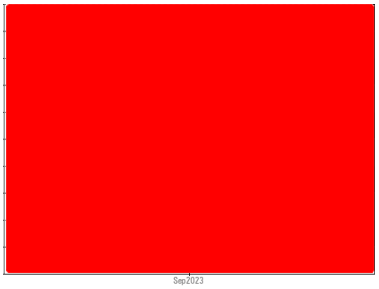
PROBLEM SUMMARY

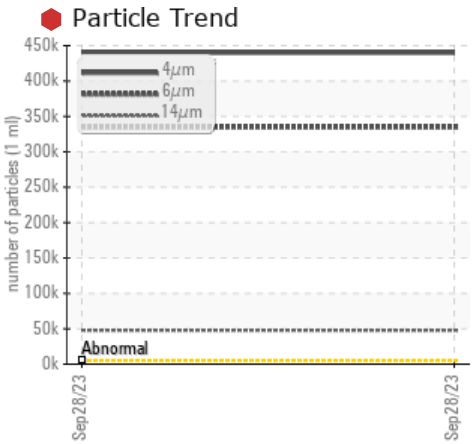
Sample Rating Trend

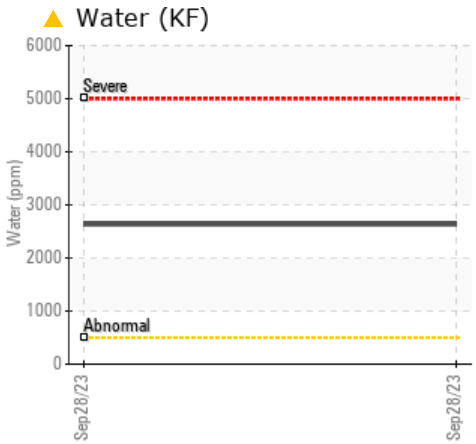


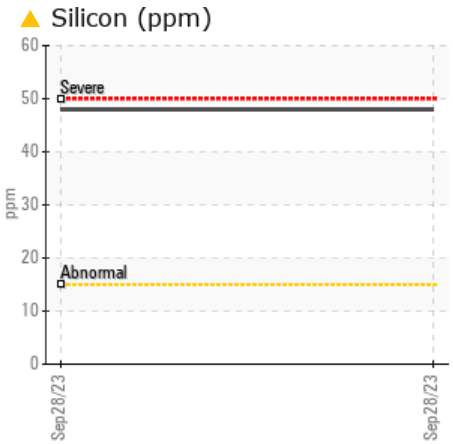
ISO

Area
Inland Iron and Metal - 888041
Machine Id
AG201
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

COMPONENT CONDITION SUMMARY







RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	---	---
Silicon	ppm	ASTM D5185(m)	>15	▲ **48**	---	---
Water	%	ASTM D6304*	>0.05	▲ **0.263**	---	---
ppm Water	ppm	ASTM D6304*	>500	▲ **2634.0**	---	---
Particles >4µm		ASTM D7647	>5000	⬢ **440025**	---	---
Particles >6µm		ASTM D7647	>1300	⬢ **334900**	---	---
Particles >14µm		ASTM D7647	>160	⬢ **47712**	---	---
Particles >21µm		ASTM D7647	>40	⬢ **7013**	---	---
Particles >38µm		ASTM D7647	>10	⬢ **164**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	⬢ **26/26/23**	---	---

Customer Id: CHECOB
Sample No.: E30000470
Lab Number: 02587161
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Tatiana Sorkina +1 (800)263-3939
tsorkina@e360s.ca

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

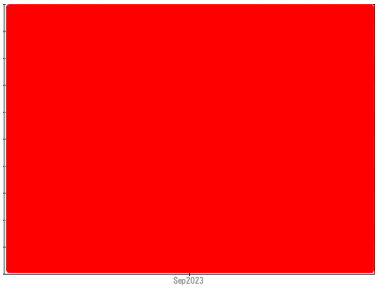
RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
Inland Iron and Metal - 888041
Machine Id
AG201
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

DIAGNOSIS

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

Wear
Aluminum and iron ppm levels are noted.

Contamination
Particles >14µm are severely high. Particles >21µm are severely high. Particles >38µm are severely high. Particles >6µm are severely high. Oil Cleanliness are severely high. Particles >4µm are severely high. Water and ppm water contamination levels are abnormal. Silicon ppm levels are notably high.

Fluid Condition
{not applicable}

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Batch #		Client Info		**AG201**	---	---
Machine ID		Client Info		**Sales**	---	---
Department		Client Info		**Machine**	---	---
Sample From		Client Info		**Initial**	---	---
Production Stage		Client Info		**10/04/2023**	---	---
Sample Number		Client Info		**E30000470**	---	---
Sample Date		Client Info		**28 Sep 2023**	---	---
Machine Age	hrs	Client Info		**0**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**SEVERE**	---	---

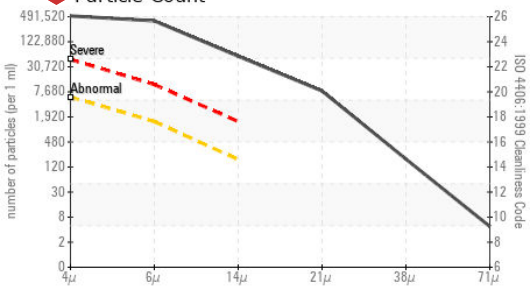
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**8**	---	---
Iron	ppm	ASTM D5185(m)	>20	**74**	---	---
Chromium	ppm	ASTM D5185(m)	>20	**<1**	---	---
Nickel	ppm	ASTM D5185(m)	>20	**<1**	---	---
Titanium	ppm	ASTM D5185(m)		**2**	---	---
Silver	ppm	ASTM D5185(m)		**<1**	---	---
Aluminum	ppm	ASTM D5185(m)	>20	**15**	---	---
Lead	ppm	ASTM D5185(m)	>20	**11**	---	---
Copper	ppm	ASTM D5185(m)	>20	**15**	---	---
Tin	ppm	ASTM D5185(m)	>20	**<1**	---	---
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)	5	**<1**	---	---
Barium	ppm	ASTM D5185(m)	5	**<1**	---	---
Molybdenum	ppm	ASTM D5185(m)	5	**0**	---	---
Manganese	ppm	ASTM D5185(m)		**2**	---	---
Magnesium	ppm	ASTM D5185(m)	25	**13**	---	---
Calcium	ppm	ASTM D5185(m)	200	**89**	---	---
Phosphorus	ppm	ASTM D5185(m)	300	**348**	---	---
Zinc	ppm	ASTM D5185(m)	370	**383**	---	---
Sulfur	ppm	ASTM D5185(m)	2500	**1520**	---	---
Lithium	ppm	ASTM D5185(m)		**<1**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	▲ **48**	---	---
Sodium	ppm	ASTM D5185(m)		**2**	---	---
Potassium	ppm	ASTM D5185(m)	>20	**4**	---	---
Water	%	ASTM D6304*	>0.05	▲ **0.263**	---	---
ppm Water	ppm	ASTM D6304*	>500	▲ **2634.0**	---	---

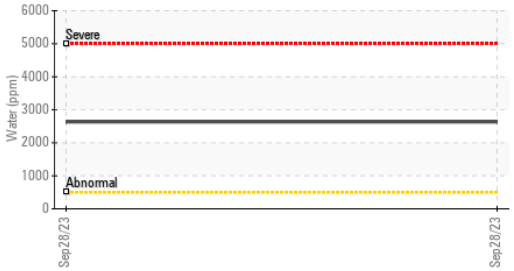
OIL ANALYSIS REPORT

Particle Count

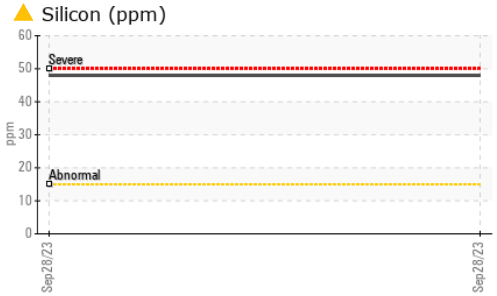


Particle Trend

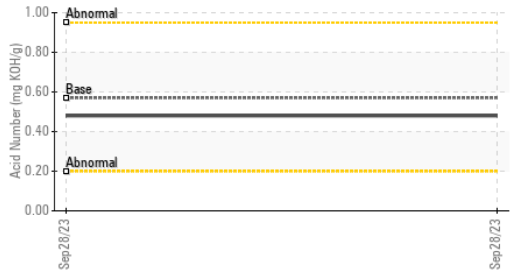
Water (KF)



Silicon (ppm)



Acid Number

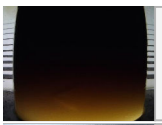
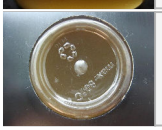


FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**440025**	---	---
Particles >6µm		ASTM D7647	>1300	**334900**	---	---
Particles >14µm		ASTM D7647	>160	**47712**	---	---
Particles >21µm		ASTM D7647	>40	**7013**	---	---
Particles >38µm		ASTM D7647	>10	**164**	---	---
Particles >71µm		ASTM D7647	>3	**4**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**26/26/23**	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	**0.48**	---	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	---	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	---	---
Precipitate	scalar	Visual*	NONE	**VLITE**	---	---
Silt	scalar	Visual*	NONE	**NONE**	---	---
Debris	scalar	Visual*	NONE	**NONE**	---	---
Sand/Dirt	scalar	Visual*	NONE	**LIGHT**	---	---
Appearance	scalar	Visual*	NORML	**NORML**	---	---
Odor	scalar	Visual*	NORML	**NORML**	---	---
Emulsified Water	scalar	Visual*	>0.05	**.5%**	---	---
Free Water	scalar	Visual*		**NEG**	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	**46.2**	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	6.7	**6.7**	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	97	**96**	---	---

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

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30000470
Lab Number : 02587161
Unique Number : 5656227
Test Package : IND 2 (Additional Tests: KF, KV100, PQ, TAN Man, VI)
Received : 05 Oct 2023
Diagnosed : 10 Oct 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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