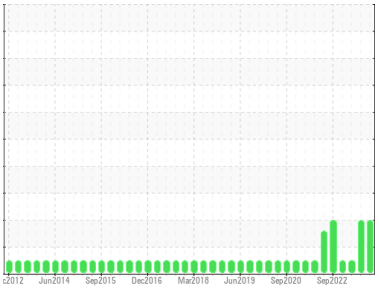
PROBLEM SUMMARY

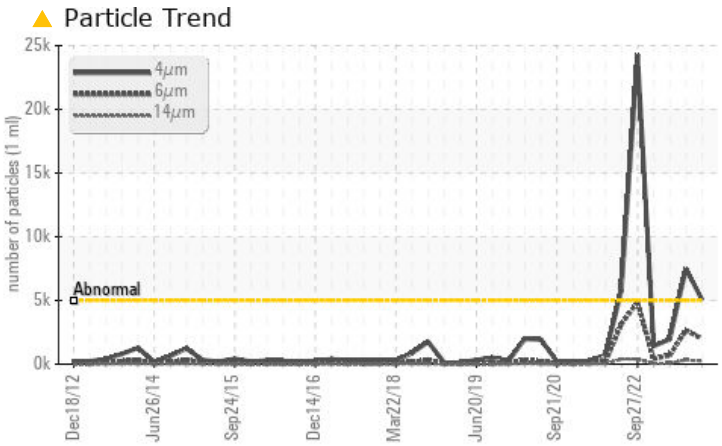
Sample Rating Trend



ISO

Area
3 Calender Line
Machine Id
3 Calender Menzel East Hydraulic Pump (S/N 42-0356B)
Component
Hydraulic System
Fluid
SUNOCO SUNVIS 846 ISO 46 (24 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ABNORMAL	NORMAL
Particles >4µm		ASTM D7647	>5000	▲ **5065**	▲ 7483	1950
Particles >6µm		ASTM D7647	>1300	▲ **2003**	▲ 2655	696
Particles >14µm		ASTM D7647	>160	▲ **231**	▲ 324	75
Particles >21µm		ASTM D7647	>40	▲ **57**	▲ 110	23
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/18/15**	▲ 20/19/16	18/17/13

Customer Id: CAN52CAM
Sample No.: WC0837257
Lab Number: 02587581
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

06 Jul 2023 Diag: Wes Davis

ISO

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.All component wear rates are normal. There is a moderate 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.

view report

29 Mar 2023 Diag: Wes Davis

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

26 Jan 2023 Diag: Wes Davis

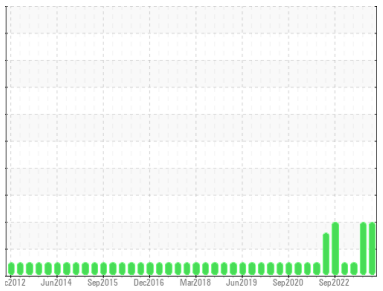
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
3 Calender Line
Machine Id
3 Calender Menzel East Hydraulic Pump (S/N 42-0356B)
Component
Hydraulic System
Fluid
SUNOCO SUNVIS 846 ISO 46 (24 GAL)

DIAGNOSIS

Recommendation
We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

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

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0837257**	WC0808276	WC0782372
Sample Date		Client Info		**03 Oct 2023**	06 Jul 2023	29 Mar 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				**ATTENTION**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>30	**0**	<1	<1
Chromium	ppm	ASTM D5185(m)	>2	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>2	**0**	<1	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**<1**	0	0
Aluminum	ppm	ASTM D5185(m)	>2	**0**	<1	<1
Lead	ppm	ASTM D5185(m)	>10	**1**	<1	<1
Copper	ppm	ASTM D5185(m)	>25	**<1**	1	<1
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	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**<1**	<1	<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	ppm	ASTM D5185(m)		**<1**	<1	<1
Calcium	ppm	ASTM D5185(m)		**39**	42	45
Phosphorus	ppm	ASTM D5185(m)		**258**	283	301
Zinc	ppm	ASTM D5185(m)		**314**	333	330
Sulfur	ppm	ASTM D5185(m)		**5359**	5037	5297
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

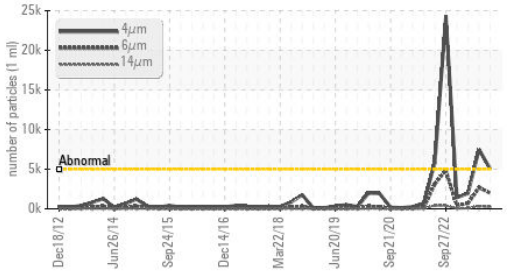
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**0**	<1	<1
Sodium	ppm	ASTM D5185(m)		**0**	<1	0
Potassium	ppm	ASTM D5185(m)	>20	**0**	2	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **5065**	▲ 7483	1950
Particles >6µm		ASTM D7647	>1300	▲ **2003**	▲ 2655	696
Particles >14µm		ASTM D7647	>160	▲ **231**	▲ 324	75
Particles >21µm		ASTM D7647	>40	▲ **57**	▲ 110	23
Particles >38µm		ASTM D7647	>10	**4**	4	1
Particles >71µm		ASTM D7647	>3	**1**	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/18/15**	▲ 20/19/16	18/17/13

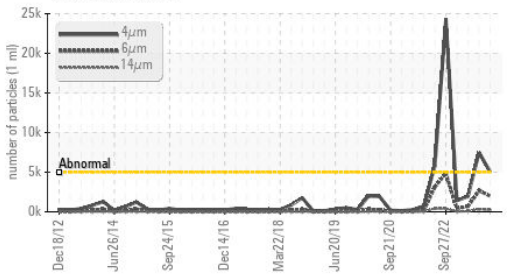
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.35**	0.33	0.33

OIL ANALYSIS REPORT

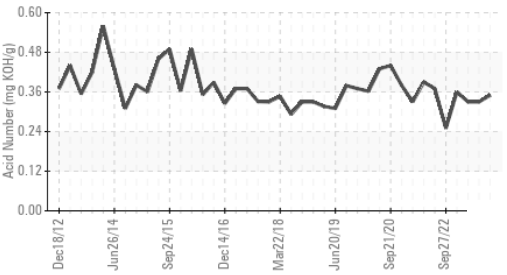
Particle Trend



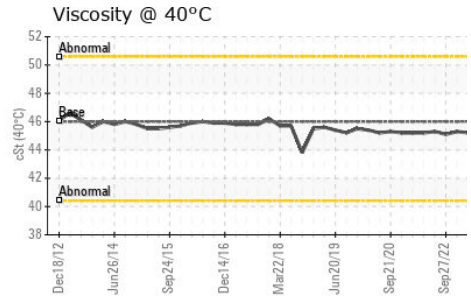
Particle Trend



Acid Number



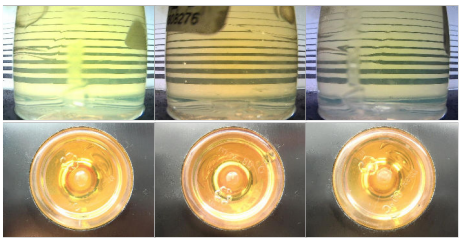
Viscosity @ 40°C



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

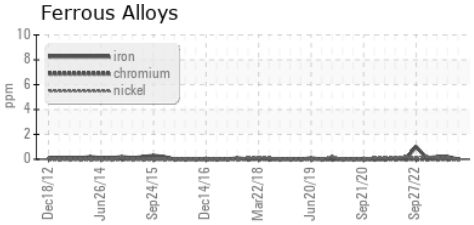
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.0	**44.4**	45.1	45.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

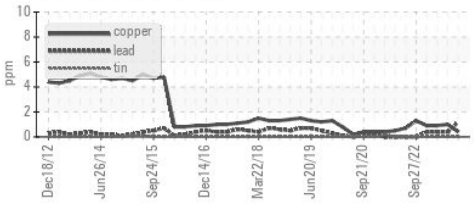


GRAPHS

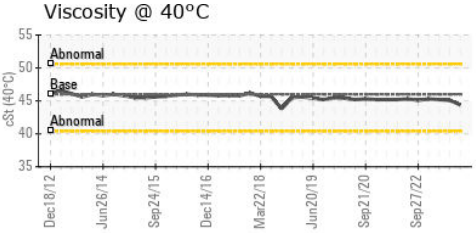
Ferrous Alloys



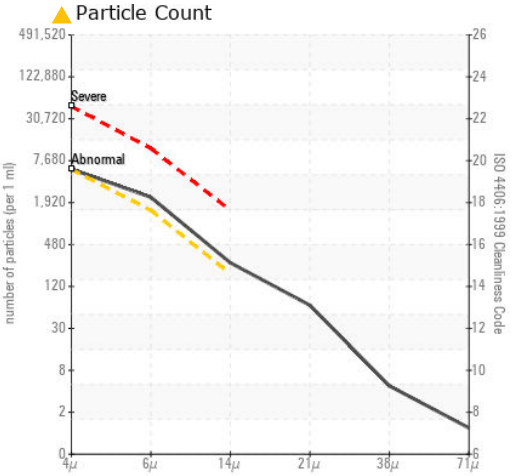
Non-ferrous Metals



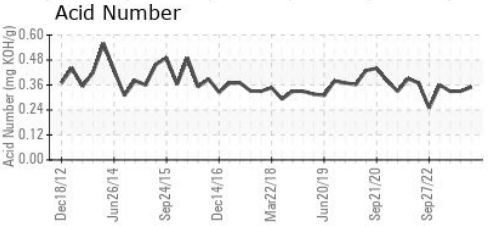
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **CANADIAN GENERAL TOWER LTD.**
Sample No. : WC0837257 **Received** : 06 Oct 2023 52 MIDDLETON STREET, P.O. BOX 160
Lab Number : 02587581 **Diagnosed** : 10 Oct 2023 CAMBRIDGE, ON
Unique Number : 5656647 **Diagnostician** : Wes Davis CA N1S 2R4
Test Package : IND 2 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