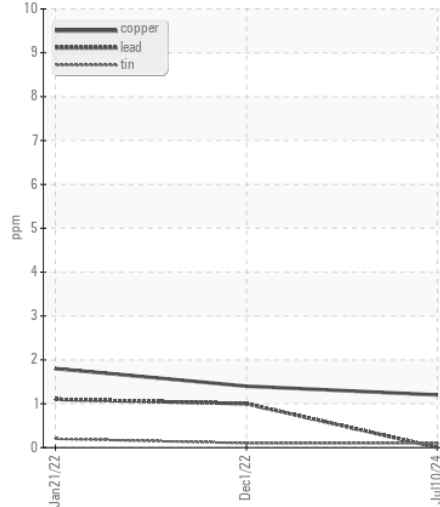
Ferrous Alloys



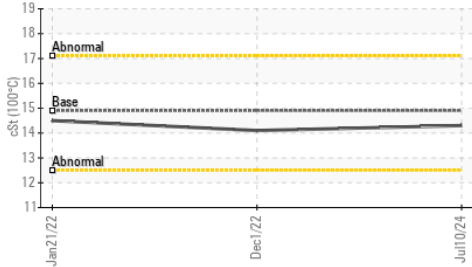
Base Number



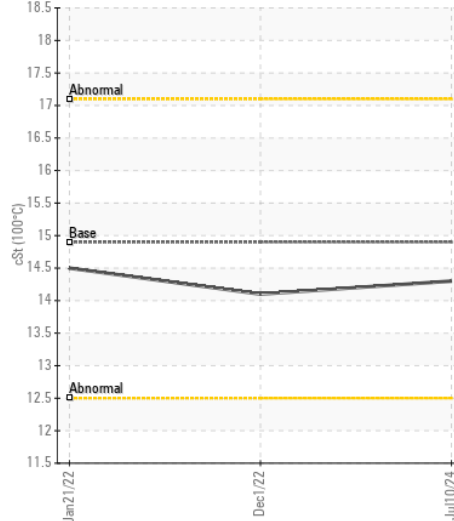
Non-ferrous Metals



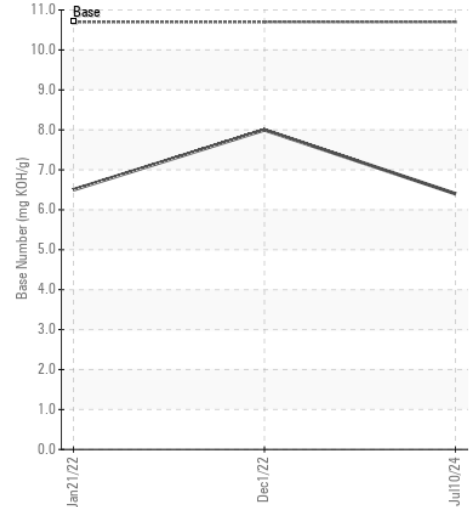
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0122751
 Lab Number : 06235602
 Unique Number : 11124436
 Test Package : FLEET

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

GFL Environmental - 629 - Northern A1
 3947 US 131 N
 Kalkaska, MI
 US 49646-8428
 Contact: MITCH HERSHBERGER

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)

T: (231)624-0848

F: