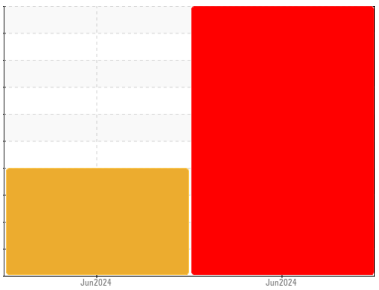
PROBLEM SUMMARY

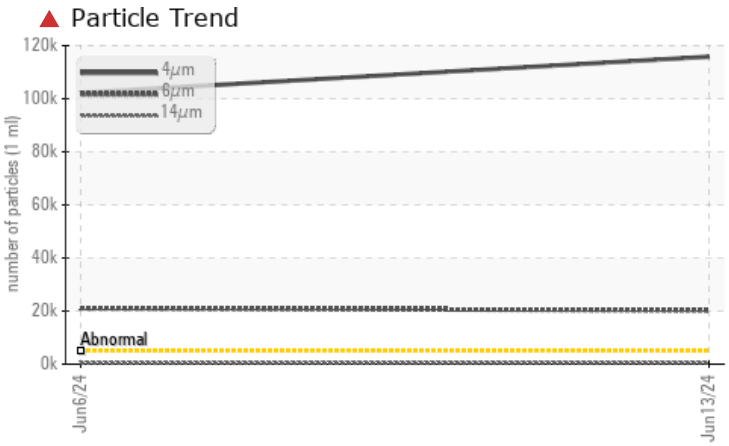
Sample Rating Trend



VISUAL METAL

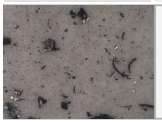
Area
Maemax Compaction Services - 888098
Machine Id
A2406100
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	SEVERE	---
Particles >4µm		ASTM D7647	>5000	▲ **115833**	▲ 102265	---
Particles >6µm		ASTM D7647	>640	▲ **20236**	▲ 21048	---
Particles >14µm		ASTM D7647	>160	▲ **453**	▲ 351	---
Oil Cleanliness		ISO 4406 (c)	>19/16/14	▲ **24/22/16**	▲ 24/22/16	---
White Metal	scalar	Visual*	NONE	▲ **LTMOD**	NONE	---
PrtFilter					*no image*	*no image*

Customer Id: CHECOB
Sample No.: E30002413
Lab Number: 02642953
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Aylwin Lee +1 (905)372-2251
aylwinlee@e360s.ca

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

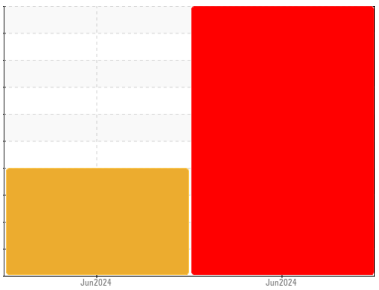
ISO

06 Jun 2024 Diag: Tatiana Sorkina
The sample submitted is 32 times dirtier than the ISO dirt count recommendation of 19/16/14. Particles >6µm are severely high. Particles >4µm are severely high. Oil Cleanliness are severely high. Particles >14µm are abnormally high.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



VISUAL METAL

Area
Maemax Compaction Services - 888098
Machine Id
A2406100
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

DIAGNOSIS

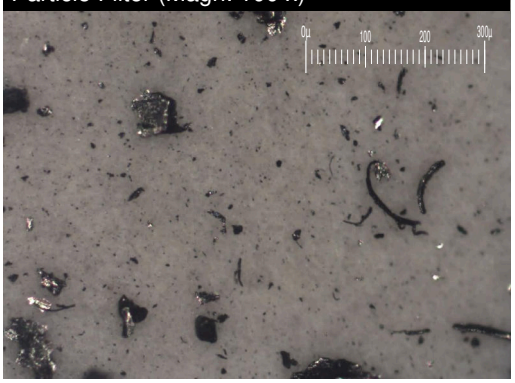
Wear

Moderate concentration of visible metal present. Cutting wear particles are caused by either hard protuberances (mis-aligned components, etc.), or abrasives entering the system and embedding themselves in softer materials (sand, etc.), and gouging out mating surfaces.

Contamination

Particles >6µm are severely high. Particles >4µm are severely high. Oil Cleanliness are severely high. Particles >14µm are abnormally high.

Particle Filter (Magn: 100 x)



SAMPLE INFORMATION		method	limit/base	current	history1	history2
Department		Client Info		**Sales**	Sales	---
Sample From		Client Info		**Machine**	Machine	---
Production Stage		Client Info		**Initial**	Initial	---
Sent to WC		Client Info		**06/17/2024**	06/13/2024	---
Sample Number		Client Info		**E30002413**	E30002387	---
Sample Date		Client Info		**13 Jun 2024**	06 Jun 2024	---
Machine Age	hrs	Client Info		**0**	0	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	N/A	---
Sample Status				**SEVERE**	SEVERE	---

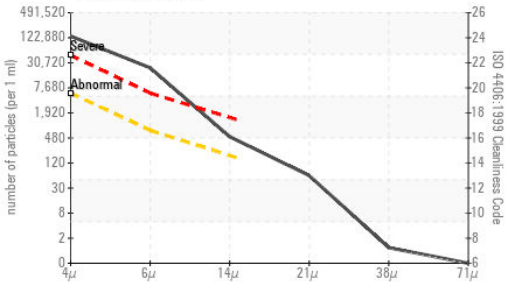
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**11**	11	---
Chromium	ppm	ASTM D5185(m)	>20	**3**	3	---
Nickel	ppm	ASTM D5185(m)	>20	**<1**	<1	---
Titanium	ppm	ASTM D5185(m)		**0**	0	---
Silver	ppm	ASTM D5185(m)		**0**	0	---
Aluminum	ppm	ASTM D5185(m)	>20	**1**	<1	---
Lead	ppm	ASTM D5185(m)	>20	**0**	0	---
Copper	ppm	ASTM D5185(m)	>20	**1**	1	---
Tin	ppm	ASTM D5185(m)	>20	**0**	0	---
Antimony	ppm	ASTM D5185(m)		**0**	0	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
Beryllium	ppm	ASTM D5185(m)		**0**	0	---
Cadmium	ppm	ASTM D5185(m)		**0**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	**1**	<1	---
Barium	ppm	ASTM D5185(m)	5	**<1**	<1	---
Molybdenum	ppm	ASTM D5185(m)	5	**0**	0	---
Manganese	ppm	ASTM D5185(m)		**<1**	<1	---
Magnesium	ppm	ASTM D5185(m)	25	**2**	2	---
Calcium	ppm	ASTM D5185(m)	200	**94**	94	---
Phosphorus	ppm	ASTM D5185(m)	300	**348**	351	---
Zinc	ppm	ASTM D5185(m)	370	**410**	417	---
Sulfur	ppm	ASTM D5185(m)	2500	**1976**	2010	---
Lithium	ppm	ASTM D5185(m)		**<1**	<1	---

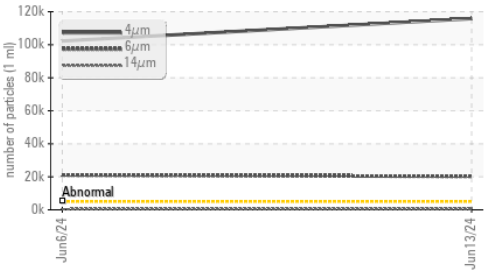
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**3**	3	---
Sodium	ppm	ASTM D5185(m)		**2**	2	---
Potassium	ppm	ASTM D5185(m)	>20	**<1**	1	---
Water	%	ASTM D6304*	>0.05	**0.007**	0.002	---
ppm Water	ppm	ASTM D6304*	>500	**77**	23	---

OIL ANALYSIS REPORT

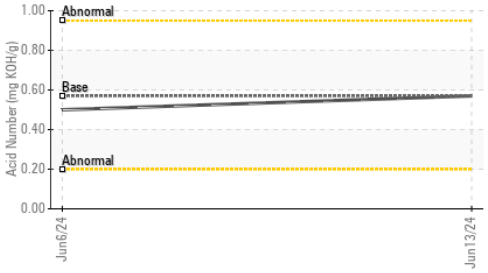
Particle Count



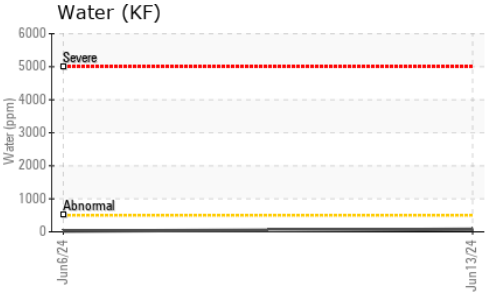
Particle Trend



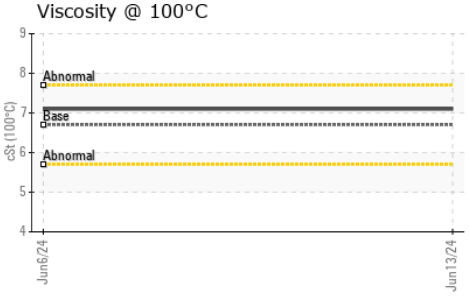
Acid Number



Water (KF)



Viscosity @ 100°C

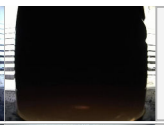
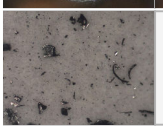


FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **115833**	▲ 102265	---
Particles >6µm		ASTM D7647	>640	▲ **20236**	▲ 21048	---
Particles >14µm		ASTM D7647	>160	▲ **453**	▲ 351	---
Particles >21µm		ASTM D7647	>40	**53**	20	---
Particles >38µm		ASTM D7647	>10	**1**	1	---
Particles >71µm		ASTM D7647	>3	**0**	1	---
Oil Cleanliness		ISO 4406 (c)	>19/16/14	▲ **24/22/16**	▲ 24/22/16	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	**0.57**	0.50	---

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	**47.1**	47.1	---
Visc @ 100°C	cSt	ASTM D7279(m)	6.7	**7.1**	7.1	---
Viscosity Index (VI)	Scale	ASTM D2270*	97	**108**	108	---

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

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30002413 **Received** : 19 Jun 2024
Lab Number : 02642953 **Tested** : 20 Jun 2024
Unique Number : 5800492 **Diagnosed** : 21 Jun 2024 - Aylwin Lee
Test Package : IND 2 (Additional Tests: Bottom, BottomAnalysis, FilterPatch, KF, KV100, PrtFilterPatch)

To discuss this sample report, contact Customer Service at 1-905-372-2251.
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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