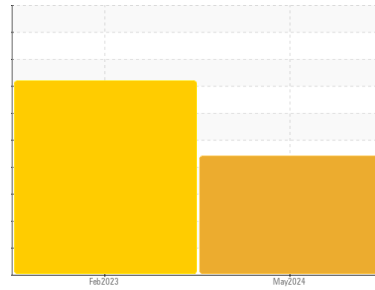




OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Machine Id
ANGELUS CL1 SEAMER (S/N 791205)
 Component
Circulating Oil
 Fluid
GEAR OIL LS 80W90 (35 LTR)

DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL LS 80W90. Please confirm.

Wear

Copper ppm levels are abnormal.

Contamination

There is a moderate amount of particulates (2 to 100 microns in size) present in the oil.

Fluid Condition

The AN level is above the recommended limit. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0737082	WC0737075	---
Sample Date	Client Info		10 May 2024	18 Feb 2023	---
Machine Age	mths	Client Info	0	0	---
Oil Age	mths	Client Info	2	0	---
Oil Changed	Client Info		N/A	Changed	---
Sample Status			ABNORMAL	SEVERE	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method		NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	0	---
Iron	ppm	ASTM D5185(m) >20	25	46	---
Chromium	ppm	ASTM D5185(m) >20	0	<1	---
Nickel	ppm	ASTM D5185(m) >20	0	<1	---
Titanium	ppm	ASTM D5185(m)	0	0	---
Silver	ppm	ASTM D5185(m)	0	0	---
Aluminum	ppm	ASTM D5185(m) >20	<1	<1	---
Lead	ppm	ASTM D5185(m) >20	3	<1	---
Copper	ppm	ASTM D5185(m) >20	▲ 63	7	---
Tin	ppm	ASTM D5185(m) >20	0	<1	---
Antimony	ppm	ASTM D5185(m)	0	0	---
Vanadium	ppm	ASTM D5185(m)	0	0	---
Beryllium	ppm	ASTM D5185(m)	0	0	---
Cadmium	ppm	ASTM D5185(m)	0	0	---

ADDITIVES

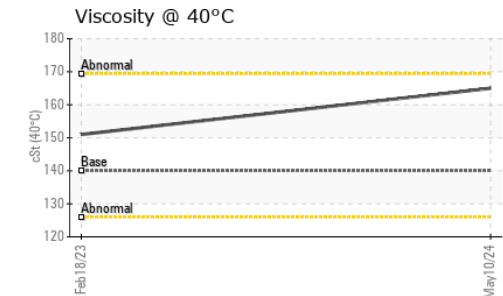
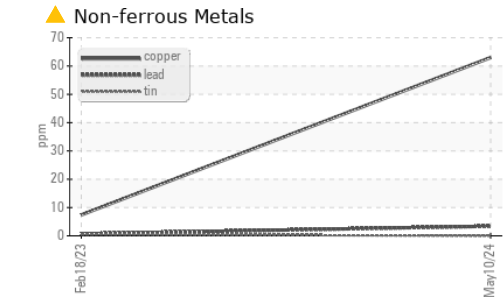
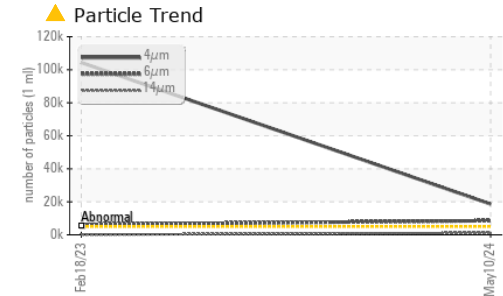
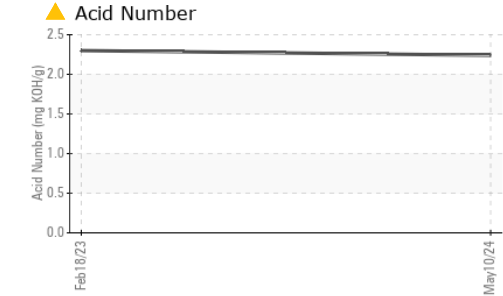
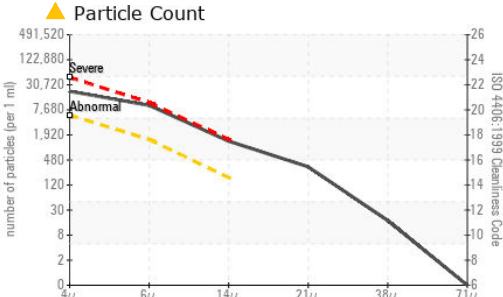
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 150	1	3	---
Barium	ppm	ASTM D5185(m)	0	0	---
Molybdenum	ppm	ASTM D5185(m)	0	0	---
Manganese	ppm	ASTM D5185(m)	0	<1	---
Magnesium	ppm	ASTM D5185(m) 10	<1	0	---
Calcium	ppm	ASTM D5185(m) 70	7	14	---
Phosphorus	ppm	ASTM D5185(m) 2000	545	546	---
Zinc	ppm	ASTM D5185(m) 50	57	10	---
Sulfur	ppm	ASTM D5185(m) 20000	1000	521	---
Lithium	ppm	ASTM D5185(m)	<1	<1	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<1	<1	---
Sodium	ppm	ASTM D5185(m)	2	7	---
Potassium	ppm	ASTM D5185(m) >20	2	4	---



OIL ANALYSIS REPORT



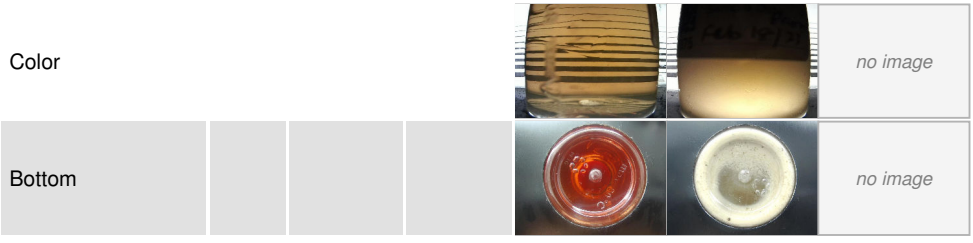
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 18625	▲ 104355	---
Particles >6µm	ASTM D7647	>1300	▲ 8560	▲ 6248	---
Particles >14µm	ASTM D7647	>160	▲ 1192	80	---
Particles >21µm	ASTM D7647	>40	▲ 289	13	---
Particles >38µm	ASTM D7647	>10	● 15	0	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 21/20/17	▲ 24/20/13	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	▲ 2.24	▲ 2.30	---

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	▲ LAYRD
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	NEG	▲ .5%	---
Free Water	scalar	Visual*	NEG	▲ 1%	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	140	165	151

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0737082 **Received** : 13 Jun 2024
Lab Number : **02641786** **Tested** : 14 Jun 2024
Unique Number : 5799325 **Diagnosed** : 14 Jun 2024 - Kevin Marson
Test Package : IND 2 (Additional Tests: PQ, PrtCount, TAN Man)

REFRESCO NORTH AMERICA
 6525 VISCOUNT RD
 MISSISSAUGA, ON
 CA L4V 1H6
 Contact: Chris Galamb
 Christopher.Galamb@Refresco.com
 T: (289)328-0128
 F:

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.