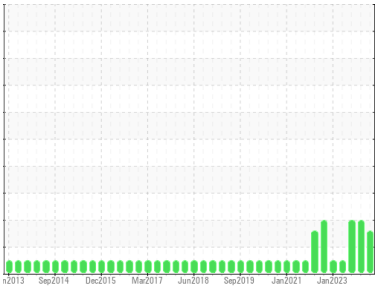
OIL ANALYSIS REPORT

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		**WC0837272**	WC0837257	WC0808276
Sample Date		Client Info		**03 Jan 2024**	03 Oct 2023	06 Jul 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**	ATTENTION	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.05	**NEG**	NEG	NEG

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

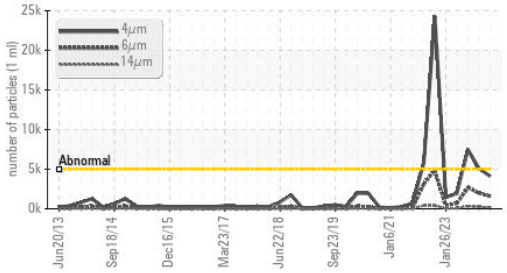
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**0**	<1	<1
Barium	ppm	ASTM D5185(m)		**0**	<1	0
Molybdenum	ppm	ASTM D5185(m)		**0**	0	0
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)		**<1**	<1	<1
Calcium	ppm	ASTM D5185(m)		**39**	39	42
Phosphorus	ppm	ASTM D5185(m)		**246**	258	283
Zinc	ppm	ASTM D5185(m)		**302**	314	333
Sulfur	ppm	ASTM D5185(m)		**5492**	5359	5037
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**0**	0	<1
Sodium	ppm	ASTM D5185(m)		**0**	0	<1
Potassium	ppm	ASTM D5185(m)	>20	**4**	0	2

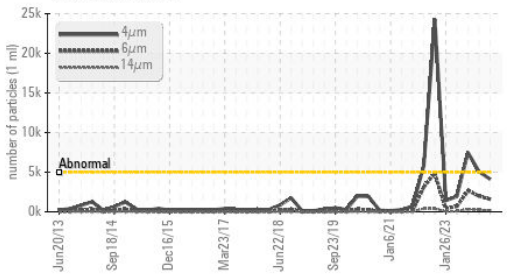
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**4127**	▲ 5065	▲ 7483
Particles >6µm		ASTM D7647	>1300	▲ **1592**	▲ 2003	▲ 2655
Particles >14µm		ASTM D7647	>160	▲ **184**	▲ 231	▲ 324
Particles >21µm		ASTM D7647	>40	▲ **57**	▲ 57	▲ 110
Particles >38µm		ASTM D7647	>10	**2**	4	4
Particles >71µm		ASTM D7647	>3	**0**	1	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **19/18/15**	▲ 20/18/15	▲ 20/19/16

OIL ANALYSIS REPORT

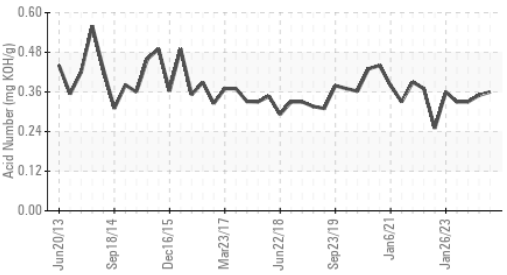
Particle Trend



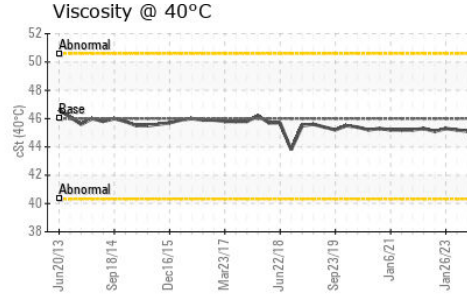
Particle Trend



Acid Number



Viscosity @ 40°C

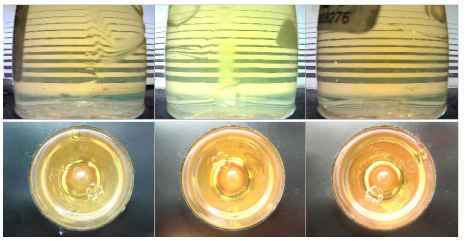


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.36**	0.35	0.33

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

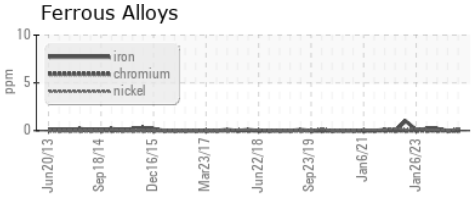
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.0	**44.1**	44.4	45.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

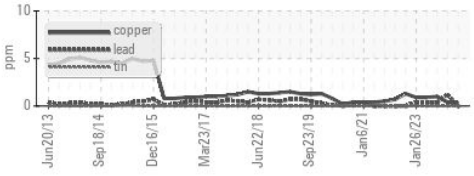


GRAPHS

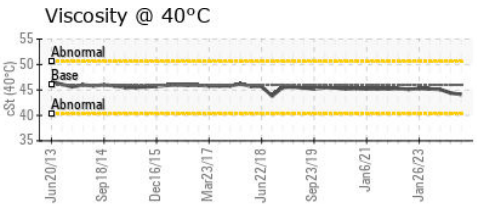
Ferrous Alloys



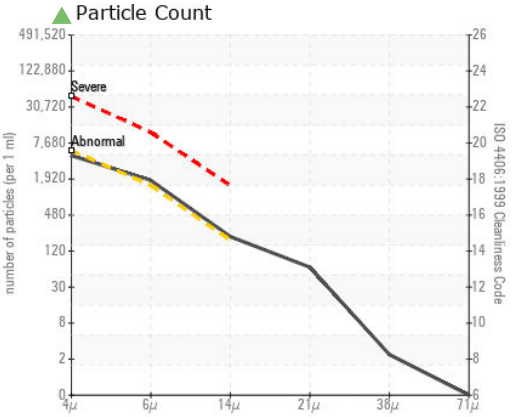
Non-ferrous Metals



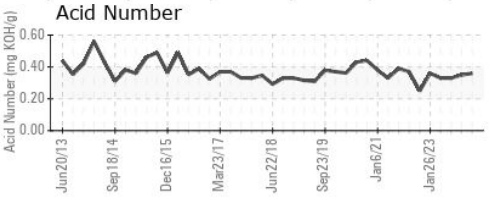
Viscosity @ 40°C



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. : WC0837272 **Recieved** : 11 Jan 2024 52 MIDDLETON STREET, P.O. BOX 160
Lab Number : 02608179 **Diagnosed** : 15 Jan 2024 CAMBRIDGE, ON
Unique Number : 5709265 **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