WEAR CONTAMINATION FLUID CONDITION

Limit/Abn

Current

ABNORMAL SEVERE ABNORMAL

History1

History2

(YA115787)

3493C

Natural Gas Engine

RECOMMENDATION

CHEVRON DELO 400 NG (30 GAL)

	0 1 1		011 11 (0510000477	0510000450
We advise that you check for the source of the coolant leak. Check for	Sample Number		Client Info		GFL0123394	GFL0082477	GFL0082452
low coolant level. We recommend that you drain the oil and perform a	Sample Date		Client Info		18 Jun 2024	18 Oct 2023	02 Jun 2023
filter service on this component if not already done. We recommend an	Machine Age	hrs	Client Info		116026	116026	9202
early resample to monitor this condition.	Oil Age	hrs	Client Info		116026	116026	1217
	Filter Age	hrs	Client Info		116026	600	1217
	Oil Changed		Client Info		N/A	Changed	Changed
	Filter Changed		Client Info		N/A	Changed	Changed
	Sample Status				SEVERE	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>50	<u>▲</u> 81	15	4
Distance when and a third access to indicate d. December and the breaking	Chromium	ppm	ASTM D5185m	>4	<u> </u>	<1	<1
Piston, ring and cylinder wear is indicated. Bearing and/or bushing wear is indicated.	Nickel	ppm	ASTM D5185m	>2	2	0	<1
wear is indicated.	Titanium	ppm	ASTM D5185m		<1	<1	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>9	<u>^</u> 7	3	2
	Lead	ppm	ASTM D5185m	>30	^ 22	<1	<1
	Copper	ppm	ASTM D5185m	>35	2	<1	0
	Tin	ppm	ASTM D5185m	>4	0	0	<1
	Vanadium	ppm	ASTM D5185m		<1	<1	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>+100	14	7	5
	Potassium	ppm	ASTM D5185m	>20	470	4	2
Sodium and/or potassium levels are high. Test for glycol is positive.	Water		WC Method	>0.1	NEG	NEG	NEG
	Glycol	%	*ASTM D2982		▲ 0.10		
	Soot %	%	*ASTM D7844		0	0	0
	Nitration	Abs/cm	*ASTM D7624	>20	11.4	8.8	7.0
	Sulfation	Abs/.1mm	*ASTM D7415	>30	24.9	18.8	19.3

Debris

Sand/Dirt

Appearance

Test

UOM

Method

FLUID CONDITION

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.

	Appearance	Journal	Violati	IVOITIVIL	l		TAOTHAL	INOTHINE
	Odor	scalar	*Visual	NORML		NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.1		NEG	NEG	NEG
	Sodium	ppm	ASTM D5185m			28	5	3
	Boron	ppm	ASTM D5185m			8	15	33
	Barium	ppm	ASTM D5185m			0	0	0
	Molybdenum	ppm	ASTM D5185m			63	52	49
	Manganese	ppm	ASTM D5185m			2	<1	<1
	Magnesium	ppm	ASTM D5185m			641	562	574
	Calcium	ppm	ASTM D5185m			1991	1665	1572
	Phosphorus	ppm	ASTM D5185m	800		914	764	802
	Zinc	ppm	ASTM D5185m	880		1191	997	984
	Sulfur	ppm	ASTM D5185m			3366	2423	2571
	Oxidation	Abs/.1mm	*ASTM D7414	>25		19.4	16.0	16.0
	Base Number (BN)	mg KOH/g	ASTM D2896	6.1		4.2	6.4	8.4
	Visc @ 100°C	cSt	ASTM D445	15.8		14.4	14.6	14.6

NONE

NONE

NONE

NORML

*Visual

*Visual

*Visual

*Visual

scalar

scalar

scalar

NONE

NONE

NONE

NORML

NONE

NONE

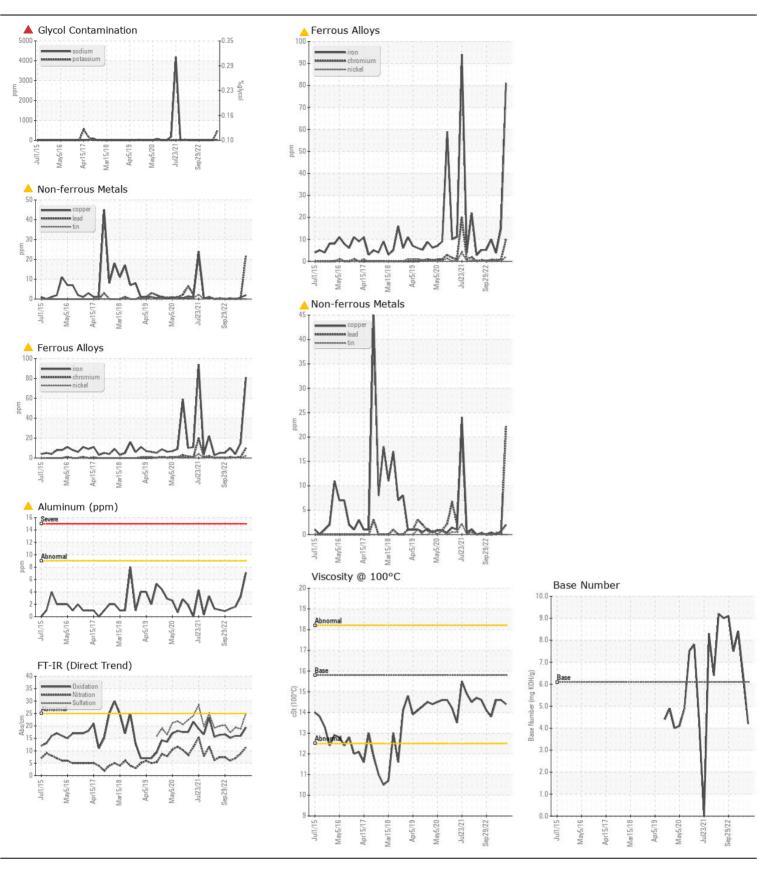
NORML

NONE

NONE

NORML

NONE







Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0123394 Lab Number : 06215669

Received **Tested** Unique Number: 11088533 Diagnosed

: 20 Jun 2024 : 24 Jun 2024

: 24 Jun 2024 - Jonathan Hester

GFL Environmental - 007 - Brunswick

2809 Galloway Road Bolivia, NC US 28422

Contact: DONALD CRAVEN

dcraven@gflenv.com T:

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.

Test Package: FLEET (Additional Tests: Glycol)

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (910)253-4179