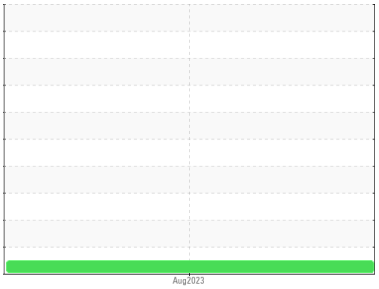
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
Chem-Ecol
Machine Id
A2308062
Component
Unknown Component
Fluid
CHEM-ECOL TOOL OIL 1002 (--- GAL)

DIAGNOSIS

Recommendation
This is a baseline read-out on the submitted sample.

Wear
Copper ppm levels are noted.

Contamination
{not applicable}

Fluid Condition
{not applicable}

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**E30000084**	---	---
Sample Date		Client Info		**14 Aug 2023**	---	---
Machine Age	hrs	Client Info		**0**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**NORMAL**	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)		**10**	---	---
Chromium	ppm	ASTM D5185(m)		**0**	---	---
Nickel	ppm	ASTM D5185(m)		**<1**	---	---
Titanium	ppm	ASTM D5185(m)		**0**	---	---
Silver	ppm	ASTM D5185(m)		**<1**	---	---
Aluminum	ppm	ASTM D5185(m)		**1**	---	---
Lead	ppm	ASTM D5185(m)		**4**	---	---
Copper	ppm	ASTM D5185(m)		**16**	---	---
Tin	ppm	ASTM D5185(m)		**0**	---	---
Antimony	ppm	ASTM D5185(m)		**0**	---	---
Vanadium	ppm	ASTM D5185(m)		**0**	---	---
Beryllium	ppm	ASTM D5185(m)		**0**	---	---
Cadmium	ppm	ASTM D5185(m)		**0**	---	---

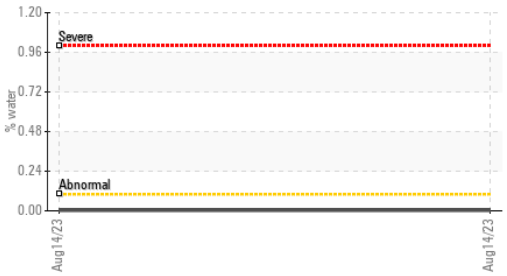
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**<1**	---	---
Barium	ppm	ASTM D5185(m)		**1**	---	---
Molybdenum	ppm	ASTM D5185(m)		**0**	---	---
Manganese	ppm	ASTM D5185(m)		**<1**	---	---
Magnesium	ppm	ASTM D5185(m)		**13**	---	---
Calcium	ppm	ASTM D5185(m)		**67**	---	---
Phosphorus	ppm	ASTM D5185(m)		**281**	---	---
Zinc	ppm	ASTM D5185(m)		**244**	---	---
Sulfur	ppm	ASTM D5185(m)		**25166**	---	---
Lithium	ppm	ASTM D5185(m)		**<1**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		**2**	---	---
Sodium	ppm	ASTM D5185(m)		**5**	---	---
Potassium	ppm	ASTM D5185(m)	>20	**<1**	---	---
Water	%	ASTM D6304*		**0.003**	---	---
ppm Water	ppm	ASTM D6304*		**37.5**	---	---

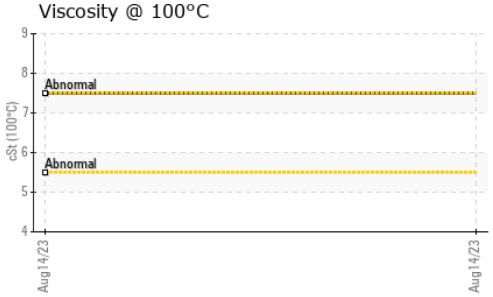
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**1160**	---	---
Particles >6µm		ASTM D7647	>1300	**206**	---	---
Particles >14µm		ASTM D7647	>160	**11**	---	---
Particles >21µm		ASTM D7647	>40	**4**	---	---
Particles >38µm		ASTM D7647	>10	**0**	---	---
Particles >71µm		ASTM D7647	>3	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**17/15/11**	---	---

OIL ANALYSIS REPORT

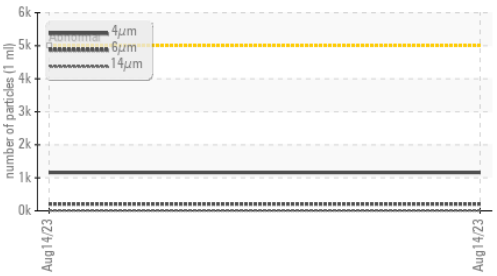
Water



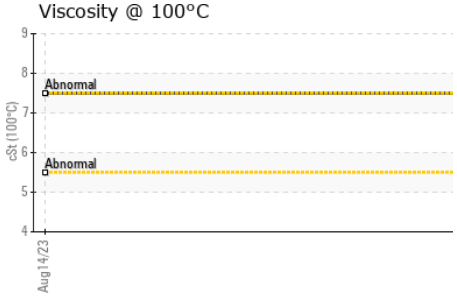
Viscosity @ 100°C



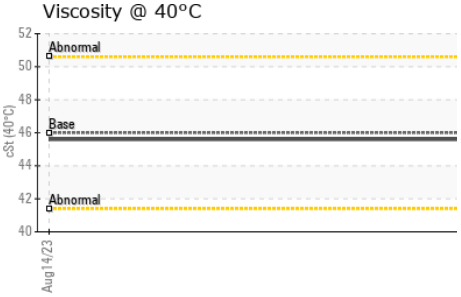
Particle Trend



Viscosity @ 100°C



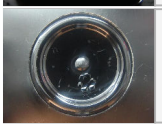
Viscosity @ 40°C



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.80**	---	---

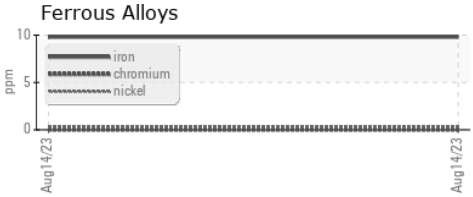
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	---	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	---	---
Precipitate	scalar	Visual*	NONE	**NONE**	---	---
Silt	scalar	Visual*	NONE	**NONE**	---	---
Debris	scalar	Visual*	NONE	**NONE**	---	---
Sand/Dirt	scalar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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	**45.6**	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		**7.5**	---	---
Viscosity Index (VI)	Scale	ASTM D2270*		**129**	---	---

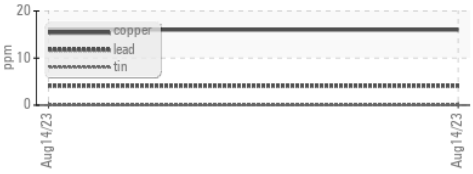
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

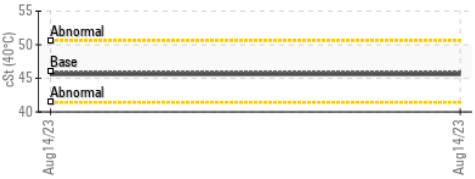
Ferrous Alloys



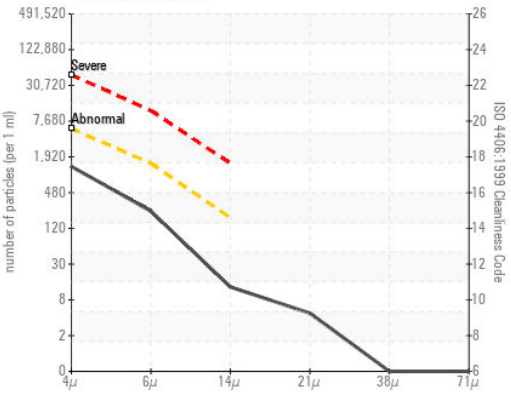
Non-ferrous Metals



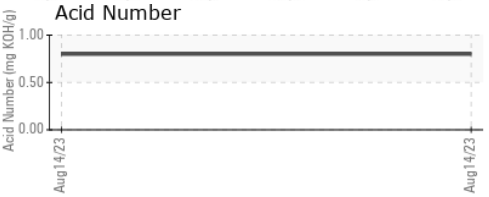
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30000084
Lab Number : 02576337
Unique Number : 5629397
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)
Received : 16 Aug 2023
Diagnosed : 25 Aug 2023
Diagnostician : Tatiana Sorkina

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.

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