



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
427041-756
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 XLE 15W40 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0096246	GFL0104595	GFL0096249
Sample Date		Client Info		03 Apr 2024	07 Mar 2024	19 Oct 2023
Machine Age	hrs	Client Info		11734	11688	268978
Oil Age	hrs	Client Info		0	538	0
Filter Age	hrs	Client Info		0	538	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	34	34	8
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		10	11	11
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	7	7	5
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	<1	0	<1
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	<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.

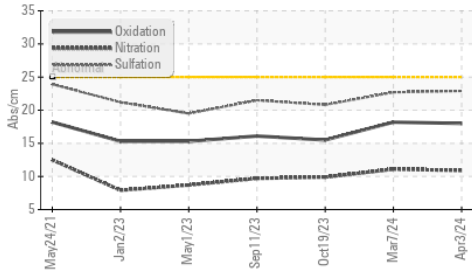
Silicon	ppm	ASTM D5185m	>25	5	5	4
Potassium	ppm	ASTM D5185m	>20	16	3	8
Fuel		WC Method	>2.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1	1	0.6
Nitration	Abs/cm	*ASTM D7624	>20	10.9	11.1	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	22.7	20.8
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

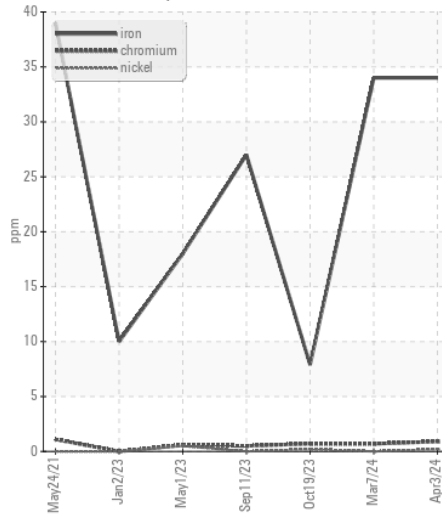
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		4	4	6
Boron	ppm	ASTM D5185m		108	90	89
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		59	62	51
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		656	718	689
Calcium	ppm	ASTM D5185m		1589	1610	1415
Phosphorus	ppm	ASTM D5185m	760	737	728	762
Zinc	ppm	ASTM D5185m	830	843	858	829
Sulfur	ppm	ASTM D5185m	2770	3338	3287	3369
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.0	18.2	15.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	7.3	6.5	7.4
Visc @ 100°C	cSt	ASTM D445	14.9	13.6	13.7	14.1

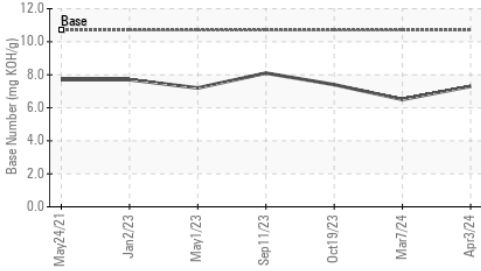
FT-IR (Direct Trend)



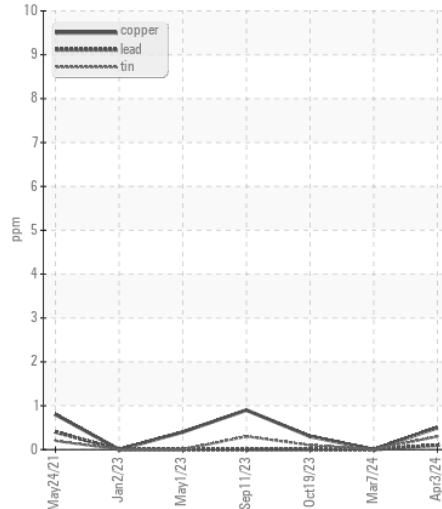
Ferrous Alloys



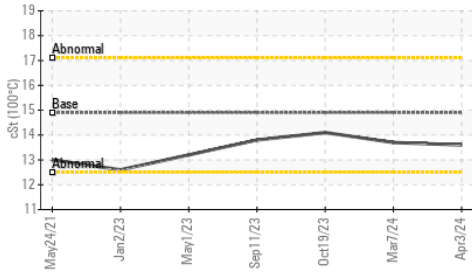
Base Number



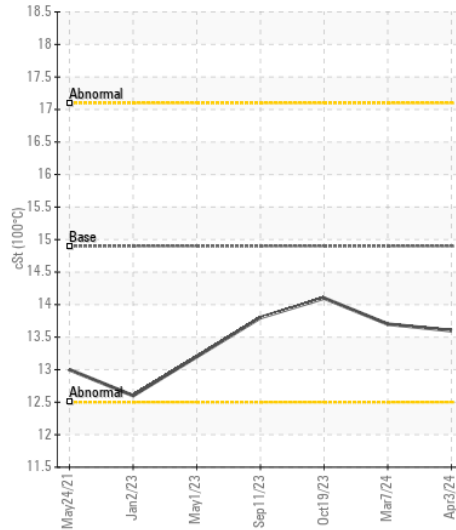
Non-ferrous Metals



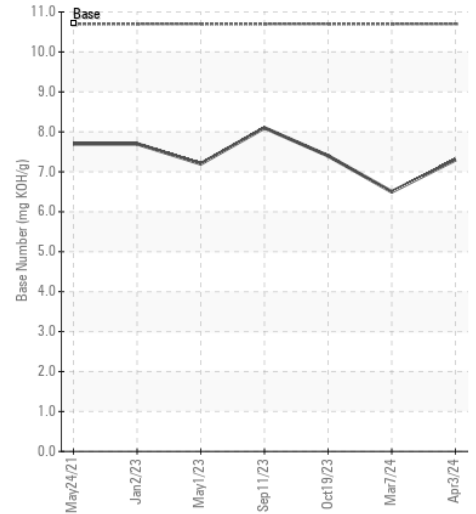
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0096246
Lab Number : 06150952
Unique Number : 10981030
Test Package : FLEET

Received : 16 Apr 2024
Tested : 17 Apr 2024
Diagnosed : 17 Apr 2024 - Wes Davis

GFL Environmental - 624 - Elmira Hauling
 10164 M-32
 Elmira, MI
 US 49730

Contact: ANDY GROBASKI
 andyg@americanwaste.org

T: (989)370-2941

F:

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)