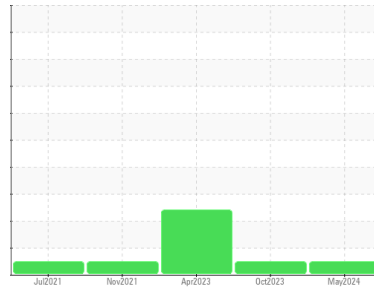




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
TICO 824-8277
 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		WC0889852	WC0818381	WC0776234
Sample Date	Client Info		31 May 2024	06 Oct 2023	06 Apr 2023
Machine Age	hrs	Client Info	0	0	4666
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	Changed
Sample Status			NORMAL	NORMAL	ABNORMAL

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	48	61	▲ 115
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	2
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	5	4	9
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
Copper	ppm	ASTM D5185(m)	>330	1	1	4
Tin	ppm	ASTM D5185(m)	>15	<1	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	3	18	7
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	10	47	9
Manganese	ppm	ASTM D5185(m)		<1	0	2
Magnesium	ppm	ASTM D5185(m)	450	13	23	23
Calcium	ppm	ASTM D5185(m)	3000	2234	2303	2434
Phosphorus	ppm	ASTM D5185(m)	1150	809	932	915
Zinc	ppm	ASTM D5185(m)	1350	1003	1101	1052
Sulfur	ppm	ASTM D5185(m)	4250	2713	2923	2783
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

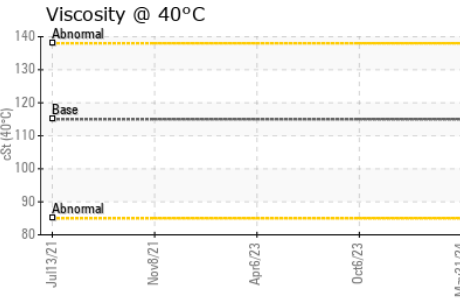
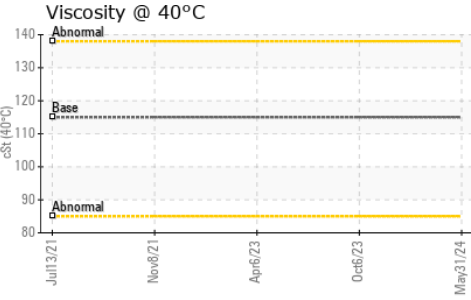
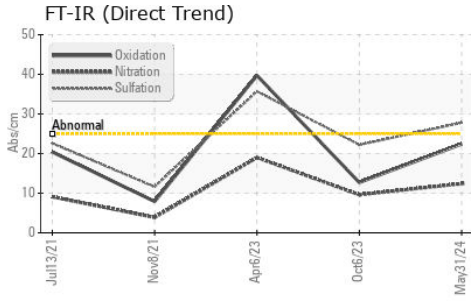
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	4	4	15
Sodium	ppm	ASTM D5185(m)	>158	2	2	3
Potassium	ppm	ASTM D5185(m)	>20	1	0	2

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.3	2.1	0.4
Nitration	Abs/cm	ASTM D7624*	>20	12.4	9.6	19.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.8	22.2	▲ 35.7



OIL ANALYSIS REPORT

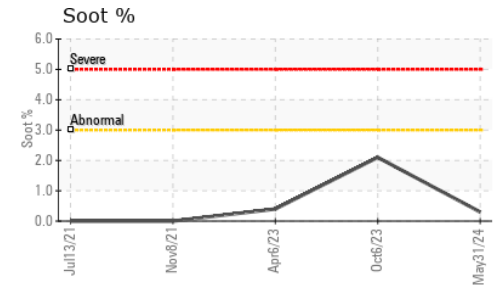
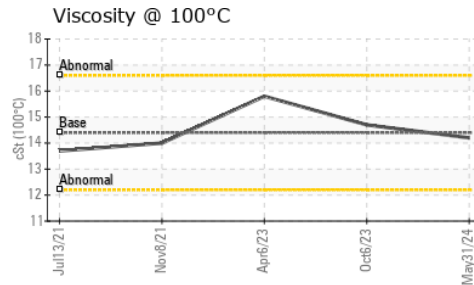
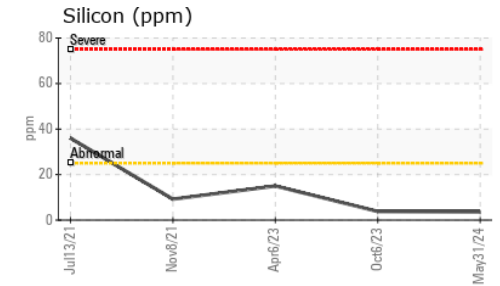
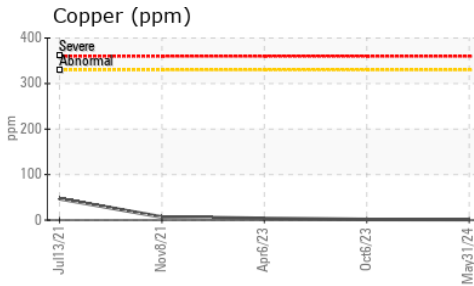
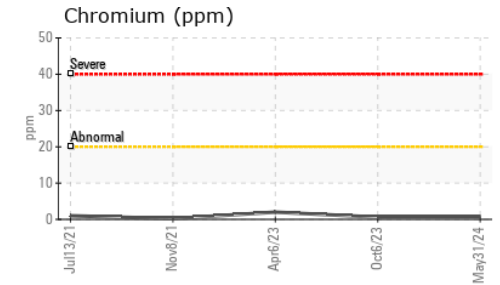
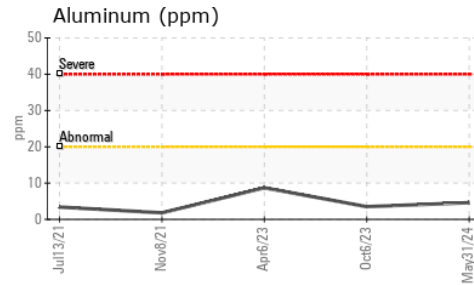
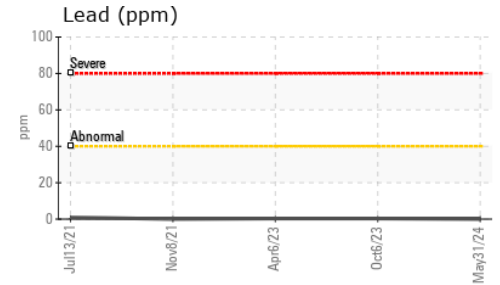
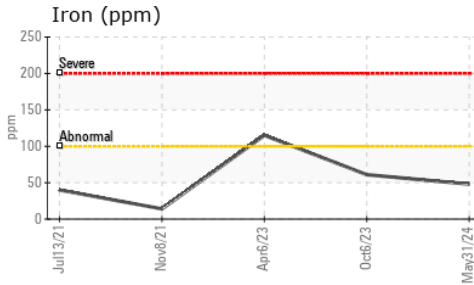


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	22.4	12.7	▲ 39.7

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	105	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.2	14.7	15.8
Viscosity Index (VI)	Scale	ASTM D2270*	126	137	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0889852 **Received** : 20 Jun 2024
Lab Number : **02643111** **Tested** : 20 Jun 2024
Unique Number : 5800650 **Diagnosed** : 20 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI)

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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.