



OIL ANALYSIS REPORT

Sample Rating Trend

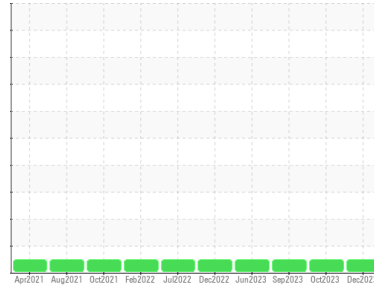
NORMAL



Machine Id
429023-1256

Component
Diesel Engine

Fluid
CHEVRON DELO 400 XLE 15W40 (--- GAL)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0096279	GFL0096253	GFL0064431
Sample Date	Client Info		30 Dec 2023	19 Oct 2023	11 Sep 2023
Machine Age	hrs	Client Info	10908	226345	10265
Oil Age	hrs	Client Info	600	0	456
Oil Changed	Client Info		Changed	Changed	Not Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
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

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	13	16	13
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		6	11	10
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	3	4	3
Lead	ppm	ASTM D5185m	>40	2	1	<1
Copper	ppm	ASTM D5185m	>330	<1	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		195	79	104
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		88	57	57
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		746	707	781
Calcium	ppm	ASTM D5185m		1597	1489	1738
Phosphorus	ppm	ASTM D5185m	760	811	793	758
Zinc	ppm	ASTM D5185m	830	966	864	908
Sulfur	ppm	ASTM D5185m	2770	3037	3293	3740

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	6	5	5
Sodium	ppm	ASTM D5185m		4	5	5
Potassium	ppm	ASTM D5185m	>20	2	6	4

INFRA-RED

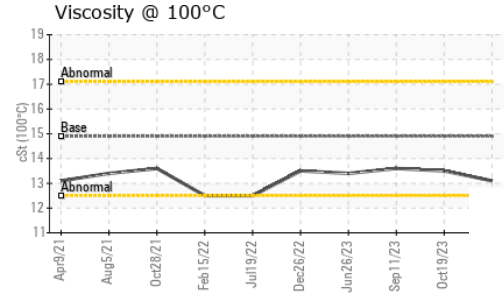
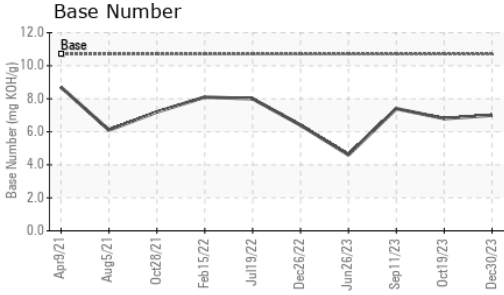
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.4	0.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.2	11.4	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	22.9	20.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.1	18.1	16.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	7.0	6.8	7.4



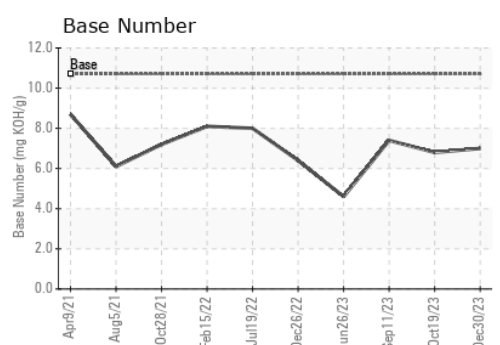
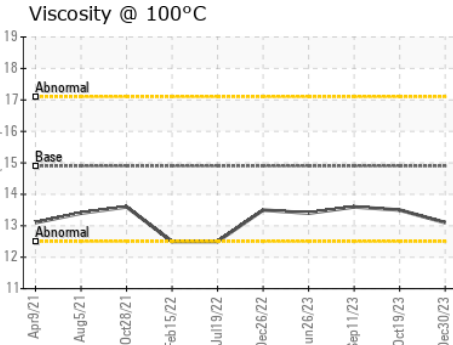
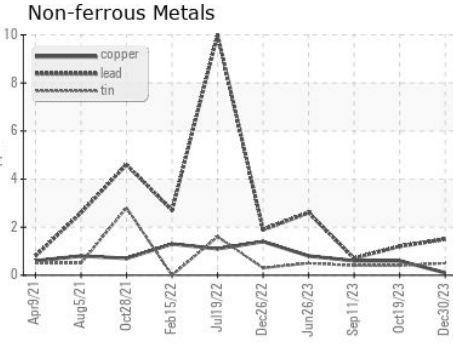
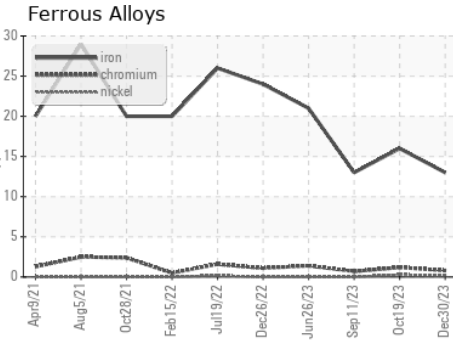
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VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.9	13.1	13.5	13.6

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0096279 **Received** : 08 Jan 2024
Lab Number : 06054662 **Diagnosed** : 09 Jan 2024
Unique Number : 10820611 **Diagnostician** : Wes Davis
Test Package : FLEET

GFL Environmental - 624 - Elmira Hauling
 10164 M-32
 Elmira, MI
 US 49730
 Contact: ANDY GROBASKI
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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)