

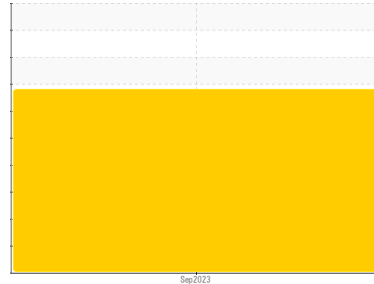
PROBLEM SUMMARY

Sample Rating Trend

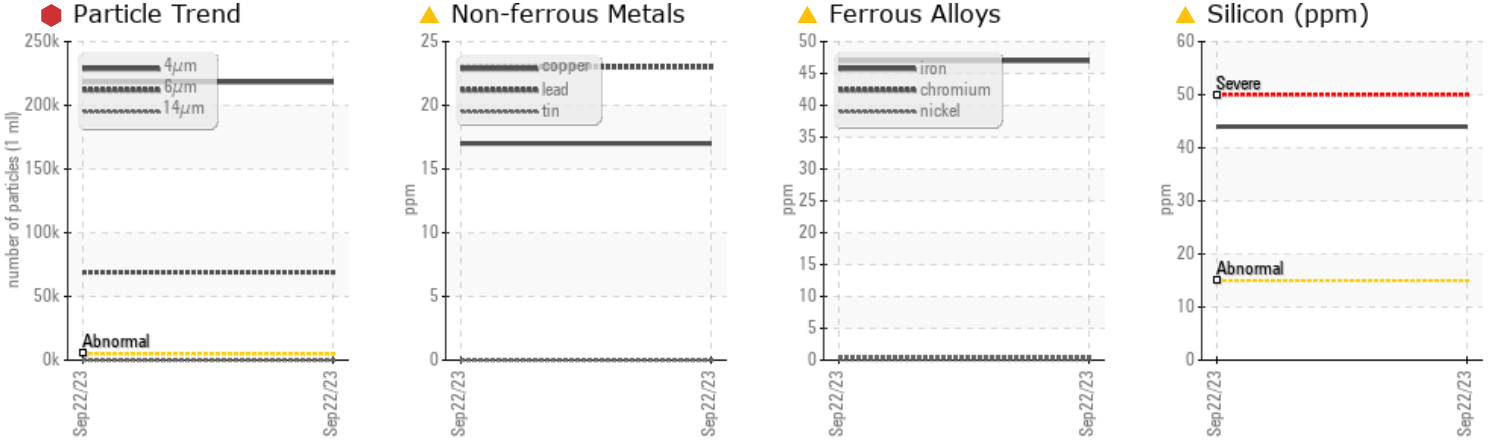
ISO



Area
Inland Iron - 888041
 Machine Id
AG195
 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	---	---
Iron	ppm	ASTM D5185(m)	>20	▲ 47	---	---
Lead	ppm	ASTM D5185(m)	>20	▲ 23	---	---
Silicon	ppm	ASTM D5185(m)	>15	▲ 44	---	---
Particles >4µm		ASTM D7647	>5000	● 218312	---	---
Particles >6µm		ASTM D7647	>1300	● 68993	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	● 25/23/11	---	---

Customer Id: CHECOB
 Sample No.: E30000425
 Lab Number: 02586122
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
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RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
Inland Iron - 888041
 Machine Id
AG195
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

DIAGNOSIS

Recommendation

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

Wear

Iron and lead ppm levels are noted.

Contamination

Particles >6µm are severely high. Particles >4µm and oil cleanliness are severely high. Silicon ppm levels are notably high.

Fluid Condition

{not applicable}

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Batch #	Client Info		AG195	---	---
Machine ID	Client Info		Sales	---	---
Department	Client Info		Tote	---	---
Sample From	Client Info		Initial	---	---
Production Stage	Client Info		09/28/2023	---	---
Sample Number	Client Info		E30000425	---	---
Sample Date	Client Info		22 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*		0	---	---
Iron	ppm	ASTM D5185(m) >20	▲ 47	---	---
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	8	---	---
Lead	ppm	ASTM D5185(m) >20	▲ 23	---	---
Copper	ppm	ASTM D5185(m) >20	17	---	---
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)	<1	---	---

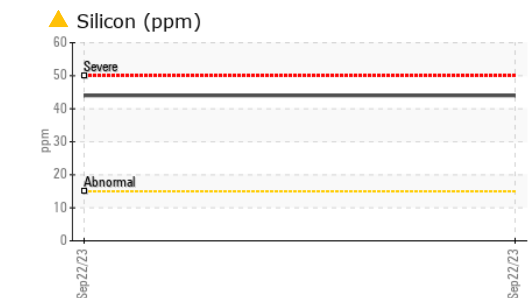
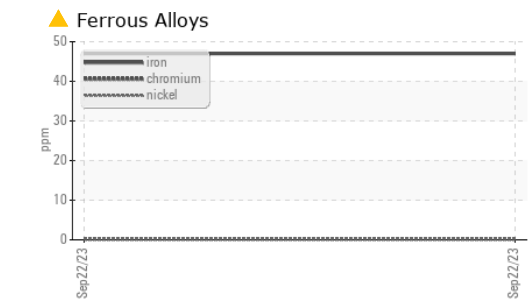
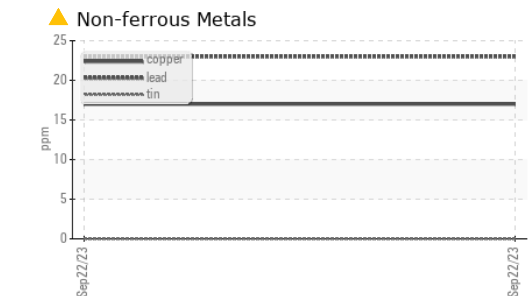
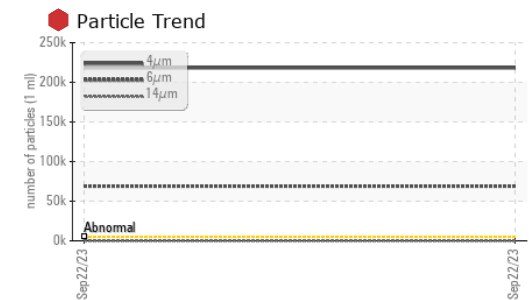
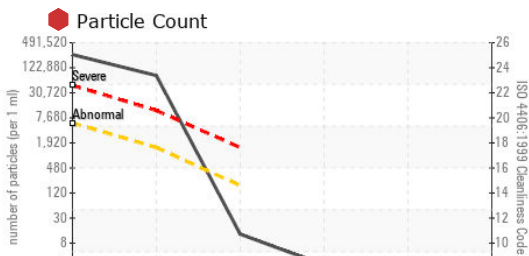
ADDITIVES

	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)	<1	---	---
Magnesium	ppm	ASTM D5185(m) 25	6	---	---
Calcium	ppm	ASTM D5185(m) 200	47	---	---
Phosphorus	ppm	ASTM D5185(m) 300	331	---	---
Zinc	ppm	ASTM D5185(m) 370	305	---	---
Sulfur	ppm	ASTM D5185(m) 2500	1864	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	▲ 44	---	---
Sodium	ppm	ASTM D5185(m)	1	---	---
Potassium	ppm	ASTM D5185(m) >20	2	---	---
Water	%	ASTM D6304* >0.05	0.006	---	---
ppm Water	ppm	ASTM D6304* >500	62.3	---	---

OIL ANALYSIS REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	218312	---	---
Particles >6µm	ASTM D7647	>1300	68993	---	---
Particles >14µm	ASTM D7647	>160	11	---	---
Particles >21µm	ASTM D7647	>40	2	---	---
Particles >38µm	ASTM D7647	>10	0	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	25/23/11	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	0.20	---	---

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	HAZY	---	---
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)	46	42.7	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	6.7	6.8	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	97	114	---	---

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



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30000425 **Received** : 02 Oct 2023
Lab Number : **02586122** **Diagnosed** : 05 Oct 2023
Unique Number : 5655188 **Diagnostician** : Tatiana Sorkina
Test Package : IND 2 (Additional Tests: KF, KV100, PQ, VI)

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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.