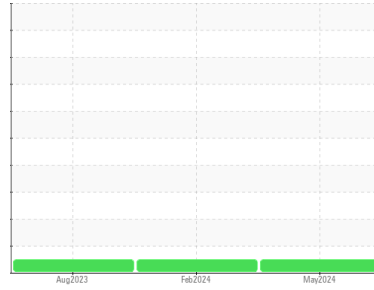




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
TICO 827-8977

Component
Diesel Engine

Fluid
 DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0683832	WC0889836	WC0818410
Sample Date	Client Info			12 May 2024	23 Feb 2024	11 Aug 2023
Machine Age	hrs	Client Info		37570	2693	2186
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	56	45	61
Chromium	ppm	ASTM D5185(m)	>20	2	1	1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	4	5	3
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	2	2	4
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

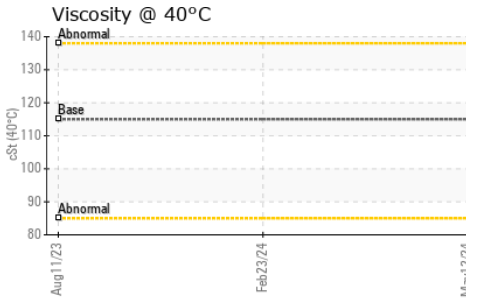
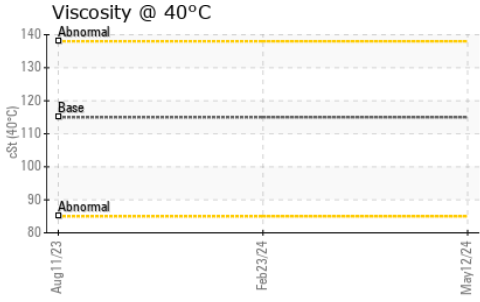
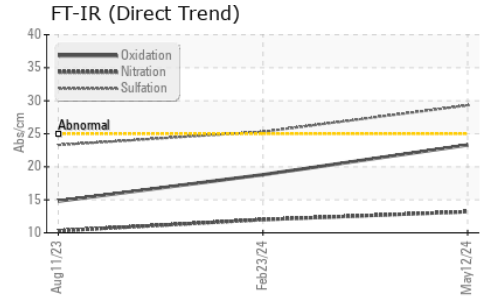
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	34	57	3
Barium	ppm	ASTM D5185(m)	10	<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)	100	90	86	6
Manganese	ppm	ASTM D5185(m)		<1	0	<1
Magnesium	ppm	ASTM D5185(m)	450	30	97	24
Calcium	ppm	ASTM D5185(m)	3000	2183	2130	2121
Phosphorus	ppm	ASTM D5185(m)	1150	949	883	858
Zinc	ppm	ASTM D5185(m)	1350	1165	1051	971
Sulfur	ppm	ASTM D5185(m)	4250	2884	2879	2764
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	6	6	7
Sodium	ppm	ASTM D5185(m)	>158	2	2	2
Potassium	ppm	ASTM D5185(m)	>20	<1	1	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	2.3	1.6	1.4
Nitration	Abs/cm	ASTM D7624*	>20	13.2	12.0	10.3
Sulfation	Abs./1mm	ASTM D7415*	>30	29.3	25.3	23.3



OIL ANALYSIS REPORT

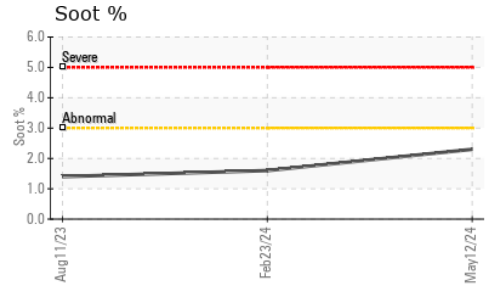
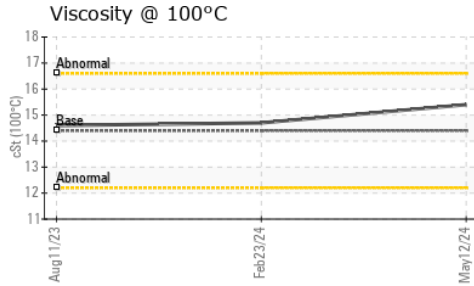
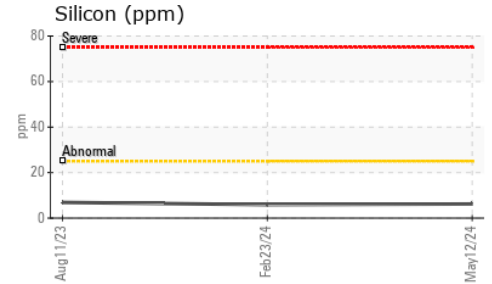
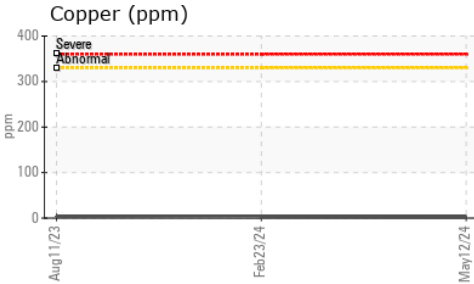
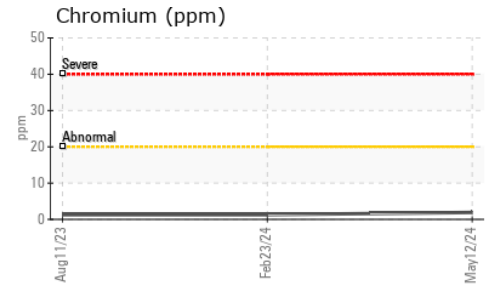
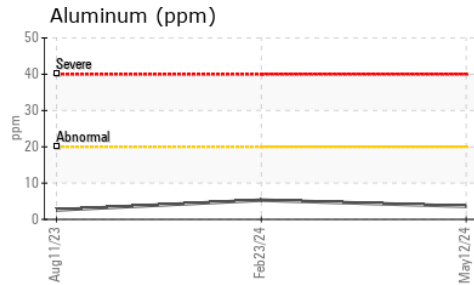
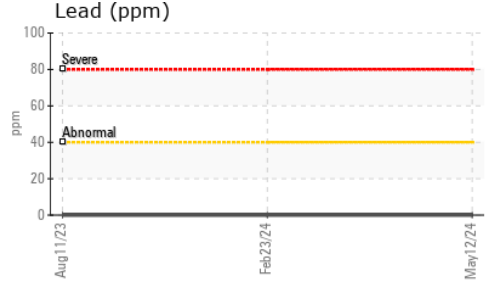
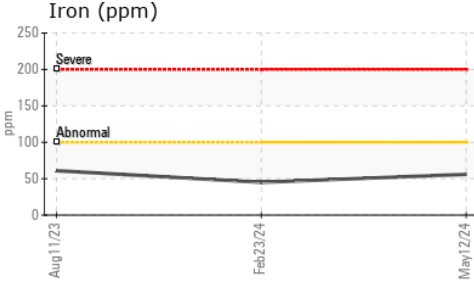


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	23.3	18.8	14.8

VISUAL	method	limit/base	current	history1	history2	
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	115	119	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	15.4	14.7	14.6
Viscosity Index (VI)	Scale	ASTM D2270*	126	135	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0683832 **Received** : 20 Jun 2024
Lab Number : **02643114** **Tested** : 20 Jun 2024
Unique Number : 5800653 **Diagnosed** : 20 Jun 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: KV40, VI)

BRITANNIA FLEET SERVICES
 1831 SHAWSON DRIVE (SHOP)
 MISSISSAUGA, ON
 CA L4W 1T9
 Contact: Tania Henriques
 tania.henriques@britanniafleet.ca
 T: (905)670-4545
 F: (905)670-9036

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.