



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION



Area
(48026UA)
Machine Id
834032
Component
Natural Gas Engine
Fluid
NOT GIVEN (--- GAL)

RECOMMENDATION

Check for low coolant level. We advise that you check for the source of the coolant leak. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0122091	GFL0116588	GFL0116572
Sample Date		Client Info		13 Jun 2024	21 May 2024	16 Apr 2024
Machine Age	hrs	Client Info		1408	1243	982
Oil Age	hrs	Client Info		165	1243	982
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	Not Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	12	44	43
Chromium	ppm	ASTM D5185m	>4	<1	1	2
Nickel	ppm	ASTM D5185m	>2	0	1	2
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>9	1	3	3
Lead	ppm	ASTM D5185m	>30	0	2	2
Copper	ppm	ASTM D5185m	>35	2	13	16
Tin	ppm	ASTM D5185m	>4	0	2	3
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

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

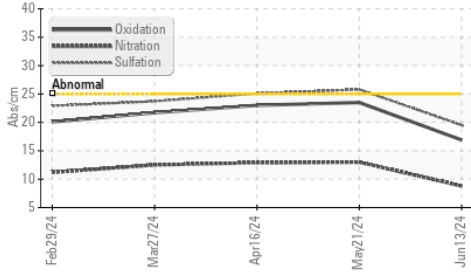
Silicon	ppm	ASTM D5185m	>+100	6	22	28
Potassium	ppm	ASTM D5185m	>20	48	4	4
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	8.8	13.0	12.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	25.8	25.1
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	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	>0.1	NEG	NEG	NEG

FLUID CONDITION

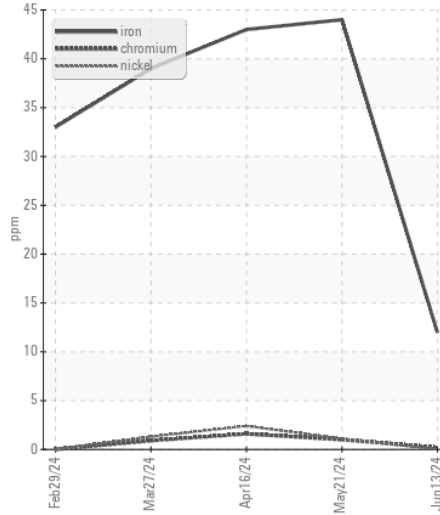
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		24	5	4
Boron	ppm	ASTM D5185m		22	4	5
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		56	59	56
Manganese	ppm	ASTM D5185m		1	9	10
Magnesium	ppm	ASTM D5185m		551	816	723
Calcium	ppm	ASTM D5185m		1506	1490	1295
Phosphorus	ppm	ASTM D5185m		749	773	713
Zinc	ppm	ASTM D5185m		973	969	890
Sulfur	ppm	ASTM D5185m		2679	2714	2458
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	23.5	23.0
Base Number (BN)	mg KOH/g	ASTM D2896		7.4	3.5	3.2
Visc @ 100°C	cSt	ASTM D445		14.9	14.4	14.3

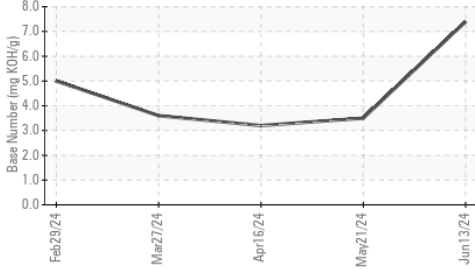
FT-IR (Direct Trend)



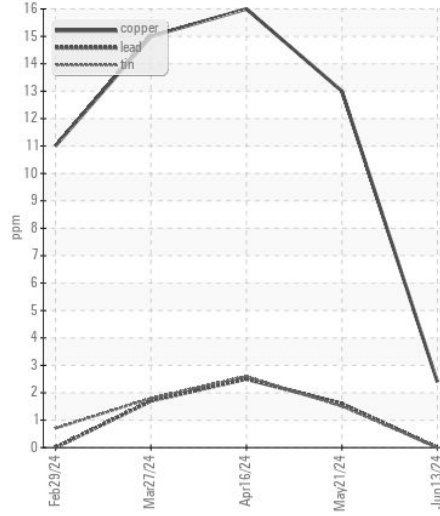
Ferrous Alloys



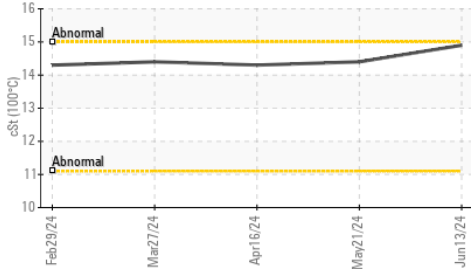
Base Number



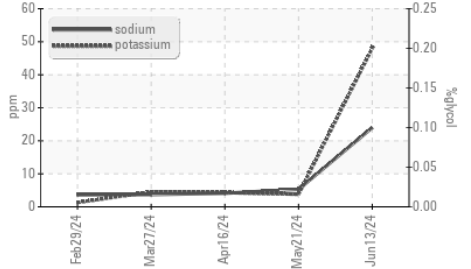
Non-ferrous Metals



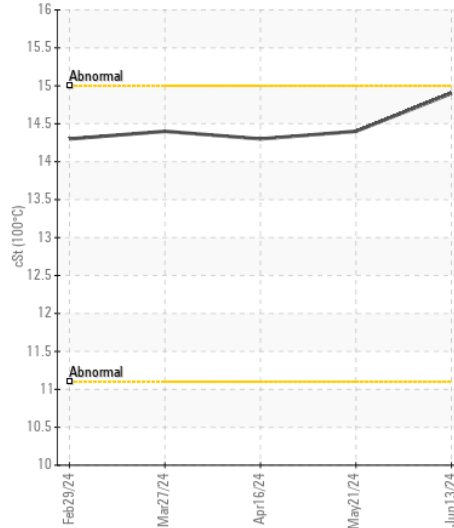
Viscosity @ 100°C



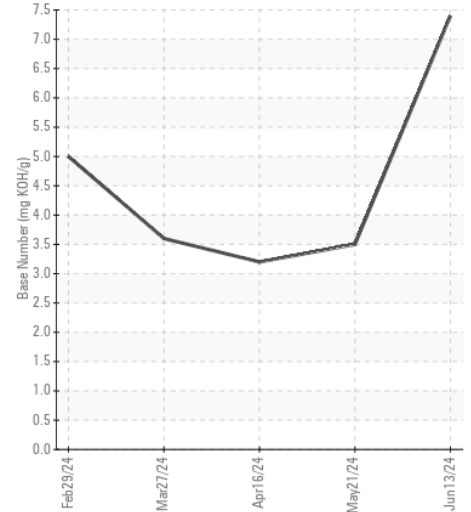
Glycol Contamination



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0122091 **Received** : 14 Jun 2024
Lab Number : 06211028 **Tested** : 19 Jun 2024
Unique Number : 11083892 **Diagnosed** : 19 Jun 2024 - Sean Felton
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 652 - Fredericksburg Hauling
 10954 Houser Drive
 Fredericksburg, VA
 US 22408
 Contact: WILLIAM MILO
 wmilo@gflenv.com

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)

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F: