



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
10946

Component
Front Diesel Engine

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

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0058873	GFL0072411	GFL0048087
Sample Date		Client Info		03 Jan 2024	07 Sep 2023	21 Sep 2022
Machine Age	hrs	Client Info		8218	8218	0
Oil Age	hrs	Client Info		8218	8218	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	SEVERE	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	5	13	17
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	0	3
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	1	3	2
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

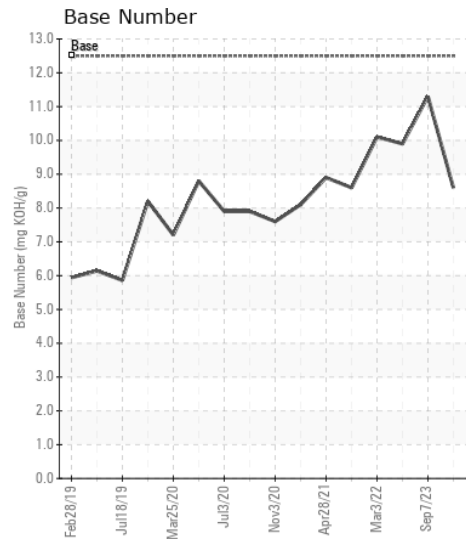
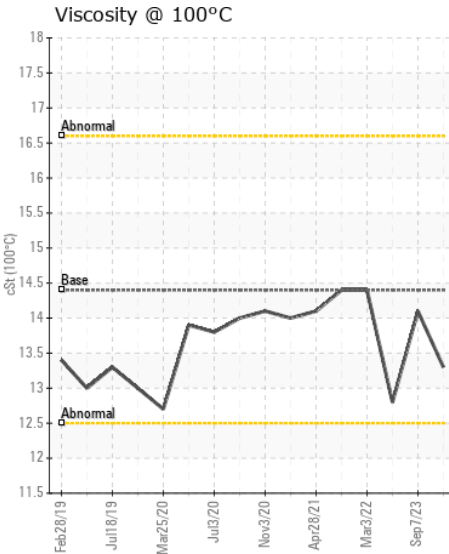
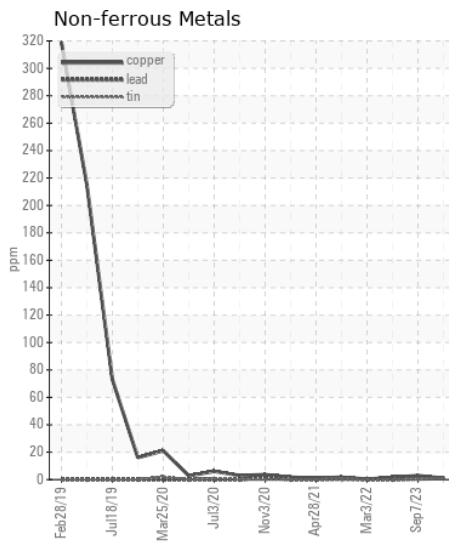
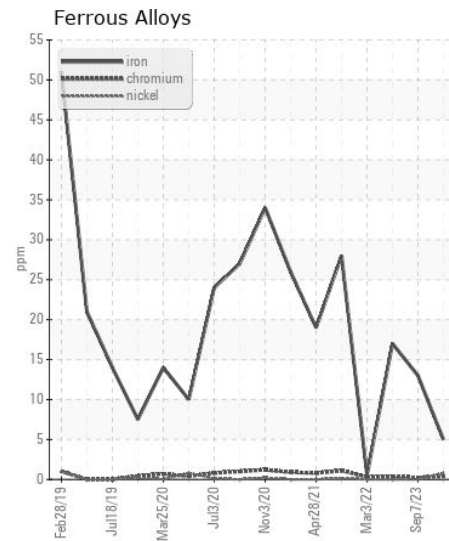
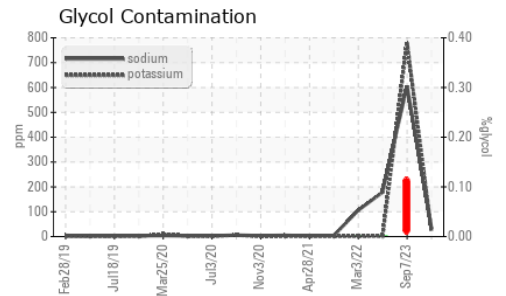
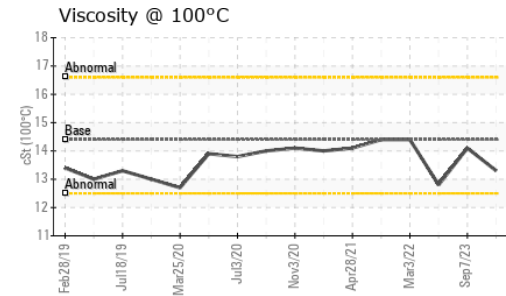
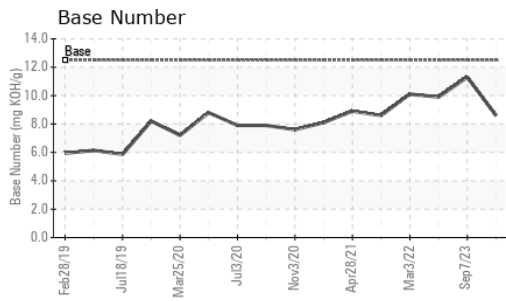
No evidence of coolant present in the oil. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	16	7
Potassium	ppm	ASTM D5185m	>20	23	▲ 781	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	● 0.12	0.0
Soot %	%	*ASTM D7844	>3	0.1	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	5.3	7.7	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.4	18.1	20.2
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		34	▲ 606	179
Boron	ppm	ASTM D5185m	151	13	▲ 9	45
Barium	ppm	ASTM D5185m	0.4	0	0	2
Molybdenum	ppm	ASTM D5185m	250	61	94	65
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	929	▲ 1010	674
Calcium	ppm	ASTM D5185m	2046	1066	1273	1284
Phosphorus	ppm	ASTM D5185m	1043	870	1070	975
Zinc	ppm	ASTM D5185m	943	1185	▲ 1287	1167
Sulfur	ppm	ASTM D5185m	5012	3122	3964	3611
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.6	13.5	15.2
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	8.6	11.3	9.9
Visc @ 100°C	cSt	ASTM D445	14.4	13.3	14.1	12.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0058873 **Received** : 09 Jan 2024
Lab Number : 06055213 **Diagnosed** : 10 Jan 2024
Unique Number : 10821162 **Diagnostician** : Jonathan Hester
Test Package : FLEET

GFL Environmental - 119 - Williamston Hauling/TriEast
 1805 West Main Street
 Williamston, NC
 US 27892
 Contact: Spencer Ligon
 spencer.ligon@gflenv.com
 T: (800)207-6618
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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)