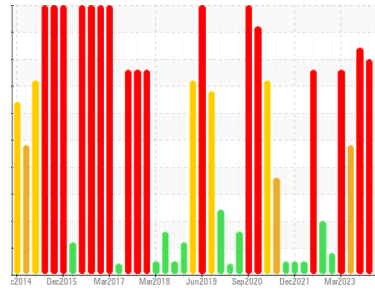




OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Area
4 Calender Line
 Machine Id
38-0062 Dropmill
 Component
Bearing
 Fluid
DOW CHEMICAL UCON CALENDAR OIL 51 (50 GAL)

DIAGNOSIS

Recommendation

The oil is near the end of its useful service life, recommend schedule an oil change. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is above the recommended limit. Viscosity of sample indicates oil is within SAE 80W140 range, advise investigate. The oil is no longer serviceable.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC0892244	WC0744105	WC0808269
Sample Date	Client Info	20 Mar 2024	03 Jan 2024	03 Oct 2023
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	SEVERE	SEVERE

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >2	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >20	<1	0	1
Chromium	ppm ASTM D5185(m) >20	0	0	0
Nickel	ppm ASTM D5185(m) >20	0	0	0
Titanium	ppm ASTM D5185(m)	0	0	0
Silver	ppm ASTM D5185(m)	0	0	<1
Aluminum	ppm ASTM D5185(m) >20	0	<1	0
Lead	ppm ASTM D5185(m) >20	0	0	0
Copper	ppm ASTM D5185(m) >20	1	0	6
Tin	ppm ASTM D5185(m) >20	0	0	0
Antimony	ppm ASTM D5185(m)	0	0	1
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)	<1	0	0
Barium	ppm ASTM D5185(m)	0	0	<1
Molybdenum	ppm ASTM D5185(m)	0	0	0
Manganese	ppm ASTM D5185(m)	0	0	0
Magnesium	ppm ASTM D5185(m)	0	<1	0
Calcium	ppm ASTM D5185(m)	0	0	<1
Phosphorus	ppm ASTM D5185(m)	<1	0	0
Zinc	ppm ASTM D5185(m)	0	<1	0
Sulfur	ppm ASTM D5185(m)	36	26	461
Lithium	ppm ASTM D5185(m)	<1	<1	<1

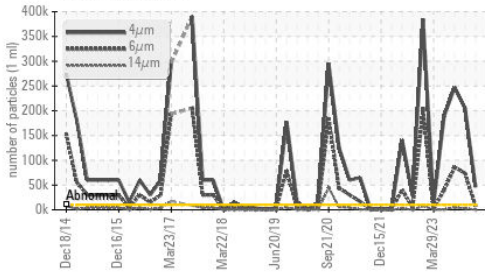
CONTAMINANTS

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

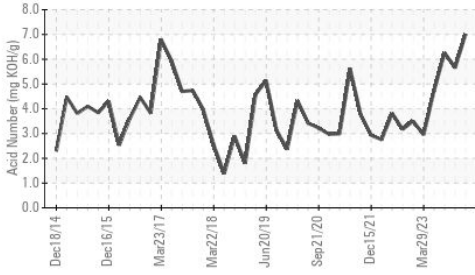
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	▲ 46113	▲ 204658	▲ 247256
Particles >6µm	ASTM D7647 >2500	▲ 7837	▲ 73928	▲ 86047
Particles >14µm	ASTM D7647 >160	● 200	▲ 2711	▲ 4503
Particles >21µm	ASTM D7647 >40	35	▲ 379	▲ 870
Particles >38µm	ASTM D7647 >10	2	13	▲ 36
Particles >71µm	ASTM D7647 >3	0	4	4
Oil Cleanliness	ISO 4406 (c) >20/18/14	▲ 23/20/15	▲ 25/23/19	▲ 25/24/19

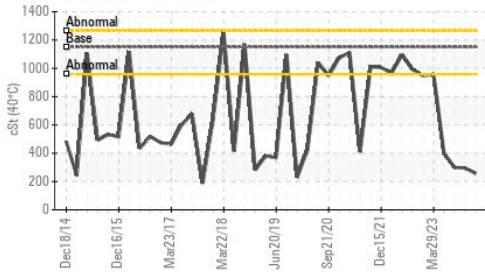
Particle Trend



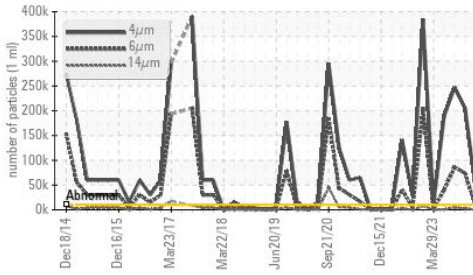
Acid Number



Viscosity @ 40°C



Particle Trend

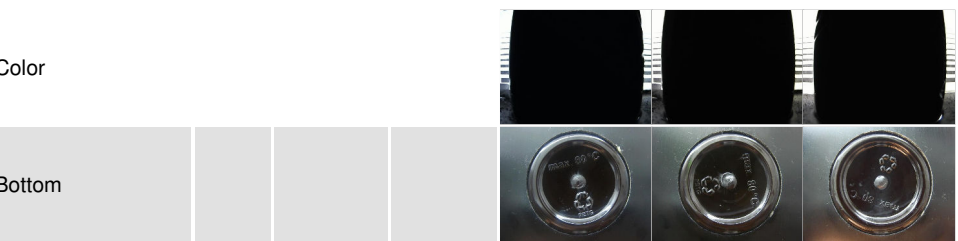


FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	▲ 7.01	5.65	6.26

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>2	NEG	NEG
Free Water	scalar	Visual*	NEG	NEG	NEG

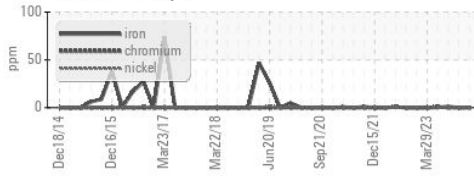
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	▲ 257	▲ 295	▲ 299

SAMPLE IMAGES

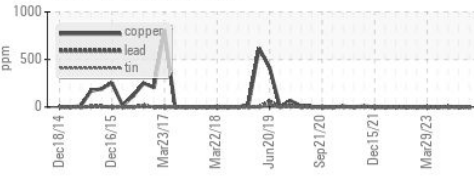


GRAPHS

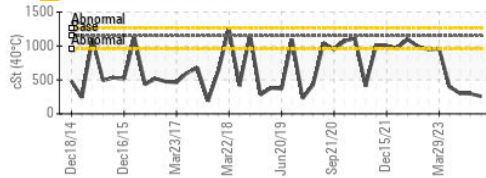
Ferrous Alloys



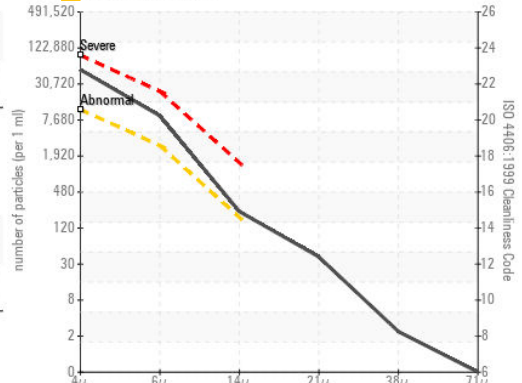
Non-ferrous Metals



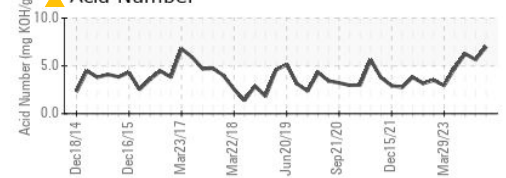
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0892244
Lab Number : 02626750
Unique Number : 5759882
Test Package : IND 2 (Additional Tests: PrtCount, TAN Man)

CANADIAN GENERAL TOWER LTD.
 52 MIDDLETON STREET, P.O. BOX 160
 CAMBRIDGE, ON
 CA N1S 2R4
 Contact: Bob Abell
 bob.abell@cgtower.com
 T: (519)623-1630
 F: (519)623-7018

*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.*