



# PROBLEM SUMMARY

Sample Rating Trend



ISO



Area  
**CYGNUS**  
 Machine Id  
**82473**

Component  
**Hydraulic System**  
 Fluid

**AW HYDRAULIC OIL ISO 32 (80 LTR)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	---	---
Particles >4µm	ASTM D7647	>5000	▲ <b>10903</b>	---	---
Particles >6µm	ASTM D7647	>1300	▲ <b>2151</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ <b>21/18/14</b>	---	---

**Customer Id:** DIESTJ  
**Sample No.:** WC0867281  
**Lab Number:** 02602264  
**Test Package:** MAR 5



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.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample. Please specify the component make and model with your next sample.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**CYGNUS**  
 Machine Id  
**82473**

Component  
**Hydraulic System**  
 Fluid

**AW HYDRAULIC OIL ISO 32 (80 LTR)**

## DIAGNOSIS

### ▲ Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the component make and model with your 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 moderate amount of silt (particulates < 14 microns in size) present in the oil.

### Fluid Condition

The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC0867281</b>	---	---
Sample Date	Client Info	<b>29 Nov 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>ABNORMAL</b>	---	---

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	<b>NEG</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >20	<b>0</b>	---	---
Chromium	ppm ASTM D5185(m) >10	<b>0</b>	---	---
Nickel	ppm ASTM D5185(m) >10	<b>&lt;1</b>	---	---
Titanium	ppm ASTM D5185(m)	<b>0</b>	---	---
Silver	ppm ASTM D5185(m)	<b>&lt;1</b>	---	---
Aluminum	ppm ASTM D5185(m) >10	<b>0</b>	---	---
Lead	ppm ASTM D5185(m) >10	<b>&lt;1</b>	---	---
Copper	ppm ASTM D5185(m) >75	<b>4</b>	---	---
Tin	ppm ASTM D5185(m) >10	<b>0</b>	---	---
Antimony	ppm ASTM D5185(m)	<b>0</b>	---	---
Vanadium	ppm ASTM D5185(m)	<b>0</b>	---	---
Beryllium	ppm ASTM D5185(m)	<b>0</b>	---	---
Cadmium	ppm ASTM D5185(m)	<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 5	<b>&lt;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>0</b>	---	---
Magnesium	ppm ASTM D5185(m) 25	<b>0</b>	---	---
Calcium	ppm ASTM D5185(m) 200	<b>38</b>	---	---
Phosphorus	ppm ASTM D5185(m) 300	<b>236</b>	---	---
Zinc	ppm ASTM D5185(m) 370	<b>308</b>	---	---
Sulfur	ppm ASTM D5185(m) 2500	<b>4048</b>	---	---
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	---	---

## CONTAMINANTS

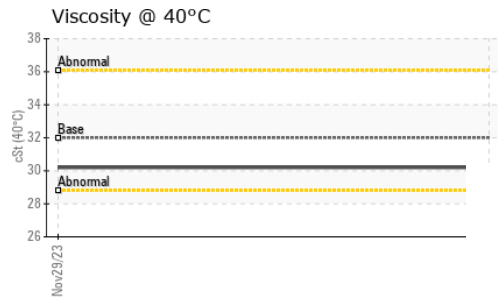
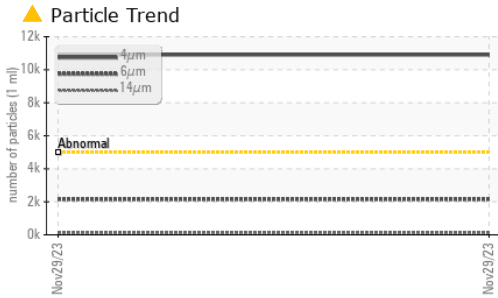
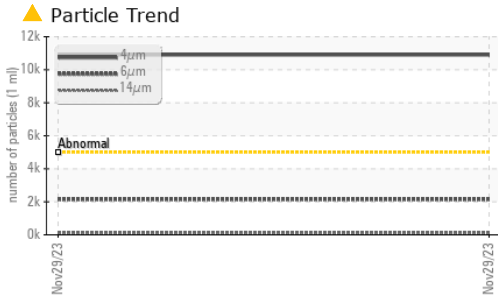
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >20	<b>2</b>	---	---
Sodium	ppm ASTM D5185(m)	<b>&lt;1</b>	---	---
Potassium	ppm ASTM D5185(m) >20	<b>0</b>	---	---

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>▲ 10903</b>	---	---
Particles >6µm	ASTM D7647 >1300	<b>▲ 2151</b>	---	---
Particles >14µm	ASTM D7647 >160	<b>120</b>	---	---
Particles >21µm	ASTM D7647 >40	<b>32</b>	---	---
Particles >38µm	ASTM D7647 >10	<b>2</b>	---	---
Particles >71µm	ASTM D7647 >3	<b>1</b>	---	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>▲ 21/18/14</b>	---	---



# OIL ANALYSIS REPORT



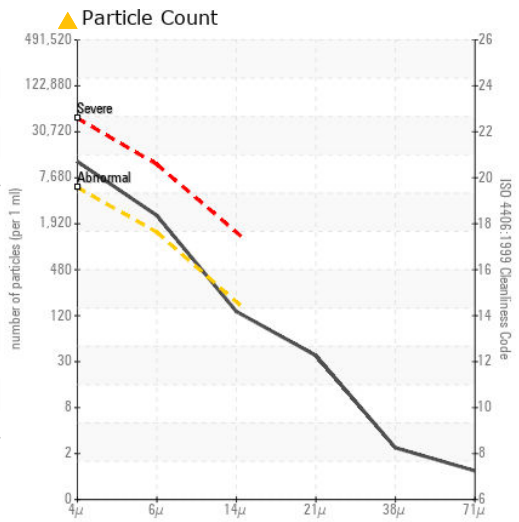
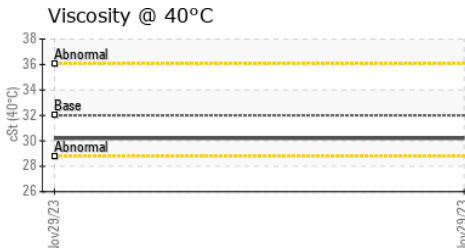
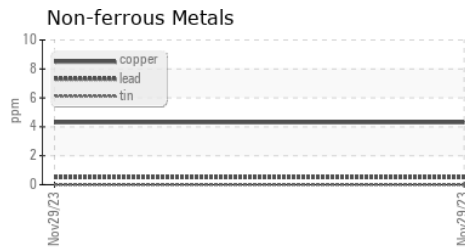
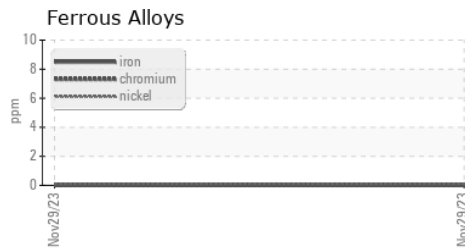
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	32	30.2	---

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

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0867281 **Received** : 11 Dec 2023  
**Lab Number** : 02602264 **Diagnosed** : 12 Dec 2023  
**Unique Number** : 5695349 **Diagnostician** : Wes Davis  
**Test Package** : MAR 5 ( Additional Tests: ICP, KV40, PrtCount, Spat, Visual )

**Madsen Diesel & Turbine**  
 141 Glencoe Drive  
 Mount Pearl, NL  
 CA A1N 4S7  
 Contact: Gina Earle  
 Gina.Earle@Madsen.ca  
 T: (709)726-6774  
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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.