



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
728018-1145

Component
Diesel Engine

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

RECOMMENDATION

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0096326	GFL0096278	GFL0055604
Sample Date		Client Info		27 Dec 2023	28 Nov 2023	11 Sep 2023
Machine Age	hrs	Client Info		14344	14164	13815
Oil Age	hrs	Client Info		12795	0	401
Filter Age	hrs	Client Info		12795	0	401
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>80	▲ 85	63	23
Chromium	ppm	ASTM D5185m	>5	2	1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		11	11	10
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>30	6	5	4
Lead	ppm	ASTM D5185m	>30	1	0	<1
Copper	ppm	ASTM D5185m	>150	23	22	11
Tin	ppm	ASTM D5185m	>5	<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

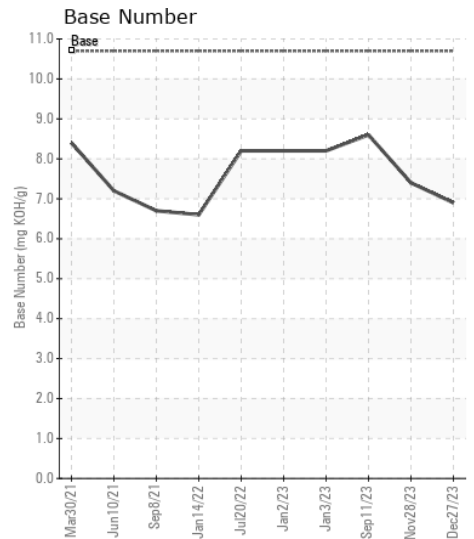
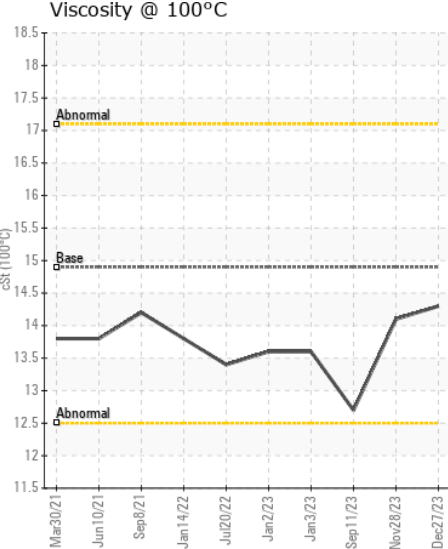
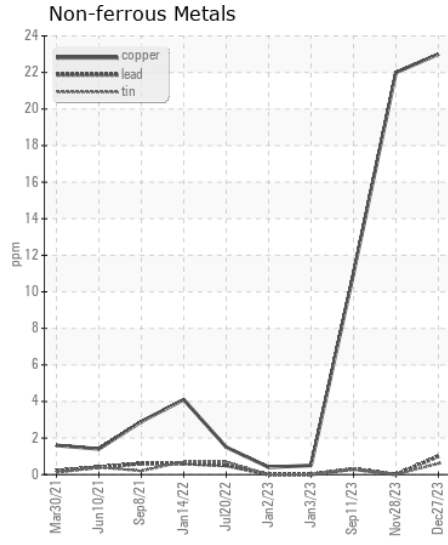
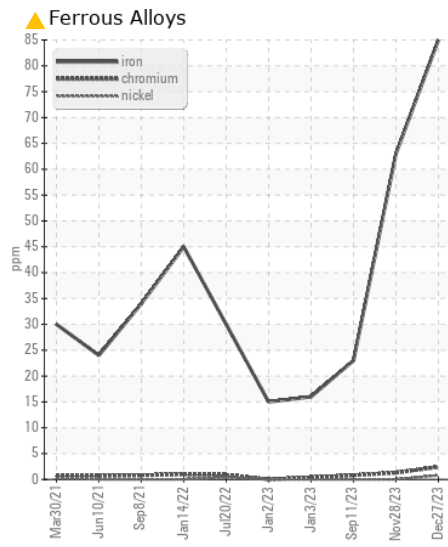
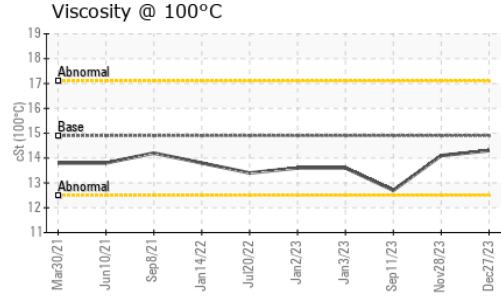
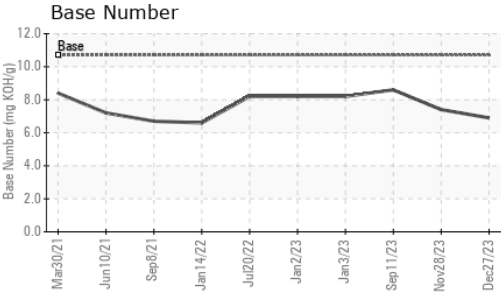
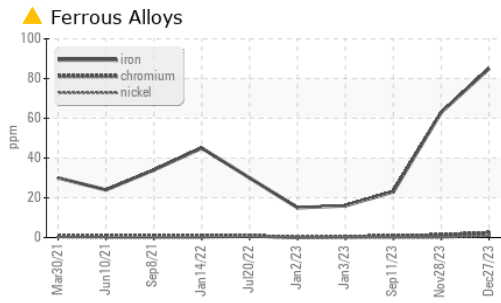
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	13	12	8
Potassium	ppm	ASTM D5185m	>20	8	7	5
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	1	1	0.5
Nitration	Abs/cm	*ASTM D7624	>20	11.7	12.3	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.9	23.6	19.6
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		26	22	18
Boron	ppm	ASTM D5185m		62	74	122
Barium	ppm	ASTM D5185m		0	2	0
Molybdenum	ppm	ASTM D5185m		51	48	46
Manganese	ppm	ASTM D5185m		2	<1	1
Magnesium	ppm	ASTM D5185m		779	643	724
Calcium	ppm	ASTM D5185m		1581	1411	1557
Phosphorus	ppm	ASTM D5185m	760	781	642	686
Zinc	ppm	ASTM D5185m	830	932	774	829
Sulfur	ppm	ASTM D5185m	2770	3098	2860	3535
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.2	21.0	15.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	6.9	7.4	8.6
Visc @ 100°C	cSt	ASTM D445	14.9	14.3	14.1	12.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0096326 **Received** : 08 Jan 2024
Lab Number : 06054650 **Diagnosed** : 10 Jan 2024
Unique Number : 10820599 **Diagnostician** : Sean Felton
Test Package : FLEET

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 Elmira, MI
 US 49730
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Certificate L2367
 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)