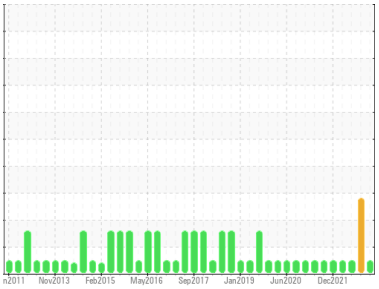
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
T.M.B.
Machine Id
5502-UHO-002 (S/N 1)
Component
Hydraulic System
Fluid
AMERICAN CHEMICAL TECH. ECOSAFE FR-46 (2000 LTR)

DIAGNOSIS

Recommendation
Échantillonner de nouveau l`équipement au prochain intervalle de vidange afin d`en surveiller la condition. Veuillez communiquer avec un représentant WearCheck au sujet de l`achat d`une trousse d`échantillonnage appropriée à vos besoins. Notez: nous recommandons d'acheter les trousses IND 3 pour cet équipement, Cet ensemble de tests inclut la ferrographie analytique qui donne une analyse morphologique détaillée des particules d'usure présentes dans le fluide.

Wear
Les taux d`usure des composants semblent être normaux (non confirmé).

Contamination
La propreté du système est acceptable pour votre objectif de propreté ISO 4406. La teneur en eau est négligeable. La propreté du système et du fluide est acceptable.

Fluid Condition
Le AN est acceptable pour ce fluide. L`état de l`huile permet d`en prolonger l`utilisation.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0840722**	WC0826372	WC0705121
Sample Date		Client Info		**20 Sep 2023**	14 Jun 2023	15 Nov 2022
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				**NORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**<1**	1	<1
Chromium	ppm	ASTM D5185(m)	>20	**<1**	2	2
Nickel	ppm	ASTM D5185(m)	>20	**<1**	0	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**<1**	0	0
Aluminum	ppm	ASTM D5185(m)	>20	**<1**	<1	<1
Lead	ppm	ASTM D5185(m)	>20	**0**	0	<1
Copper	ppm	ASTM D5185(m)	>20	**5**	5	7
Tin	ppm	ASTM D5185(m)	>20	**<1**	7	<1
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

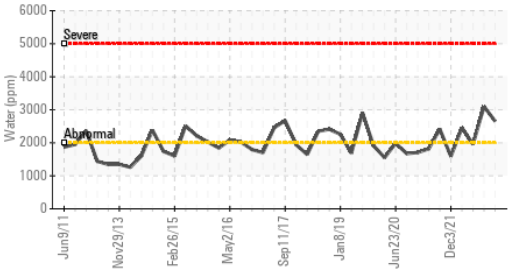
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**1**	1	1
Barium	ppm	ASTM D5185(m)		**<1**	0	0
Molybdenum	ppm	ASTM D5185(m)		**0**	0	0
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)		**0**	<1	<1
Calcium	ppm	ASTM D5185(m)		**<1**	<1	0
Phosphorus	ppm	ASTM D5185(m)		**617**	646	671
Zinc	ppm	ASTM D5185(m)		**6**	8	8
Sulfur	ppm	ASTM D5185(m)		**2908**	2880	2980
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**0**	<1	<1
Sodium	ppm	ASTM D5185(m)		**2**	2	2
Potassium	ppm	ASTM D5185(m)	>20	**<1**	<1	<1
Water	%	ASTM D6304*	>0.2	**0.265**	▲ 0.309	0.195
ppm Water	ppm	ASTM D6304*	>2000	**2655.2**	▲ 3096.9	1957.3

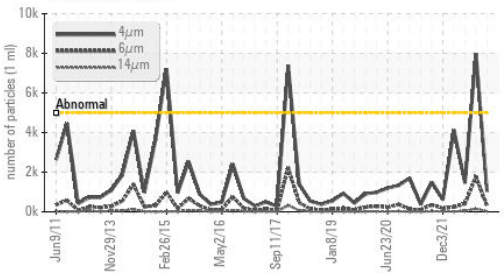
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**1034**	▲ 7981	1458
Particles >6µm		ASTM D7647	>1300	**301**	▲ 1770	404
Particles >14µm		ASTM D7647	>160	**28**	144	41
Particles >21µm		ASTM D7647	>40	**7**	46	11
Particles >38µm		ASTM D7647	>10	**0**	2	1
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**17/15/12**	▲ 20/18/14	18/16/13

OIL ANALYSIS REPORT

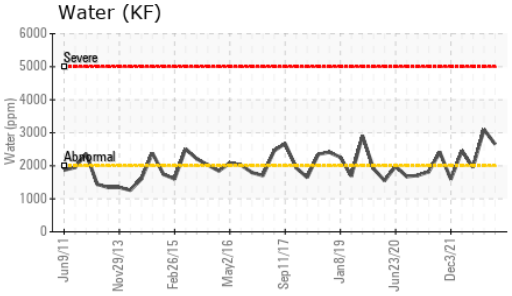
Water (KF)



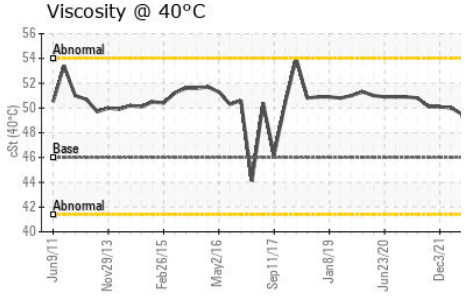
Particle Trend



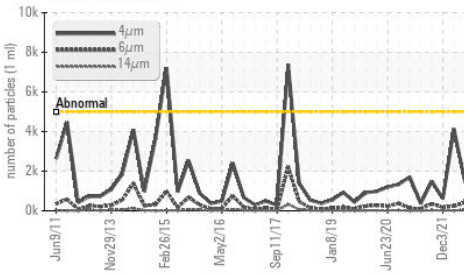
Water (KF)



Viscosity @ 40°C



Particle Trend



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.37**	0.52	0.44

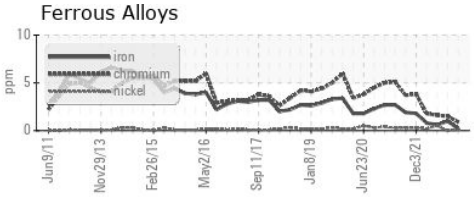
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	**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	**50.3**	45.2	49.5

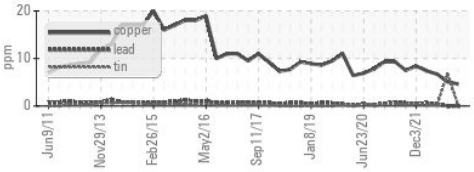
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

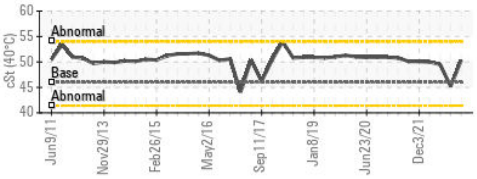
Ferrous Alloys



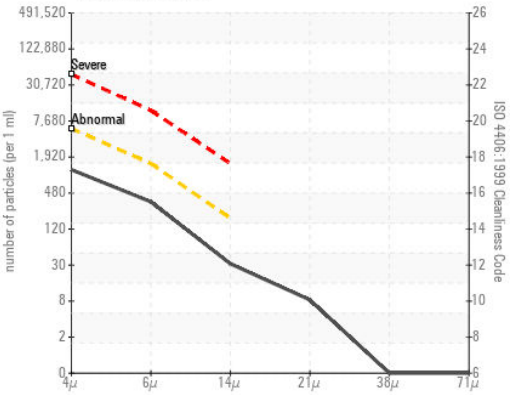
Non-ferrous Metals



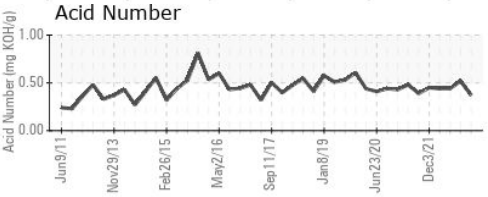
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0840722 **Received** : 04 Oct 2023
Lab Number : 02586787 **Diagnosed** : 05 Oct 2023
Unique Number : 5655853 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: KF)

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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