

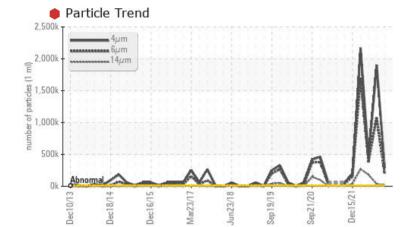
PROBLEM SUMMARY

Area 6 Calender Line Machine Id 39-0251 CGT mill Component

Bearing

DOW CHEMICAL UCON CALENDAR OIL 51 (60 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

PROBLEMATIC TEST RESULTS Sample Status SEVERE SEVERE SEVERE Particles >4µm ASTM D7647 >10000 291959 1898229 436379 Particles >6µm ASTM D7647 >2500 96354 1077690 9393765 Particles >14µm ASTM D7647 >160 17140 • 35550 179538 Particles >21um ASTM D7647 >40 2144 3295 56994 Particles >38µm ASTM D7647 >10 **A** 37 29 13 **Oil Cleanliness** ISO 4406 (c) >20/18/14 25/25/21 28/27/22 26/26/25

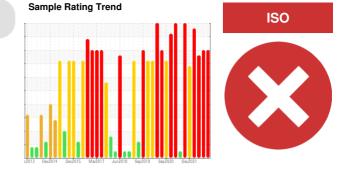
Customer Id: CAN52CAM Sample No.: WC0837258 Lab Number: 02587831 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 <u>gloria.gonzalez@wearcheck.com</u>



RECOMMENDED ACTIONS										
Action	Status Date		Done By	Description						
Change Filter			?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.						
Resample			?	Resample in 30-45 days to monitor this situation.						
Check Breathers			?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.						
Check Dirt Access			?	We advise that you check all areas where contaminants can enter the system.						
Filter Fluid			?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.						

HISTORICAL DIAGNOSIS

06 Jul 2023 Diag: Kevin Marson



IS0

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.All component wear rates are normal. There is a high amount of particulates (2 to 100 microns in size) present in the oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



25 Jan 2023 Diag: Kevin Marson

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.All component wear rates are normal. Particles >14µm are severely high. Particles >21µm are severely high. Particles >6µm are severely high. Oil Cleanliness are severely high. Particles >4µm are severely high. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



27 Sep 2022 Diag: Kevin Marson

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.All component wear rates are normal. Particles >14µm are severely high. Particles >21µm are severely high. Particles >38µm are severely high. Particles >4µm are severely high. Oil Cleanliness are severely high. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.





OIL ANALYSIS REPORT

6 Calender Line 39-0251 CGT mill Component

Bearing Fluid

DOW CHEMICAL UCON CALENDAR OIL 51 (60 GAL)

DIAGNOSIS

Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

Wear

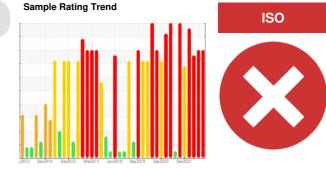
All component wear rates are normal.

Contamination

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

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



SAMPLE INFORM		method	limit/base	current	history1	history2
			mmbase			
Sample Number		Client Info		WC0837258	WC0808284	WC0627663
Sample Date		Client Info		03 Oct 2023	06 Jul 2023	25 Jan 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	SEVERE
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	0	0	<1
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	0	0	0
Lead	ppm	ASTM D5185(m)	>20	0	<1	0
Copper	ppm	ASTM D5185(m)		4	0	0
Tin	ppm	ASTM D5185(m)	>20	0	0	0
Antimony	ppm	ASTM D5185(m)	-	ء <1	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)		<1	0	<1
Barium	ppm	ASTM D5185(m)		<1	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium		ASTM D5185(m)		<1	<1	0
Calcium	ppm	ASTM D5185(m)		<1	<1	0
	ppm	()		<1 <1	12	2
Phosphorus	ppm	ASTM D5185(m)		<1	1	
Zinc	ppm	ASTM D5185(m)				<1
Sulfur	ppm	ASTM D5185(m)		496	24	127
Lithium	ppm	ASTM D5185(m)		<1	<1	0
CONTAMINANTS	\$	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<1	<1	<1
Sodium	ppm	ASTM D5185(m)		36	2	3
Potassium	ppm	ASTM D5185(m)	>20	3	0	0
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	e 291959	• 1898229	436379
Particles >6µm		ASTM D7647	>2500	🛑 196354	1077690	933765
Particles >14µm		ASTM D7647	>160	• 17140	• 35550	179538
Particles >21µm		ASTM D7647	>40	e 2144	93295	6994
Particles >38µm		ASTM D7647	>10	3 7	A 29	13
Particles >71µm		ASTM D7647	>3	2	0	2
Oil Cleanliness		ISO 4406 (c)	>20/18/14	• 25/25/21	• 28/27/22	• 26/26/25
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		3.53	4.11	3.99
						0.00

Report Id: CAN52CAM [WCAMIS] 02587831 (Generated: 10/11/2023 07:39:06) Rev: 1

Contact/Location: Bob Abell - CAN52CAM



Acid Number

Viscosity @ 40°C

Per16/11

un23/18

Aar73/

ep 19/15

5 (

B23. g 2.0 Pio 1

Dec

140

1200

100

800

40

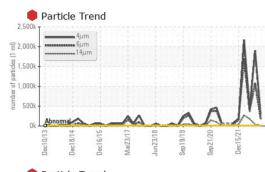
200

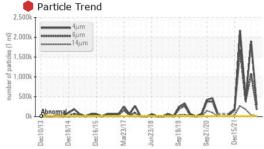
lec10/1

(40°C)

cSt (600

OIL ANALYSIS REPORT





Aar23/1

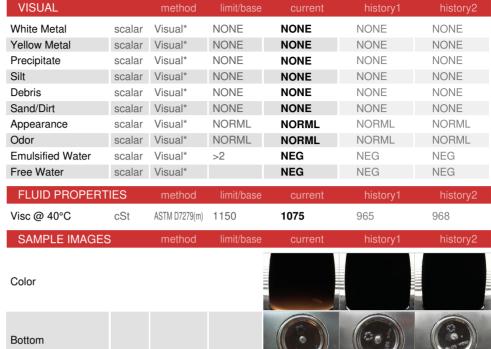
PU19/19

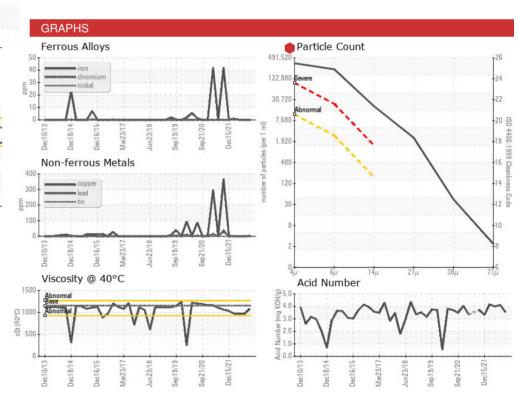
Pn21/20

Sep21/20

Dec15/21

Pc15/71





Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CANADIAN GENERAL TOWER LTD. CALA Sample No. : 06 Oct 2023 52 MIDDLETON STREET, P.O. BOX 160 : WC0837258 Received Lab Number : 02587831 Diagnosed : 11 Oct 2023 CAMBRIDGE, ON ISO 17025:2017 Accredited Unique Number : 5656897 Diagnostician : Kevin Marson CA N1S 2R4 Laboratory Test Package : IND 2 (Additional Tests: TAN Man) Contact: Bob Abell To discuss this sample report, contact Customer Service at 1-800-268-2131. bob.abell@cgtower.com Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (519)623-1630 Validity of results and interpretation are based on the sample and information as supplied. F: (519)623-7018

Contact/Location: Bob Abell - CAN52CAM