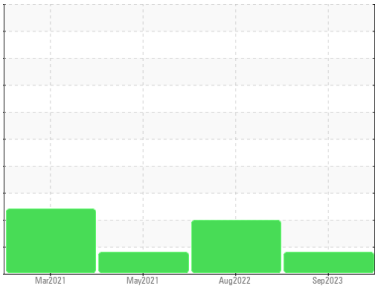
PROBLEM SUMMARY

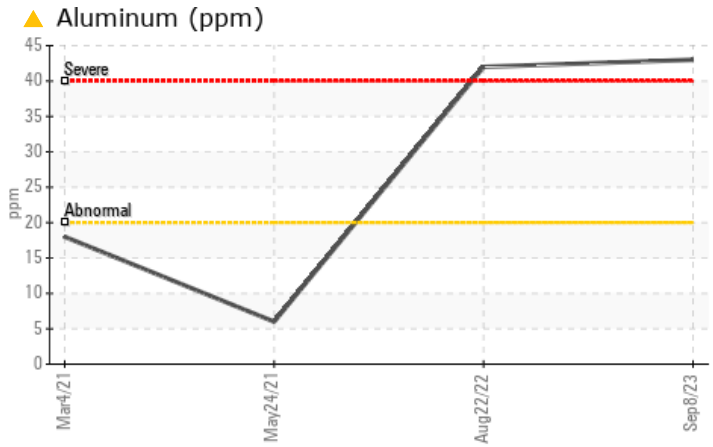
Sample Rating Trend



WEAR

Machine Id
251000-958
Component
Diesel Engine
Fluid
CHEVRON DELO 400 XLE 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	MARGINAL
Aluminum	ppm	ASTM D5185m	>20	▲ 43	▲ 42	6

Customer Id: GFL629
Sample No.: GFL0084505
Lab Number: 05949833
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

22 Aug 2022 Diag: Doug Bogart

WEAR

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.The aluminum level is abnormal. All other component wear rates are normal. Light fuel dilution occurring. Fuel is present in the oil and is lowering the viscosity.

view report

24 May 2021 Diag: Don Baldridge

FUEL

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. Light fuel dilution occurring. The BN result indicates that there is suitable alkalinity remaining in the oil.

view report

04 Mar 2021 Diag: Jonathan Hester

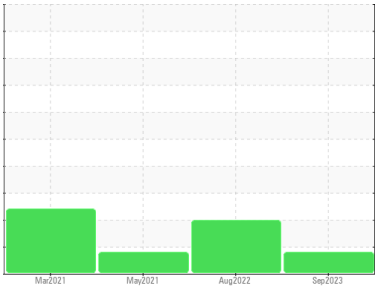
FUEL

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.All component wear rates are normal. There is a high amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
251000-958
Component
Diesel Engine
Fluid
CHEVRON DELO 400 XLE 15W40 (--- GAL)

DIAGNOSIS

Recommendation
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
The aluminum level is abnormal. All other 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 acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0084505**	GFL0052999	GFL0024697
Sample Date		Client Info		**08 Sep 2023**	22 Aug 2022	24 May 2021
Machine Age	hrs	Client Info		**4641**	3401	3401
Oil Age	hrs	Client Info		**1240**	402	382
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	ABNORMAL	MARGINAL

CONTAMINATION		method	limit/base	current	history1	history2
Glycol		WC Method		**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	**34**	45	8
Chromium	ppm	ASTM D5185m	>20	**2**	3	<1
Nickel	ppm	ASTM D5185m	>4	**0**	0	<1
Titanium	ppm	ASTM D5185m		**5**	2	13
Silver	ppm	ASTM D5185m	>3	**0**	<1	<1
Aluminum	ppm	ASTM D5185m	>20	▲ **43**	▲ 42	6
Lead	ppm	ASTM D5185m	>40	**1**	2	<1
Copper	ppm	ASTM D5185m	>330	**2**	5	<1
Tin	ppm	ASTM D5185m	>15	**<1**	1	<1
Antimony	ppm	ASTM D5185m		**---**	---	0
Vanadium	ppm	ASTM D5185m		**<1**	0	<1
Cadmium	ppm	ASTM D5185m		**0**	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**126**	54	103
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**80**	45	37
Manganese	ppm	ASTM D5185m		**1**	2	<1
Magnesium	ppm	ASTM D5185m		**564**	440	610
Calcium	ppm	ASTM D5185m		**1692**	1517	1365
Phosphorus	ppm	ASTM D5185m	760	**758**	831	666
Zinc	ppm	ASTM D5185m	830	**893**	993	735
Sulfur	ppm	ASTM D5185m	2770	**3454**	2710	2482

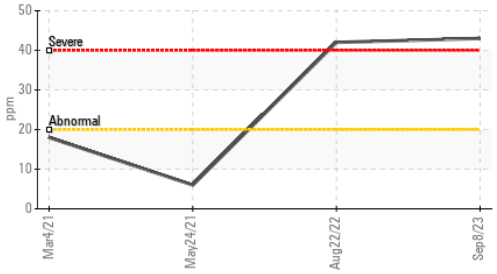
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**10**	16	4
Sodium	ppm	ASTM D5185m		**2**	3	2
Potassium	ppm	ASTM D5185m	>20	**1**	3	2
Fuel	%	ASTM D3524	>5	**<1.0**	▲ 3.2	▲ 4.3

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.6**	0.7	0.1
Nitration	Abs/cm	*ASTM D7624	>20	**10.5**	12.5	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	**20.9**	24.1	19.4

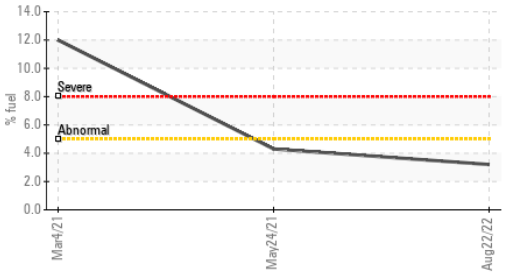
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**16.0**	22.7	14.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	**6.9**	9.3	9.6

OIL ANALYSIS REPORT

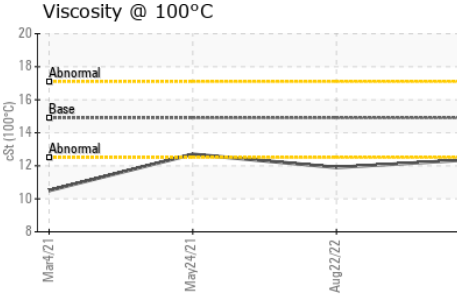
Aluminum (ppm)



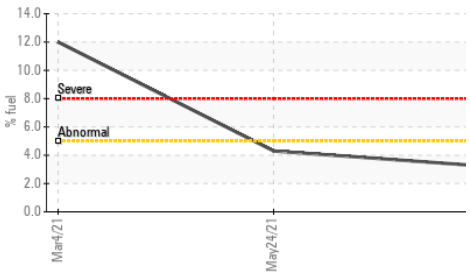
Fuel Dilution



Viscosity @ 100°C



Fuel Dilution

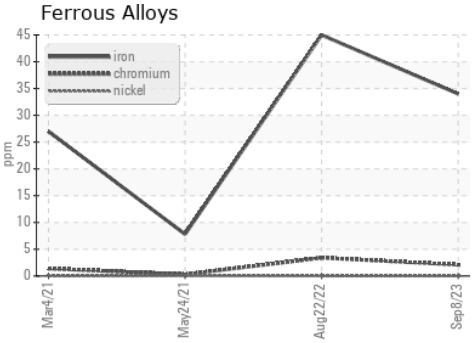


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

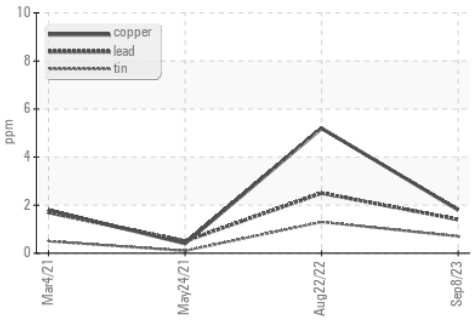
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.9	**12.4**	▲ 11.9	12.7

GRAPHS

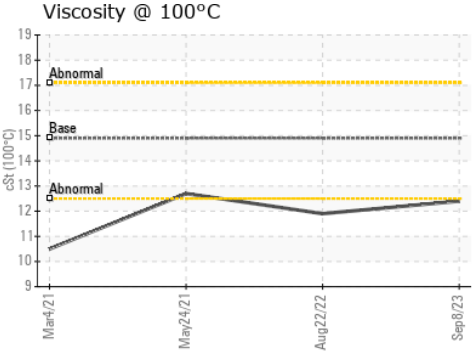
Ferrous Alloys



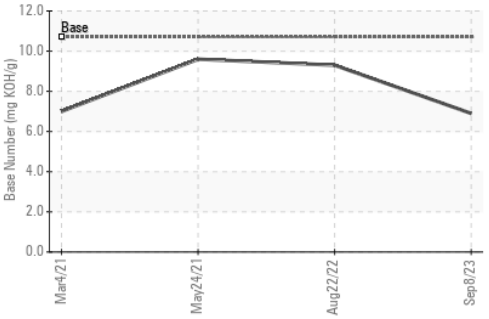
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0084505 **Received** : 13 Sep 2023
Lab Number : 05949833 **Diagnosed** : 18 Sep 2023
Unique Number : 10645792 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

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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