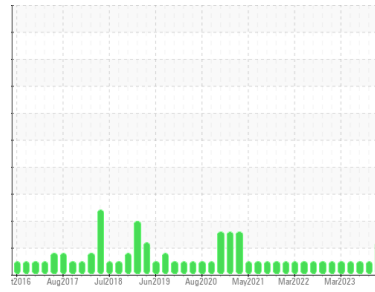




OIL ANALYSIS REPORT

Sample Rating Trend



COOL CHEMICALS



Machine Id
3579C AUTOCAR ACX
 Component
Natural Gas Engine
 Fluid
CHEVRON DELO 400 NG (48 QTS)

DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

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	GFL0127949	GFL0103192	GFL0103160
Sample Date	Client Info	15 Jul 2024	04 Mar 2024	12 Feb 2024
Machine Age	mls	8023	8876	6473
Oil Age	mls	0	0	0
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		ABNORMAL	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >50	11	8	17
Chromium	ppm ASTM D5185m >4	<1	<1	<1
Nickel	ppm ASTM D5185m >2	<1	<1	0
Titanium	ppm ASTM D5185m	<1	0	0
Silver	ppm ASTM D5185m >3	0	0	0
Aluminum	ppm ASTM D5185m >9	2	2	2
Lead	ppm ASTM D5185m >30	<1	3	2
Copper	ppm ASTM D5185m >35	6	0	<1
Tin	ppm ASTM D5185m >4	<1	0	0
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	11	28	22
Barium	ppm ASTM D5185m	0	0	8
Molybdenum	ppm ASTM D5185m	53	49	55
Manganese	ppm ASTM D5185m	2	<1	0
Magnesium	ppm ASTM D5185m	565	573	564
Calcium	ppm ASTM D5185m	1563	1560	1487
Phosphorus	ppm ASTM D5185m 800	732	810	728
Zinc	ppm ASTM D5185m 880	944	928	944
Sulfur	ppm ASTM D5185m	2735	2577	2437

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	7	10	10
Sodium	ppm ASTM D5185m	17	5	4
Potassium	ppm ASTM D5185m >20	▲ 41	0	2

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	0	0	0
Nitration	Abs/cm *ASTM D7624 >20	11.1	8.5	10.0
Sulfation	Abs/.1mm *ASTM D7415 >30	22.6	19.0	21.6

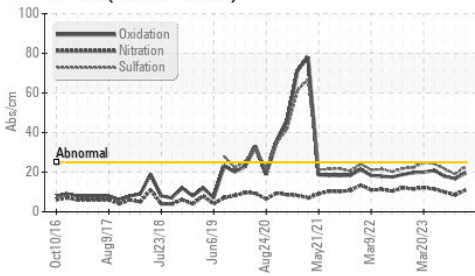
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	19.6	16.7	18.0
Base Number (BN)	mg KOH/g ASTM D2896 6.1	4.6	7.0	6.7

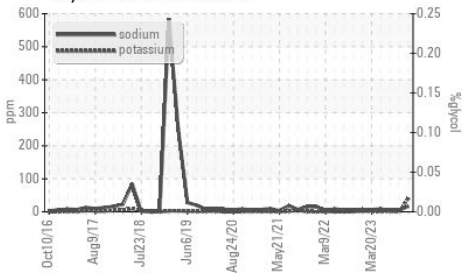


OIL ANALYSIS REPORT

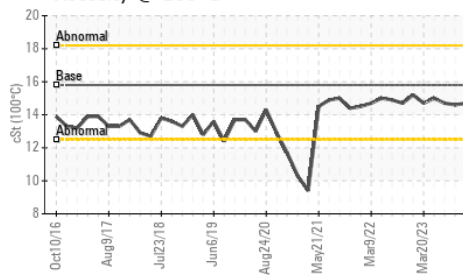
FT-IR (Direct Trend)



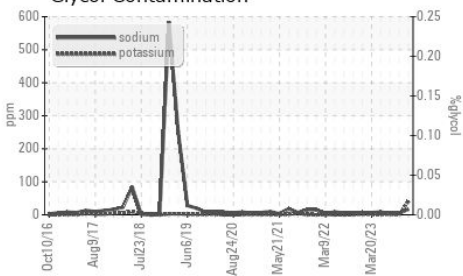
Glycol Contamination



Viscosity @ 100°C



Glycol Contamination

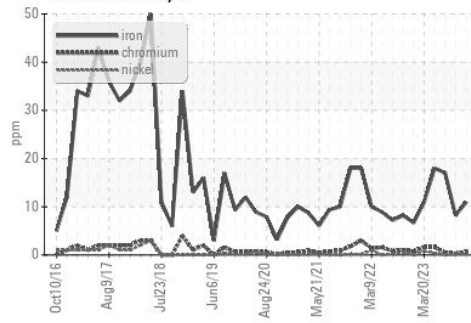


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

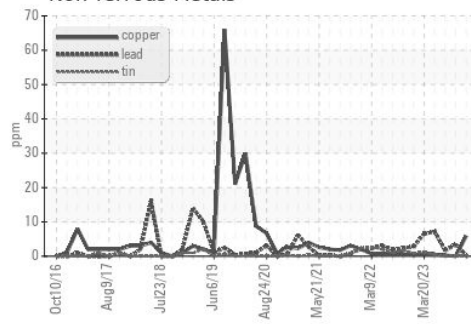
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.8	14.7	14.6

GRAPHS

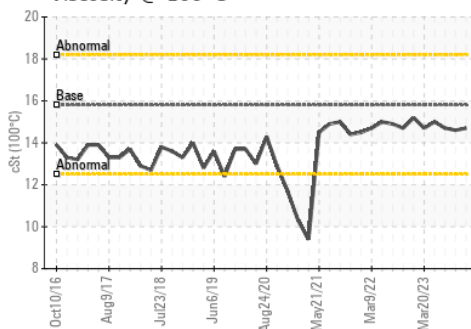
Ferrous Alloys



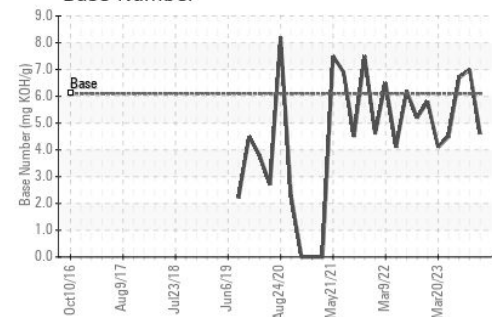
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : GFL0127949

Lab Number : 06238788

Unique Number : 11127622

Test Package : FLEET (Additional Tests: Glycol)

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)

Received : 17 Jul 2024

Tested : 19 Jul 2024

Diagnosed : 19 Jul 2024 - Jonathan Hester

GFL Environmental - 001 - Raleigh(CNG)

3741 Conquest Drive

Garner, NC

US 27529

Contact: Craig Johnson

craig.johnson@gflenv.com

T: (919)662-7100

F: (919)662-7130