



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
WL0089-462

Component
Diesel Engine

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



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

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		GFL0096119	---	---
Sample Date	Client Info		09 Nov 2023	---	---
Machine Age	hrs	Client Info	8632	---	---
Oil Age	hrs	Client Info	892	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>2.1	<1.0	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>51	34	---
Chromium	ppm	ASTM D5185m	>11	<1	---
Nickel	ppm	ASTM D5185m	>5	2	---
Titanium	ppm	ASTM D5185m		15	---
Silver	ppm	ASTM D5185m	>3	<1	---
Aluminum	ppm	ASTM D5185m	>31	2	---
Lead	ppm	ASTM D5185m	>26	1	---
Copper	ppm	ASTM D5185m	>26	1	---
Tin	ppm	ASTM D5185m	>4	<1	---
Vanadium	ppm	ASTM D5185m		0	---
Cadmium	ppm	ASTM D5185m		<1	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		135	---
Barium	ppm	ASTM D5185m		6	---
Molybdenum	ppm	ASTM D5185m		53	---
Manganese	ppm	ASTM D5185m		<1	---
Magnesium	ppm	ASTM D5185m		689	---
Calcium	ppm	ASTM D5185m		1644	---
Phosphorus	ppm	ASTM D5185m	760	748	---
Zinc	ppm	ASTM D5185m	830	862	---
Sulfur	ppm	ASTM D5185m	2770	3651	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>22	6	---
Sodium	ppm	ASTM D5185m	>31	0	---
Potassium	ppm	ASTM D5185m	>20	6	---

INFRA-RED

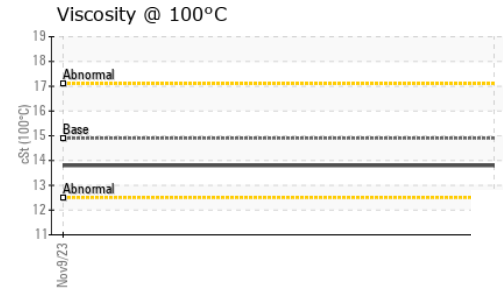
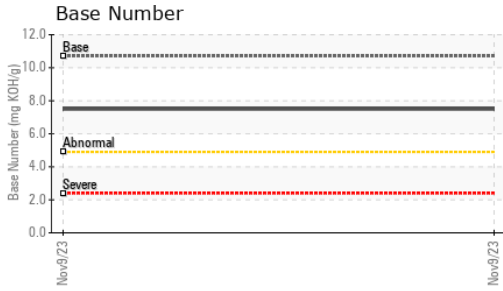
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.8	---
Nitration	Abs/cm	*ASTM D7624	>20	11.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	7.5	---



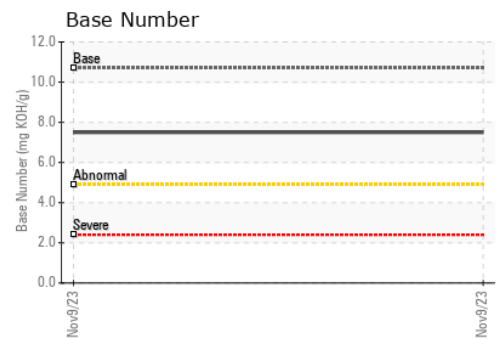
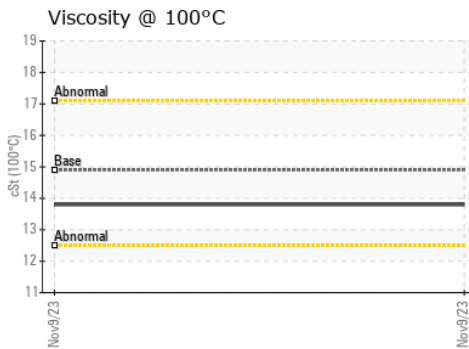
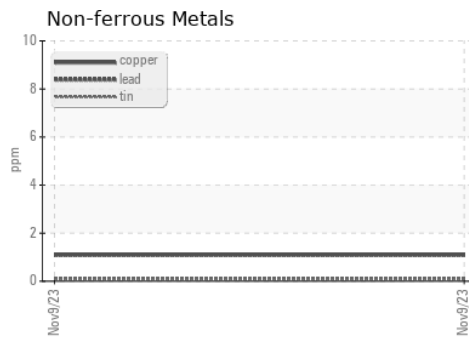
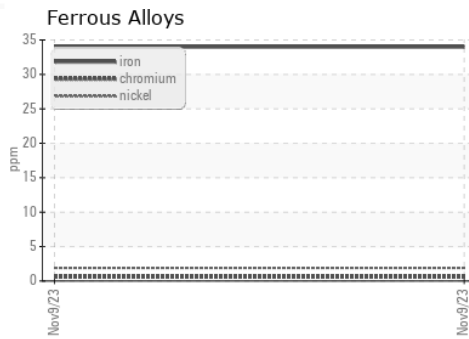
OIL ANALYSIS REPORT



PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.21	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.9	13.8	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0096119 Received : 14 Nov 2023
 Lab Number : 06006675 Diagnosed : 14 Nov 2023
 Unique Number : 10740437 Diagnostician : Wes Davis
 Test Package : FLEET

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: