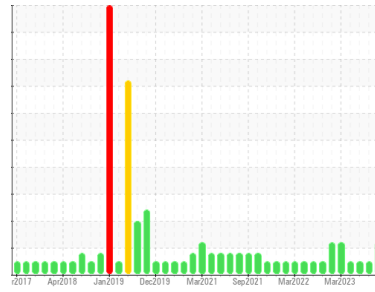




OIL ANALYSIS REPORT

Sample Rating Trend



COOL CHEMICALS



Machine Id
3595C AUTOCAR ACX
 Component
Natural Gas Engine
 Fluid
CHEVRON DELO 400 NG (48 QTS)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: requested resample)

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 suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0117431	GFL0089287	GFL0089332
Sample Date	Client Info	03 Jun 2024	25 Aug 2023	02 Aug 2023
Machine Age	hrs	25509	23877	23691
Oil Age	hrs	1632	186	867
Oil Changed	Client Info	Not Chngd	Changed	Changed
Sample Status		ATTENTION	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	20	45	32
Chromium	ppm	ASTM D5185m >4	<1	3	2
Nickel	ppm	ASTM D5185m >2	0	<1	<1
Titanium	ppm	ASTM D5185m	0	<1	<1
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	5	9	7
Lead	ppm	ASTM D5185m >30	0	0	<1
Copper	ppm	ASTM D5185m >35	4	7	6
Tin	ppm	ASTM D5185m >4	<1	0	0
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	8	1	0
Barium	ppm	ASTM D5185m	<1	0	0
Molybdenum	ppm	ASTM D5185m	53	64	49
Manganese	ppm	ASTM D5185m	1	1	<1
Magnesium	ppm	ASTM D5185m	581	625	500
Calcium	ppm	ASTM D5185m	1527	1904	1520
Phosphorus	ppm	ASTM D5185m 800	773	778	592
Zinc	ppm	ASTM D5185m 880	939	1068	840
Sulfur	ppm	ASTM D5185m	2693	3141	2429

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >+100	7	23	18
Sodium	ppm	ASTM D5185m	32	53	42
Potassium	ppm	ASTM D5185m >20	61	31	23

INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	0.1	0	0.1
Nitration	Abs/cm	*ASTM D7624 >20	10.0	11.6	10.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.6	25.2	23.3

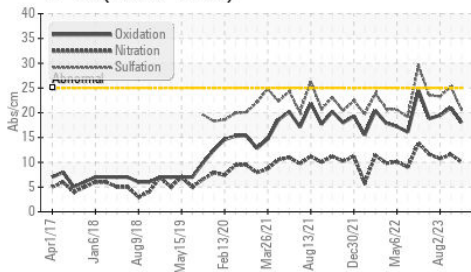
FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.0	21.0	19.5
Base Number (BN)	mg KOH/g	ASTM D2896 6.1	5.3	3.1	3.4

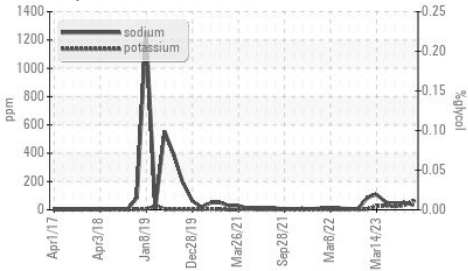


OIL ANALYSIS REPORT

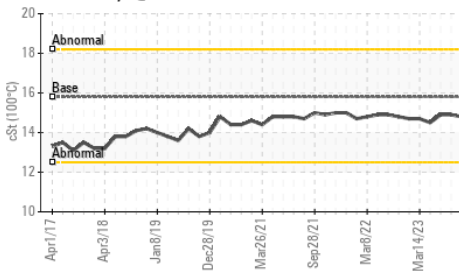
FT-IR (Direct Trend)



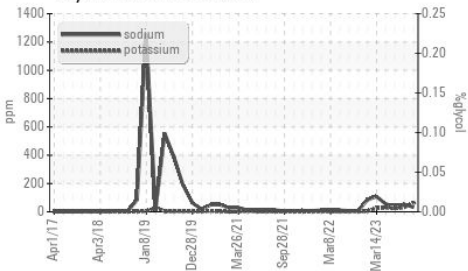
Glycol Contamination



Viscosity @ 100°C



Glycol Contamination



VISUAL

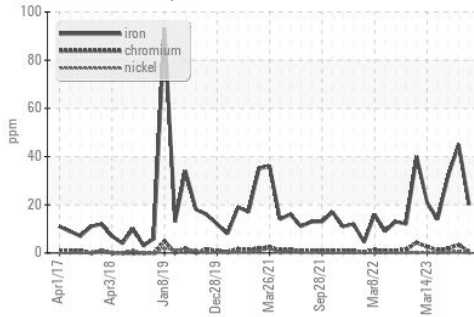
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*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

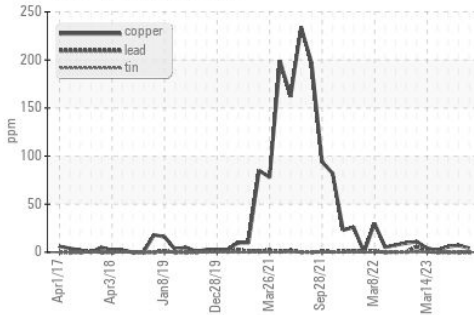
	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.8	14.8	14.9

GRAPHS

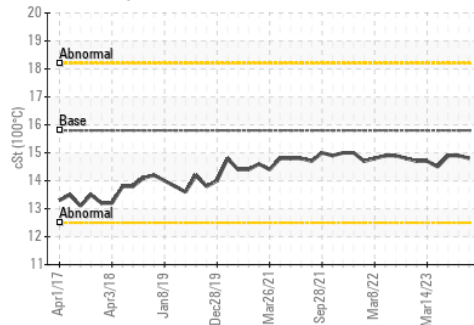
Ferrous Alloys



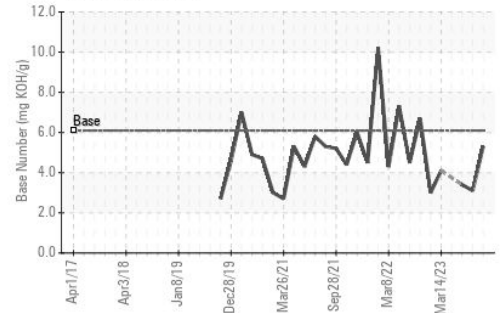
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : GFL0117431

Lab Number : 06199803

Unique Number : 11061926

Test Package : FLEET (Additional Tests: Glycol)

Received : 05 Jun 2024

Tested : 07 Jun 2024

Diagnosed : 07 Jun 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

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)