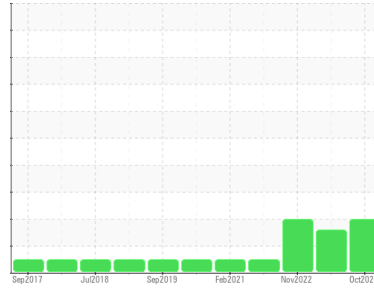


# PROBLEM SUMMARY

Sample Rating Trend

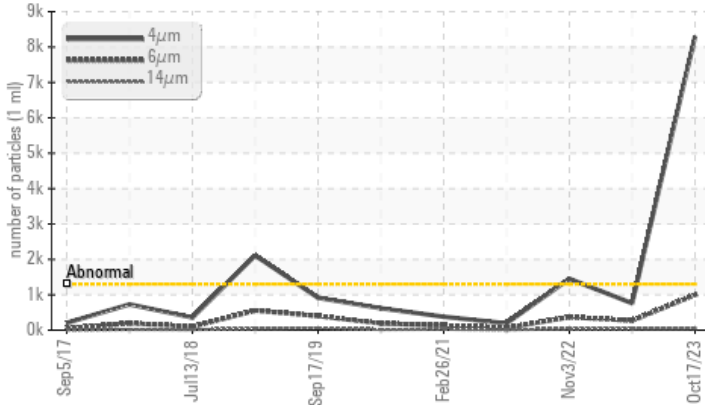


Area  
**West Molding**  
Machine Id  
**139 (S/N 65000105)**

Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 46 (645 GAL)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>1300	▲ 8294	759	▲ 1451
Particles >6µm	ASTM D7647	>160	▲ 998	▲ 271	▲ 370
Particles >14µm	ASTM D7647	>10	▲ 47	▲ 42	▲ 36
Particles >21µm	ASTM D7647	>3	▲ 14	▲ 13	▲ 10
Oil Cleanliness	ISO 4406 (c)	>17/14/10	▲ 20/17/13	▲ 17/15/13	▲ 18/16/12

Customer Id: JOHHOL  
Sample No.: RP0034703  
Lab Number: 05997961  
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:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
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.
Filter Fluid	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

## HISTORICAL DIAGNOSIS

### 17 May 2023 Diag: Wes Davis

ISO



We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The water content is negligible. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report



### 03 Nov 2022 Diag: Don Baldrige

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 14 Apr 2022 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

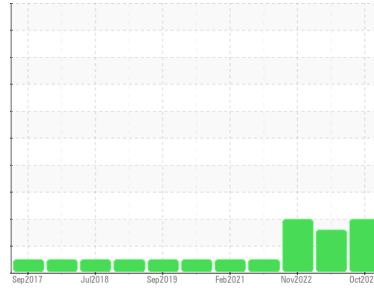
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**West Molding**  
Machine Id  
**139 (S/N 65000105)**

Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 46 (645 GAL)**

## DIAGNOSIS

### Recommendation

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. 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 particulates (2 to 100 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

### Fluid Condition

The AN level is acceptable for this fluid. 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>RP0034703</b>	RP0034636	RP0030212
Sample Date	Client Info			<b>17 Oct 2023</b>	17 May 2023	03 Nov 2022
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>1</b>	2	2
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>20	<b>4</b>	4	4
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	<1
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	25	<b>4</b>	4	5
Calcium	ppm	ASTM D5185m	200	<b>58</b>	64	57
Phosphorus	ppm	ASTM D5185m	300	<b>324</b>	382	350
Zinc	ppm	ASTM D5185m	370	<b>408</b>	464	399

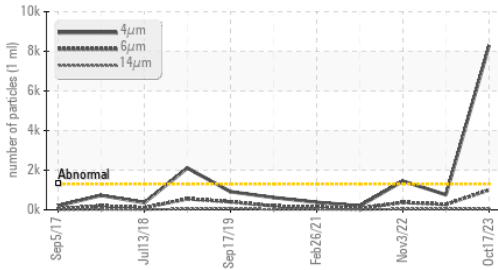
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>1</b>	<1	<1
Sodium	ppm	ASTM D5185m		<b>1</b>	1	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Water	%	ASTM D6304	>0.05	<b>0.003</b>	0.008	0.010
ppm Water	ppm	ASTM D6304	>500	<b>36.0</b>	80.3	109.8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>1300	<b>▲ 8294</b>	759	▲ 1451
Particles >6µm		ASTM D7647	>160	<b>▲ 998</b>	▲ 271	▲ 370
Particles >14µm		ASTM D7647	>10	<b>▲ 47</b>	▲ 42	▲ 36
Particles >21µm		ASTM D7647	>3	<b>▲ 14</b>	▲ 13	▲ 10
Particles >38µm		ASTM D7647	>3	<b>1</b>	1	1
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>17/14/10	<b>▲ 20/17/13</b>	▲ 17/15/13	▲ 18/16/12

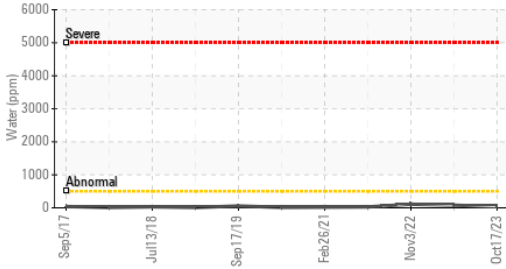
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.38</b>	0.40	0.44

# OIL ANALYSIS REPORT

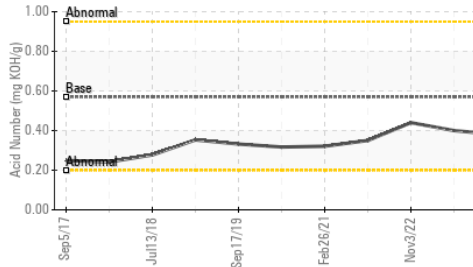
## ▲ Particle Trend



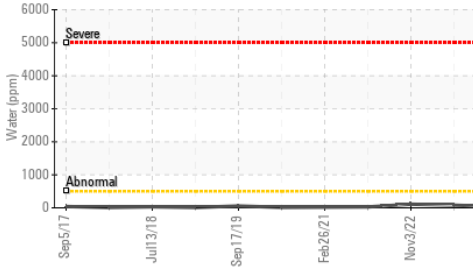
## Water (KF)



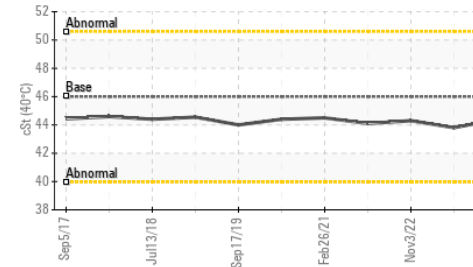
## Acid Number



## Water (KF)



## Viscosity @ 40°C



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

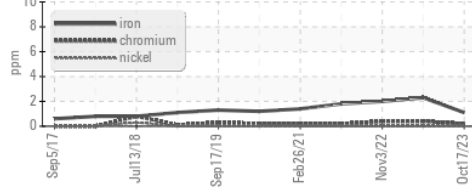
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	44.4	43.8	44.3

## SAMPLE IMAGES

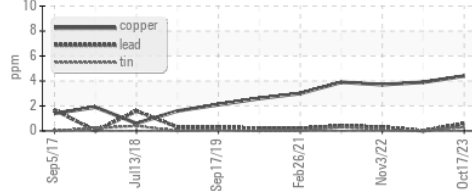


## GRAPHS

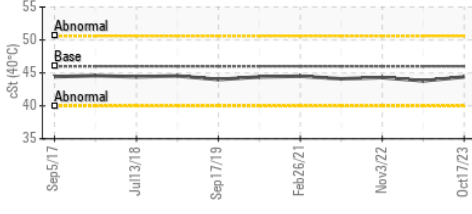
### Ferrous Alloys



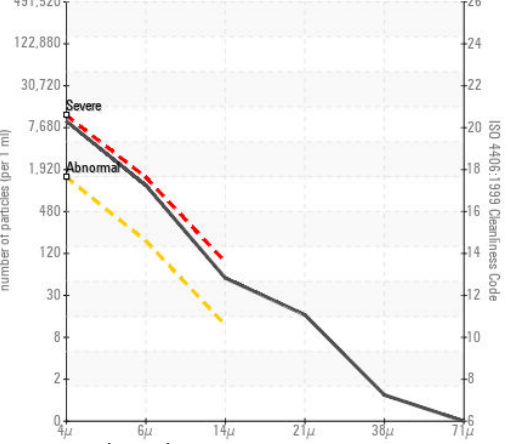
### Non-ferrous Metals



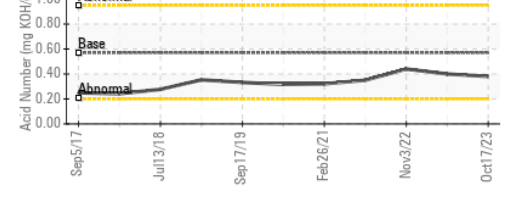
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0034703 **Received** : 03 Nov 2023  
**Lab Number** : 05997961 **Diagnosed** : 06 Nov 2023  
**Unique Number** : 10726321 **Diagnostician** : Wes Davis  
**Test Package** : IND 2

**YANFENG AUTOMOTIVE INTERIORS**  
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 HOLLAND, MI  
 US 49423  
 Contact: JEFF HARRIS  
 jeffrey.harris@yanfeng.com  
 T: (616)915-4443  
 F: (616)394-1725

Certificate L2367  
 To discuss this sample report, contact Customer Service at 1-800-237-1369.  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)