



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**Windmill Plastics - W02200**  
 Machine Id  
**A2308140**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

## DIAGNOSIS

### Recommendation

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

### Wear

Copper and iron ppm levels are noted.

### Contamination

{not applicable}

### Fluid Condition

{not applicable}

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>E3000052</b>	---	---
Sample Date	Client Info		<b>24 Aug 2023</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>0</b>	---	---
Iron	ppm	ASTM D5185(m) >20	<b>54</b>	---	---
Chromium	ppm	ASTM D5185(m) >20	<b>1</b>	---	---
Nickel	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185(m) >20	<b>9</b>	---	---
Copper	ppm	ASTM D5185(m) >20	<b>40</b>	---	---
Tin	ppm	ASTM D5185(m) >20	<b>0</b>	---	---
Antimony	ppm	ASTM D5185(m)	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 5	<b>1</b>	---	---
Barium	ppm	ASTM D5185(m) 5	<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185(m) 5	<b>0</b>	---	---
Manganese	ppm	ASTM D5185(m)	<b>2</b>	---	---
Magnesium	ppm	ASTM D5185(m) 25	<b>25</b>	---	---
Calcium	ppm	ASTM D5185(m) 200	<b>30</b>	---	---
Phosphorus	ppm	ASTM D5185(m) 300	<b>457</b>	---	---
Zinc	ppm	ASTM D5185(m) 370	<b>367</b>	---	---
Sulfur	ppm	ASTM D5185(m) 2500	<b>1713</b>	---	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---

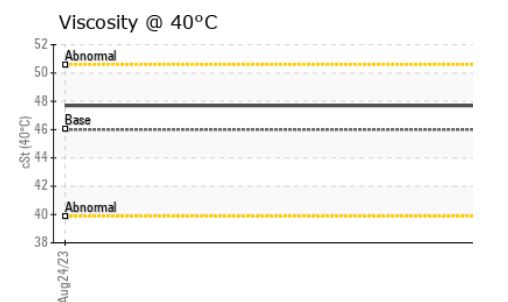
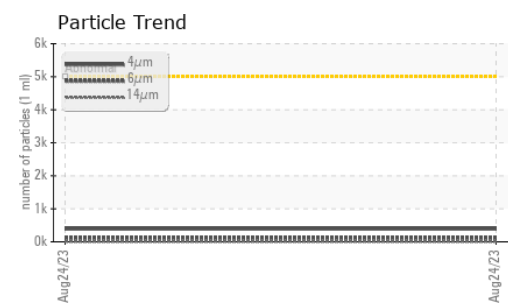
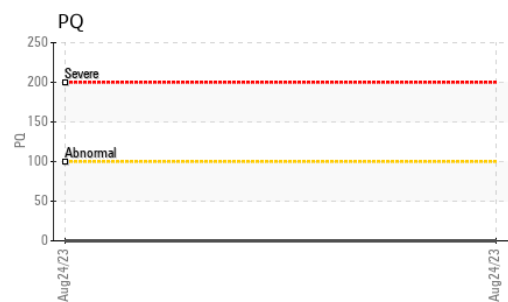
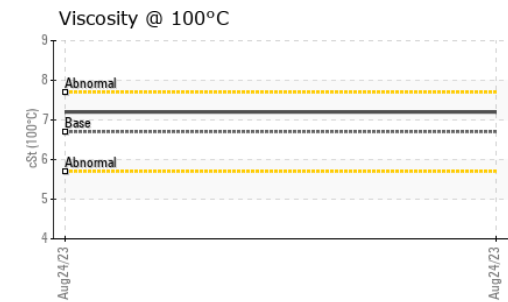
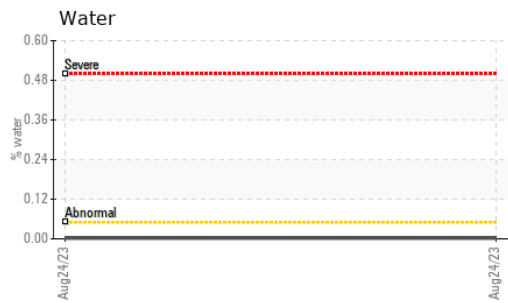
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<b>3</b>	---	---
Sodium	ppm	ASTM D5185(m)	<b>4</b>	---	---
Potassium	ppm	ASTM D5185(m) >20	<b>2</b>	---	---
Water	%	ASTM D6304* >0.05	<b>0.002</b>	---	---
ppm Water	ppm	ASTM D6304* >500	<b>16.3</b>	---	---

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>393</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>116</b>	---	---
Particles >14µm	ASTM D7647	>160	<b>5</b>	---	---
Particles >21µm	ASTM D7647	>40	<b>1</b>	---	---
Particles >38µm	ASTM D7647	>10	<b>0</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>16/14/10</b>	---	---

# OIL ANALYSIS REPORT



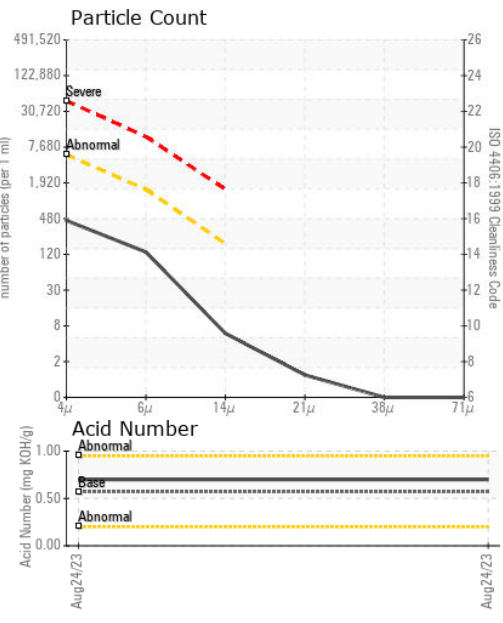
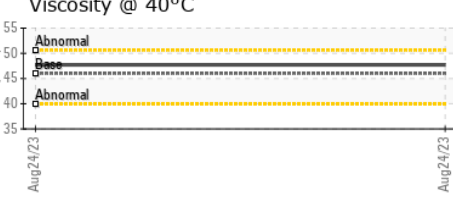
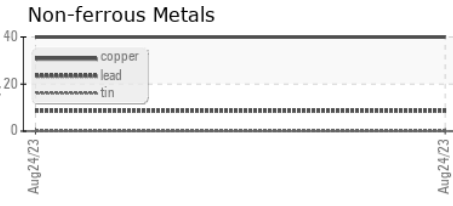
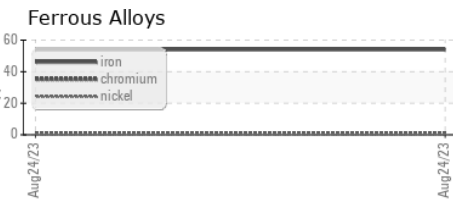
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	<b>0.70</b>	---	---

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	<b>47.7</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	6.7	<b>7.2</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	97	<b>110</b>	---	---

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

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : E30000052 **Received** : 28 Aug 2023  
**Lab Number** : **02578768** **Diagnosed** : 30 Aug 2023  
**Unique Number** : 5631828 **Diagnostician** : Tatiana Sorkina  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, PQ, TAN Man, VI )

**Environmental 360 Solutions Ltd.**  
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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.