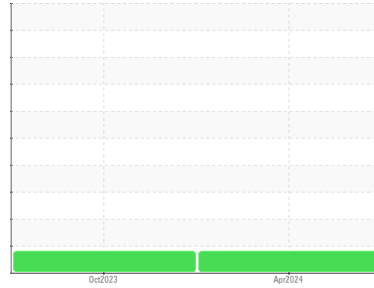




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id

412

Component

Diesel Engine

Fluid

PRIMROSE 790 Syn-O-Gen 8 (--- GAL)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

▲ Wear

The aluminum level is abnormal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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		WC0925559	WC0584574	---
Sample Date	Client Info		22 Apr 2024	19 Oct 2023	---
Machine Age	mls	Client Info	172740	160382	---
Oil Age	mls	Client Info	12000	12174	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			ABNORMAL	ABNORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	<1.0	---
Water	WC Method	>0.2	NEG	NEG	---
Glycol	WC Method		NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>90	66	68	---
Chromium	ppm	ASTM D5185m	>20	1	2	---
Nickel	ppm	ASTM D5185m	>2	0	<1	---
Titanium	ppm	ASTM D5185m	>2	0	<1	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>20	▲ 38	▲ 32	---
Lead	ppm	ASTM D5185m	>40	0	0	---
Copper	ppm	ASTM D5185m	>330	3	2	---
Tin	ppm	ASTM D5185m	>15	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		0	<1	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		114	78	---
Barium	ppm	ASTM D5185m		0	3	---
Molybdenum	ppm	ASTM D5185m		86	96	---
Manganese	ppm	ASTM D5185m		1	<1	---
Magnesium	ppm	ASTM D5185m		432	428	---
Calcium	ppm	ASTM D5185m		1421	1437	---
Phosphorus	ppm	ASTM D5185m		1024	1038	---
Zinc	ppm	ASTM D5185m		1214	1269	---
Sulfur	ppm	ASTM D5185m		3617	3437	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	21	23	---
Sodium	ppm	ASTM D5185m		2	1	---
Potassium	ppm	ASTM D5185m	>20	6	15	---

INFRA-RED

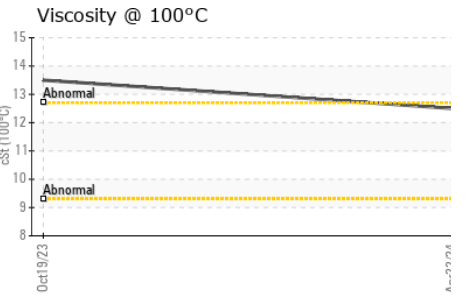
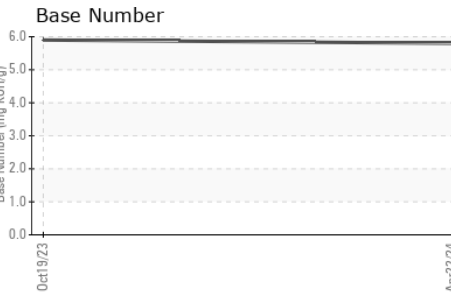
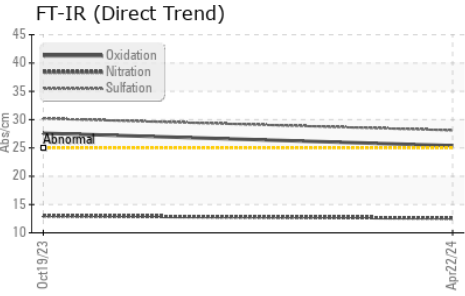
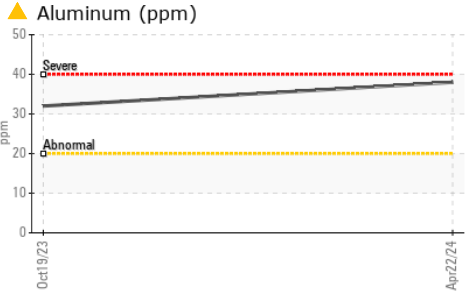
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>6	1	1.2	---
Nitration	Abs/cm	*ASTM D7624	>20	12.6	13.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.1	30.2	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.4	27.6	---
Base Number (BN)	mg KOH/g	ASTM D2896		5.8	5.9	---



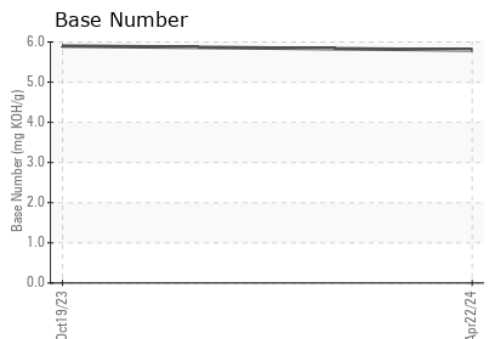
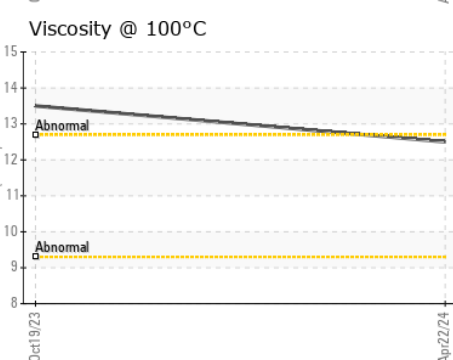
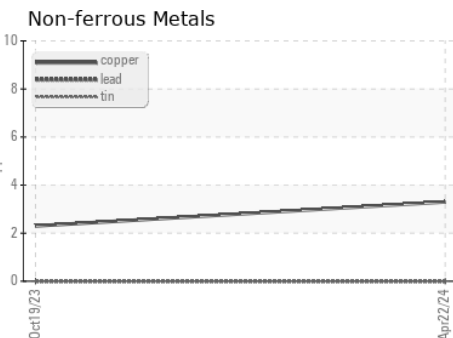
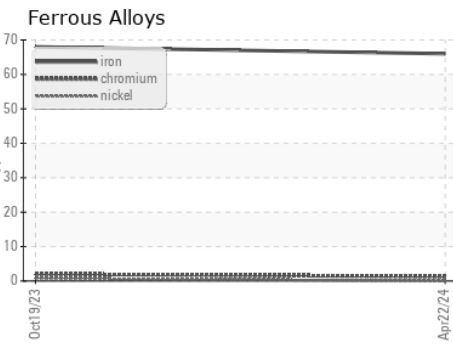
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.5	13.5	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0925559
Lab Number : 06158803
Unique Number : 10994226
Test Package : FLEET

Received : 24 Apr 2024
Tested : 25 Apr 2024
Diagnosed : 25 Apr 2024 - Sean Felton

MIDDLESBORO COCA-COLA BOTTLING - MCCB
 1324 E CUMBERLAND AVE
 MIDDLESBORO, KY
 US 40965
 Contact: TIM GOINS
 tgoins@mccbw.com
 T: (606)248-0362
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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)