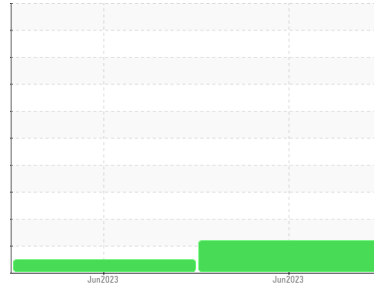




# PROBLEM SUMMARY

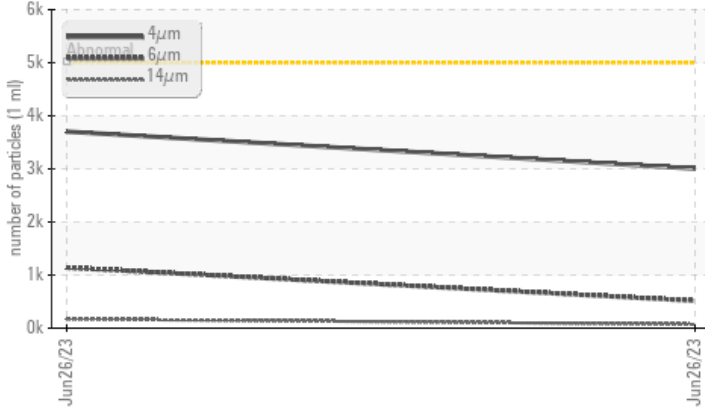
Area  
**Kimco Steel - K03600**  
 Machine Id  
**Sales AG164**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

## PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	NORMAL	---
Particles >14µm	ASTM D7647	>160	▲ 172	71	---
Particles >21µm	ASTM D7647	>40	▲ 75	44	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 19/17/15	19/16/13	---

Customer Id: CHECOB  
 Sample No.: E30000091  
 Lab Number: 02576325  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Wes Davis +1 905-569-8600 x223  
[wesd@wearcheck.ca](mailto:wesd@wearcheck.ca)

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

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

## HISTORICAL DIAGNOSIS

**26 Jun 2023 Diag: Wes Davis**

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

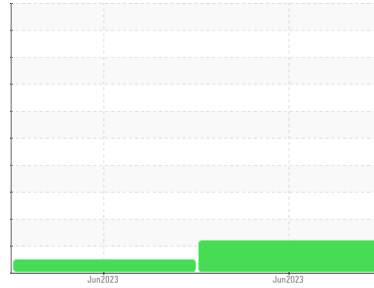
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



Area  
**Kimco Steel - K03600**  
 Machine Id  
**Sales AG164**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

### Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>E30000091</b>	E30000036	---
Sample Date	Client Info		<b>26 Jun 2023</b>	26 Jun 2023	---
Machine Age	hrs	Client Info	<b>0</b>	0	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>ATTENTION</b>	NORMAL	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	---
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	---
Nickel	ppm	ASTM D5185(m) >20	<b>0</b>	0	---
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	---
Lead	ppm	ASTM D5185(m) >20	<b>0</b>	0	---
Copper	ppm	ASTM D5185(m) >20	<b>2</b>	2	---
Tin	ppm	ASTM D5185(m) >20	<b>0</b>	0	---
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	---
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 5	<b>&lt;1</b>	<1	---
Barium	ppm	ASTM D5185(m) 5	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m) 5	<b>&lt;1</b>	<1	---
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185(m) 25	<b>1</b>	1	---
Calcium	ppm	ASTM D5185(m) 200	<b>101</b>	104	---
Phosphorus	ppm	ASTM D5185(m) 300	<b>370</b>	403	---
Zinc	ppm	ASTM D5185(m) 370	<b>401</b>	409	---
Sulfur	ppm	ASTM D5185(m) 2500	<b>831</b>	853	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---

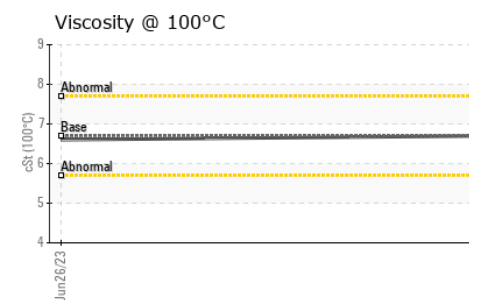
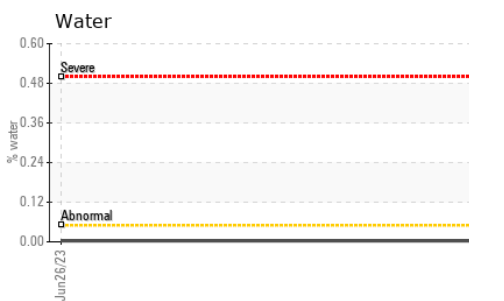
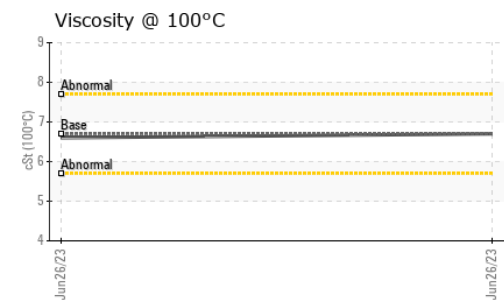
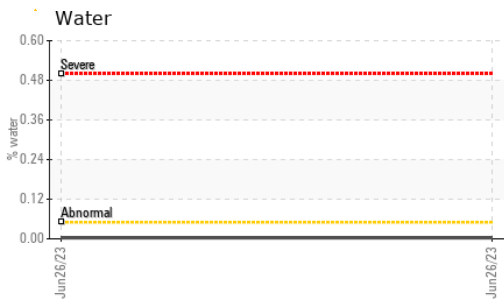
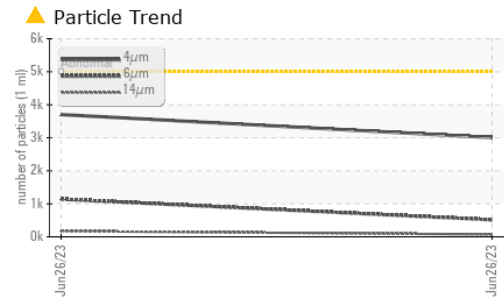
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<b>0</b>	<1	---
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	---
Water	%	ASTM D6304* >0.05	<b>0.003</b>	0.003	---
ppm Water	ppm	ASTM D6304* >500	<b>34.9</b>	27.4	---

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>3703</b>	3005	---
Particles >6µm	ASTM D7647	>1300	<b>1140</b>	514	---
Particles >14µm	ASTM D7647	>160	<b>▲ 172</b>	71	---
Particles >21µm	ASTM D7647	>40	<b>▲ 75</b>	44	---
Particles >38µm	ASTM D7647	>10	<b>11</b>	5	---
Particles >71µm	ASTM D7647	>3	<b>2</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 19/17/15</b>	19/16/13	---

# OIL ANALYSIS REPORT



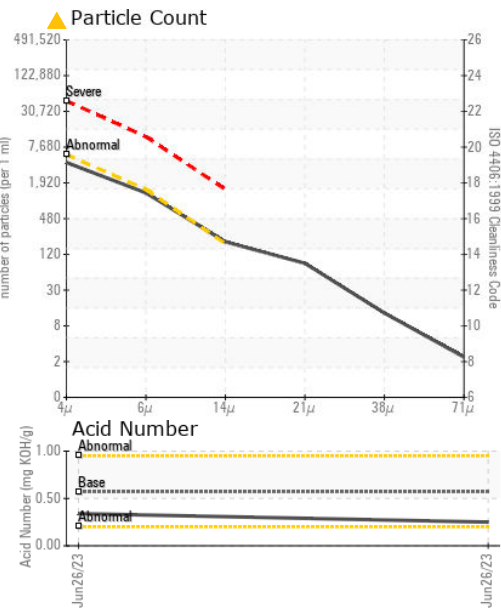
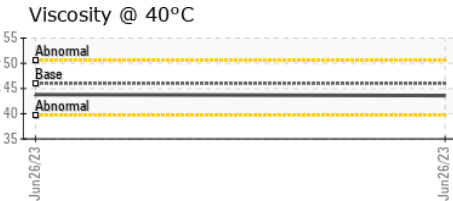
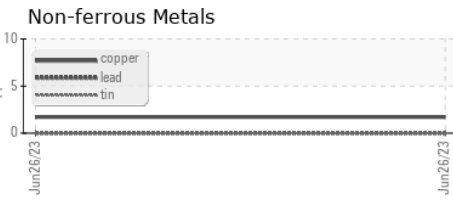
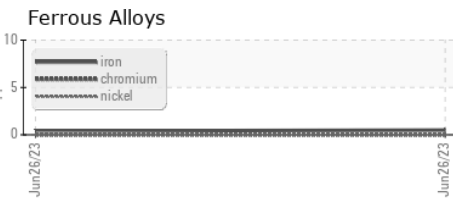
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	<b>0.25</b>	0.34	---

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	<b>43.6</b>	43.8	---
Visc @ 100°C	cSt	ASTM D7279(m)	6.7	<b>6.7</b>	6.6	---
Viscosity Index (VI)	Scale	ASTM D2270*	97	<b>106</b>	101	---

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

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : E30000091 **Received** : 16 Aug 2023  
**Lab Number** : **02576325** **Diagnosed** : 18 Aug 2023  
**Unique Number** : 5629385 **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, VI )

**Environmental 360 Solutions Ltd.**  
 640 Victoria Street  
 Cobourg, ON  
 CA K9A 5H5  
 Contact: Fred Kosseim  
 fkosseim@e360s.ca  
 T: (905)372-2251  
 F: (905)372-1658

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.