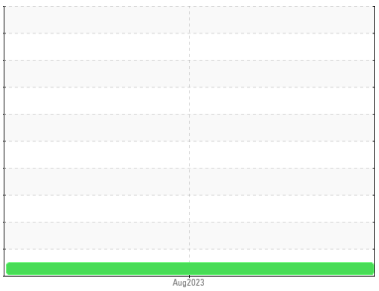
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
Chem-Ecol
Machine Id
A2308152
Component
Hydraulic System
Fluid
CHEM-ECOL WAYLUBE 220 (--- GAL)

DIAGNOSIS

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

Wear
{not applicable}

Contamination
{not applicable}

Fluid Condition
{not applicable}

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**E30000168**	---	---
Sample Date		Client Info		**25 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)	>20	**<1**	---	---
Chromium	ppm	ASTM D5185(m)	>20	**0**	---	---
Nickel	ppm	ASTM D5185(m)	>20	**<1**	---	---
Titanium	ppm	ASTM D5185(m)		**0**	---	---
Silver	ppm	ASTM D5185(m)		**0**	---	---
Aluminum	ppm	ASTM D5185(m)	>20	**0**	---	---
Lead	ppm	ASTM D5185(m)	>20	**0**	---	---
Copper	ppm	ASTM D5185(m)	>20	**<1**	---	---
Tin	ppm	ASTM D5185(m)	>20	**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**	---	---

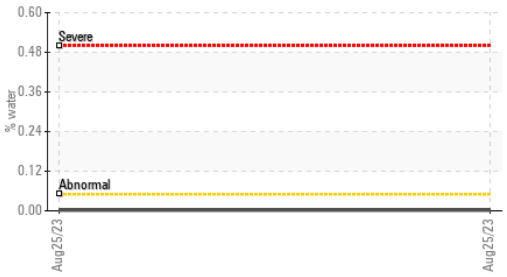
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**0**	---	---
Barium	ppm	ASTM D5185(m)		**0**	---	---
Molybdenum	ppm	ASTM D5185(m)		**0**	---	---
Manganese	ppm	ASTM D5185(m)		**0**	---	---
Magnesium	ppm	ASTM D5185(m)		**1**	---	---
Calcium	ppm	ASTM D5185(m)		**9**	---	---
Phosphorus	ppm	ASTM D5185(m)		**199**	---	---
Zinc	ppm	ASTM D5185(m)		**9**	---	---
Sulfur	ppm	ASTM D5185(m)		**1961**	---	---
Lithium	ppm	ASTM D5185(m)		**<1**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**1**	---	---
Sodium	ppm	ASTM D5185(m)		**1**	---	---
Potassium	ppm	ASTM D5185(m)	>20	**0**	---	---
Water	%	ASTM D6304*	>0.05	**0.002**	---	---
ppm Water	ppm	ASTM D6304*	>500	**23.4**	---	---

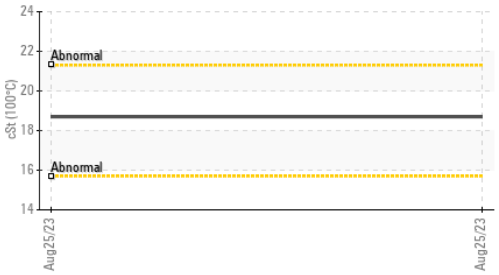
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**406**	---	---
Particles >6µm		ASTM D7647	>1300	**136**	---	---
Particles >14µm		ASTM D7647	>160	**23**	---	---
Particles >21µm		ASTM D7647	>40	**11**	---	---
Particles >38µm		ASTM D7647	>10	**7**	---	---
Particles >71µm		ASTM D7647	>3	**6**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**16/14/12**	---	---

OIL ANALYSIS REPORT

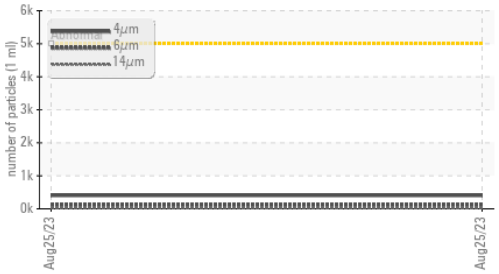
Water



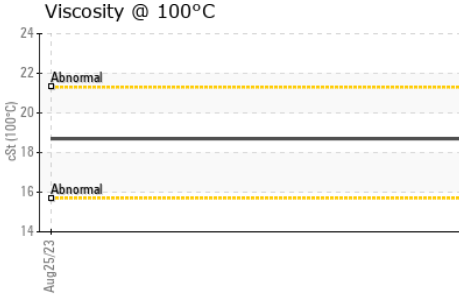
Viscosity @ 100°C



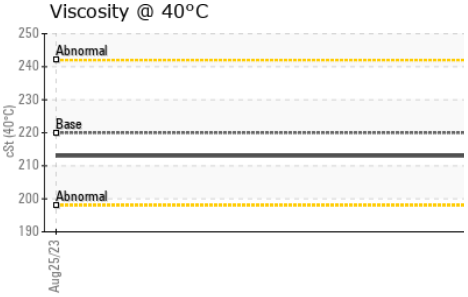
Particle Trend



Viscosity @ 100°C



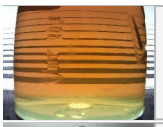
Viscosity @ 40°C



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.78**	---	---

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*	>0.05	**NEG**	---	---
Free Water	scalar	Visual*		**NEG**	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220	**213**	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		**18.7**	---	---
Viscosity Index (VI)	Scale	ASTM D2270*		**97**	---	---

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

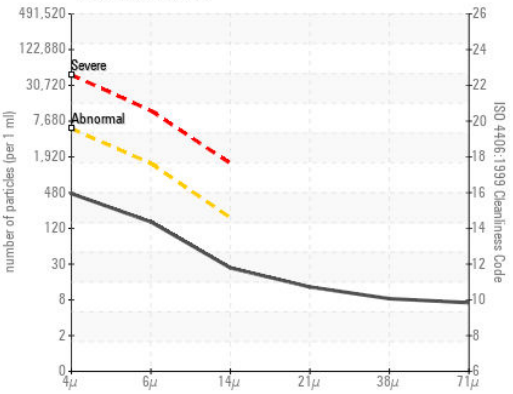
GRAPHS

Ferrous Alloys

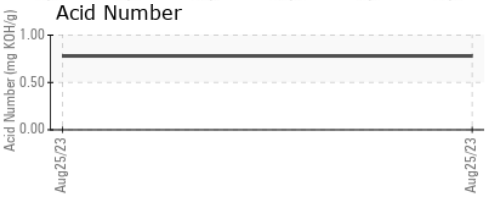
Non-ferrous Metals

Viscosity @ 40°C

Particle Count



Acid Number



CALA Testing Accreditation No. 1005078
ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30000168 **Received** : 29 Aug 2023
Lab Number : 02579121 **Diagnosed** : 30 Aug 2023
Unique Number : 5632181 **Diagnostician** : Tatiana Sorkina
Test Package : IND 2 (Additional Tests: KF, KV100, VI)

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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