

## **PROBLEM SUMMARY**

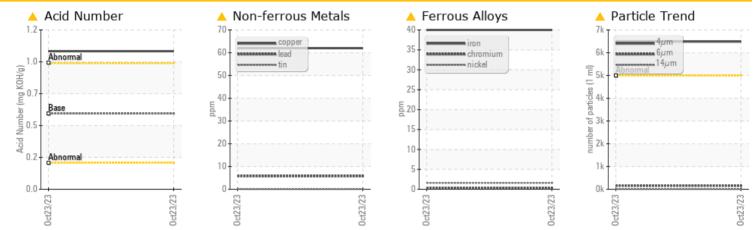
Sample Rating Trend

# DEGRADATION

# Signature Alum - A02500 A2310132

Component Hydraulic System Fluid AW HYDRAULIC OIL ISO 68 (--- GAL)

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION		
Iron	ppm	ASTM D5185(m)	>20	<u> </u>		
Copper	ppm	ASTM D5185(m)	>20	<u> </u>		
Particles >4µm		ASTM D7647	>5000	<u> </u>		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>A</b> 20/14/11		
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	<u> </u>		

Customer Id: CHECOB Sample No.: E30000586 Lab Number: 02591391 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 There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS



## **OIL ANALYSIS REPORT**

Sample Rating Trend

## DEGRADATION

## Signature Alum - A02500 A2310132

Hydraulic System Fluid AW HYDRAULIC OIL ISO 68 (--- GAL)

## DIAGNOSIS

### A Recommendation

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

#### 🔺 Wear

Copper and iron ppm levels are noted.

#### Contamination

Particles  $>4\mu m$  and oil cleanliness are notably high.

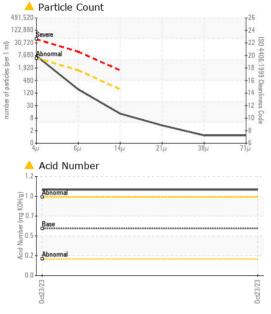
## Fluid Condition

Acid Number (AN) is notably high.

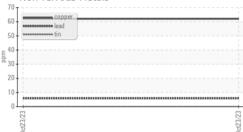
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Batch #		Client Info		2023 10 0180		
Machine ID		Client Info		A2310132		
Department		Client Info		Production		
Sample From		Client Info		Machine		
Production Stage		Client Info		Final		
Sent to WC		Client Info		10/23/2023		
Sample Number		Client Info		E30000586		
Sample Date		Client Info		23 Oct 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ATTENTION		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*	00	0		
lron Obversiver	ppm	ASTM D5185(m)	>20	<b>▲</b> 40		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>20	2		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		<1		
Aluminum	ppm	ASTM D5185(m)	>20	14		
Lead	ppm	ASTM D5185(m)	>20	6		
Copper	ppm	ASTM D5185(m)	>20	<mark>6</mark> 2		
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	2		
Molybdenum	ppm	ASTM D5185(m)	5	0		
Manganese	ppm	ASTM D5185(m)		<1		
Magnesium	ppm	ASTM D5185(m)	25	40		
Calcium	ppm	ASTM D5185(m)	200	114		
Phosphorus	ppm	ASTM D5185(m)	300	615		
Zinc	ppm	ASTM D5185(m)	370	538		
Sulfur	ppm	ASTM D5185(m)	2500	2004		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	4		
Sodium	ppm	ASTM D5185(m)		4		
Potassium	ppm	ASTM D5185(m)	>20	<1		
Water	%	ASTM D6304*	>0.05	0.001		
opm Water	ppm	ASTM D6304*	>500	11.0		
F.F	le le	2				

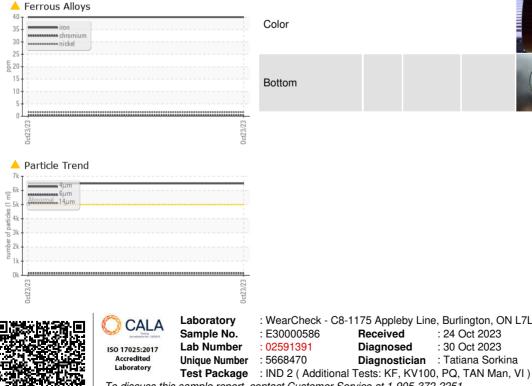


## **OIL ANALYSIS REPORT**



#### 🔺 Non-ferrous Metals





FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>6489</b>		
Particles >6µm		ASTM D7647	>1300	159		
Particles >14µm		ASTM D7647	>160	11		
Particles >21µm		ASTM D7647	>40	3		
Particles >38µm		ASTM D7647	>10	1		
Particles >71µm		ASTM D7647	>3	1		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>20/14/11</b>		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	<b>1.04</b>		
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*	20.00	NEG		
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68	64.5		
Visc @ 100°C	cSt	ASTM D7279(m)	8.6	9		
Viscosity Index (VI)	Scale	ASTM D2270*	96	115		
SAMPLE IMAGES	5	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
02591391	Received Diagnose	i : 24 ( ed : 30 (	ington, ON Oct 2023 Oct 2023 ana Sorkina	L7L 5H9 <b>Env</b> i	ironmental 360 64(	<b>Solutions Ltd.</b> ) Victoria Street Cobourg, ON

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.

Diagnostician : Tatiana Sorkina

Cobourg, ON CA K9A 5H5 Contact: Pierre Guillet pguillet@e360s.ca T: F: (905)373-4950