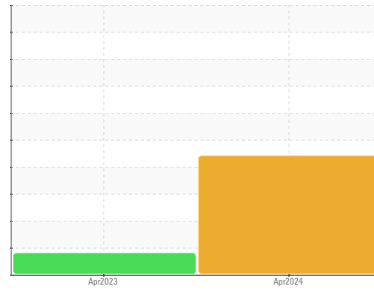




# PROBLEM SUMMARY

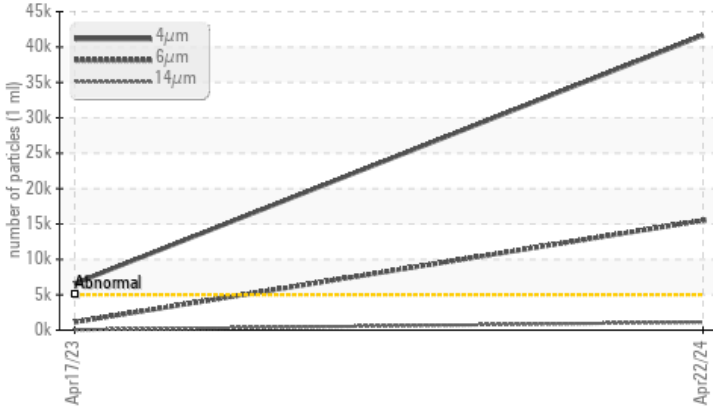
Machine Id  
**2965 - AG PRO**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 32 (--- GAL)**

## Sample Rating Trend



## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. 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	ASTM D7647	SEVERE	ATTENTION	---
Particles >4µm	>5000	▲ 41658	● 6579	---
Particles >6µm	>1300	▲ 15501	● 1145	---
Particles >14µm	>160	▲ 1134	● 52	---
Particles >21µm	>40	▲ 202	● 13	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 23/21/17	● 20/17/13	---

Customer Id: PALTIF  
 Sample No.: WC0911883  
 Lab Number: 06157587  
 Test Package: CONST



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	---	---	?	Resample in 30-45 days to monitor this situation.
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.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Dirt Access	---	---	?	We advise that you check all areas where contaminants can enter the system.
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

ISO



### 17 Apr 2023 Diag: Wes Davis

We recommend you service the filters on this component. Resample at the next service interval to monitor. 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. All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

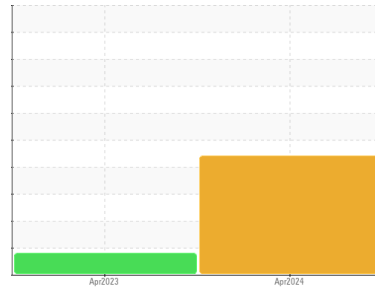
view report





# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Machine Id

## 2965 - AG PRO

Component

### Hydraulic System

Fluid

### AW HYDRAULIC OIL ISO 32 (--- GAL)

## DIAGNOSIS

### ▲ Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. 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 high amount of particulates (2 to 100 microns in size) present in the oil.

### 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>WC0911883</b>	WC0780171	---
Sample Date	Client Info		<b>22 Apr 2024</b>	17 Apr 2023	---
Machine Age	mls	Client Info	<b>0</b>	0	---
Oil Age	mls	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>SEVERE</b>	ATTENTION	---

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	---
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
Nickel	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >10	<b>2</b>	0	---
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m >75	<b>6</b>	6	---
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 5	<b>0</b>	0	---
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 5	<b>&lt;1</b>	0	---
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m 25	<b>2</b>	3	---
Calcium	ppm	ASTM D5185m 200	<b>58</b>	66	---
Phosphorus	ppm	ASTM D5185m 300	<b>306</b>	353	---
Zinc	ppm	ASTM D5185m 370	<b>417</b>	458	---
Sulfur	ppm	ASTM D5185m 2500	<b>911</b>	1196	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	---
Sodium	ppm	ASTM D5185m	<b>0</b>	1	---
Potassium	ppm	ASTM D5185m >20	<b>1</b>	<1	---

## FLUID CLEANLINESS

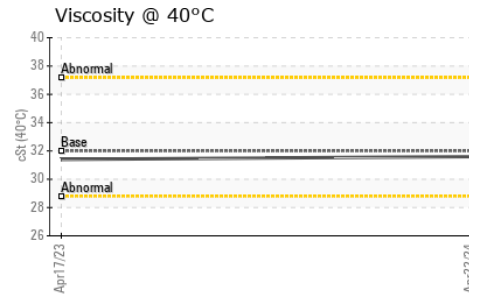
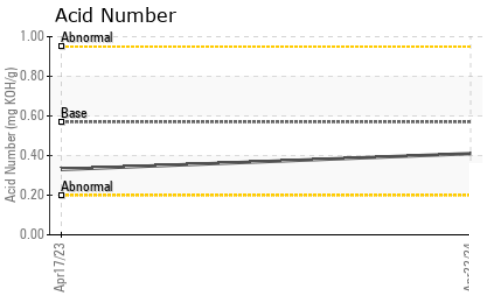
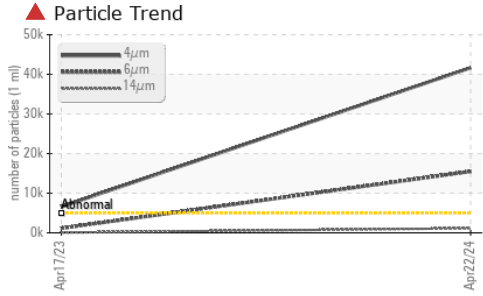
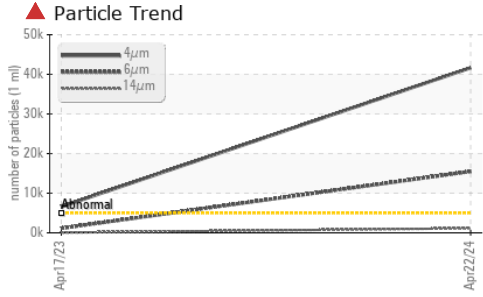
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 41658</b>	● 6579	---
Particles >6µm	ASTM D7647	>1300	<b>▲ 15501</b>	● 1145	---
Particles >14µm	ASTM D7647	>160	<b>▲ 1134</b>	● 52	---
Particles >21µm	ASTM D7647	>40	<b>▲ 202</b>	● 13	---
Particles >38µm	ASTM D7647	>10	<b>3</b>	0	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 23/21/17</b>	● 20/17/13	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.57	<b>0.41</b>	0.33	---



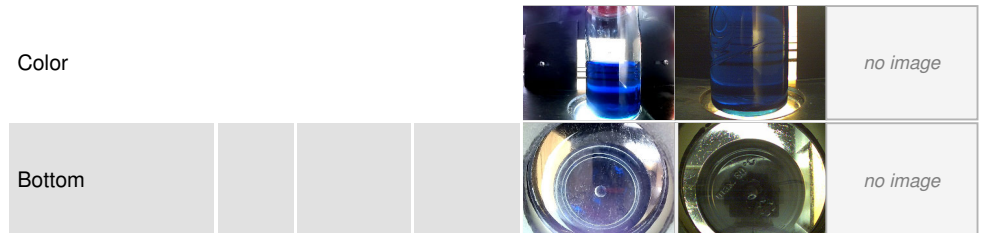
# OIL ANALYSIS REPORT



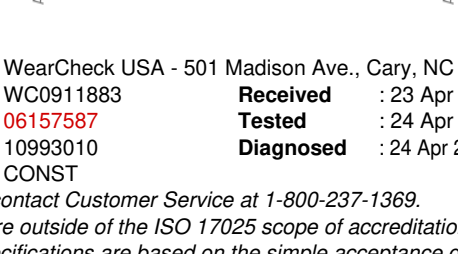
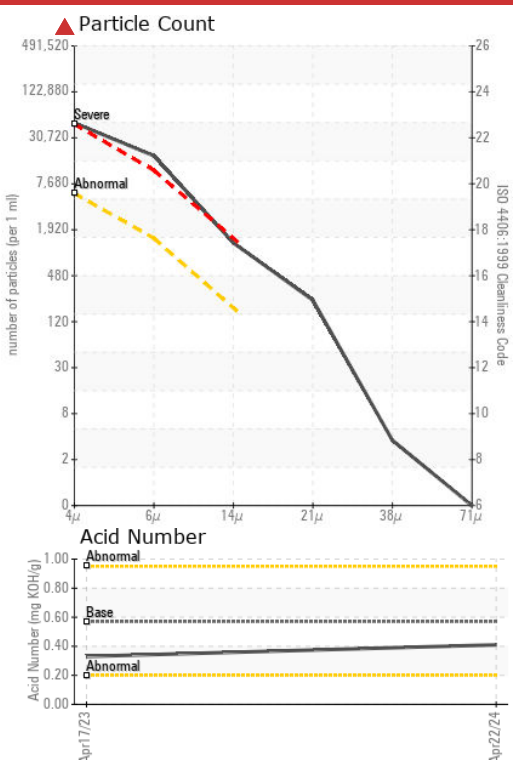
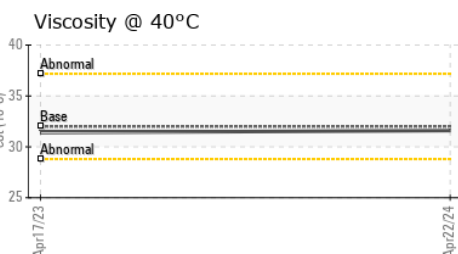
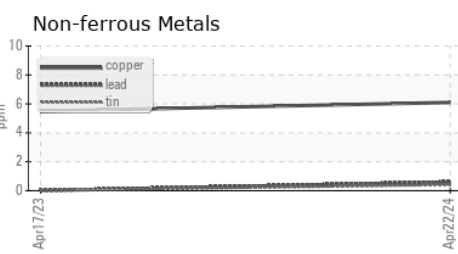
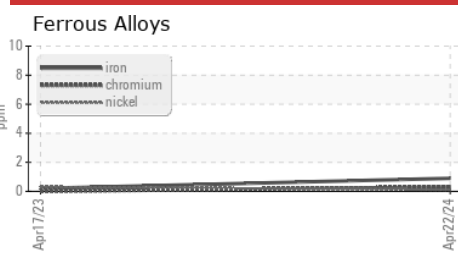
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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 D445	32	31.6	31.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0911883      **Received** : 23 Apr 2024  
**Lab Number** : 06157587      **Tested** : 24 Apr 2024  
**Unique Number** : 10993010      **Diagnosed** : 24 Apr 2024 - Wes Davis  
**Test Package** : CONST

**PALFINGER - BRANCH 400**  
 4151 W ST RT 18  
 TIFFIN, OH  
 US 44883  
 Contact: ERIC HILL  
 e.hill@palfinger.com  
 T: (419)448-8156  
 F:

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)