



# PROBLEM SUMMARY

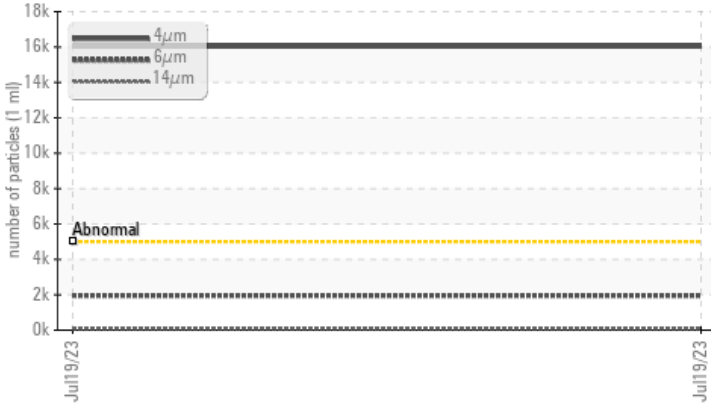
Sample Rating Trend



Machine Id  
**PALFINGER 56359 - L&W**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 32 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

The filter change at the time of sampling has been noted. 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			<b>ABNORMAL</b>	---	---
Particles >4µm	ASTM D7647	>5000	▲ <b>16030</b>	---	---
Particles >6µm	ASTM D7647	>1300	▲ <b>1948</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ <b>21/18/14</b>	---	---

Customer Id: PALJACNJ  
 Sample No.: WC0747146  
 Lab Number: 05931468  
 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

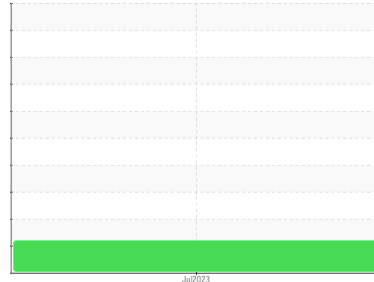
Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**PALFINGER 56359 - L&W**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 32 (--- GAL)**

## DIAGNOSIS

### Recommendation

The filter change at the time of sampling has been noted. 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 silt (particulates < 14 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>WC0747146</b>	---	---
Sample Date	Client Info	<b>19 Jul 2023</b>	---	---
Machine Age	yrs Client Info	<b>0</b>	---	---
Oil Age	yrs Client Info	<b>0</b>	---	---
Oil Changed	Client Info	<b>Not Changed</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## WEAR METALS

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

## ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185m	5	<b>0</b>	---	---
Barium ppm ASTM D5185m	5	<b>0</b>	---	---
Molybdenum ppm ASTM D5185m	5	<b>3</b>	---	---
Manganese ppm ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium ppm ASTM D5185m	25	<b>25</b>	---	---
Calcium ppm ASTM D5185m	200	<b>153</b>	---	---
Phosphorus ppm ASTM D5185m	300	<b>368</b>	---	---
Zinc ppm ASTM D5185m	370	<b>445</b>	---	---
Sulfur ppm ASTM D5185m	2500	<b>3535</b>	---	---

## CONTAMINANTS

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

## FLUID CLEANLINESS

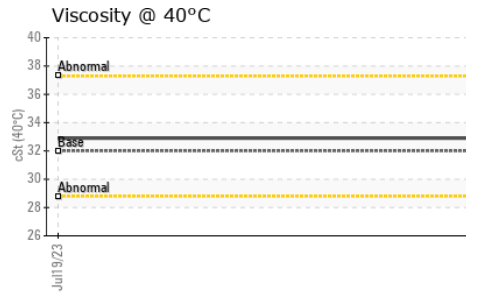
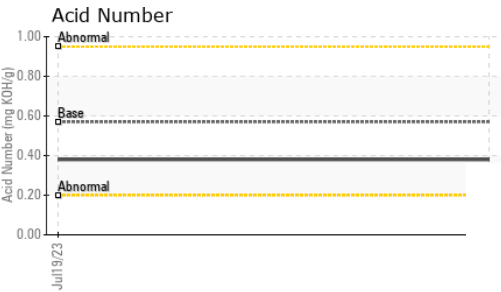
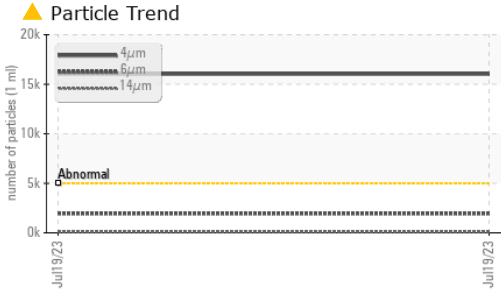
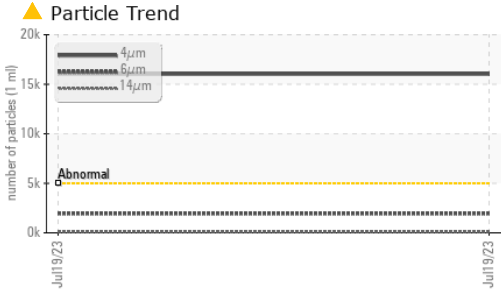
method	limit/base	current	history1	history2
Particles >4µm ASTM D7647	>5000	<b>▲ 16030</b>	---	---
Particles >6µm ASTM D7647	>1300	<b>▲ 1948</b>	---	---
Particles >14µm ASTM D7647	>160	<b>89</b>	---	---
Particles >21µm ASTM D7647	>40	<b>24</b>	---	---
Particles >38µm ASTM D7647	>10	<b>0</b>	---	---
Particles >71µm ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness ISO 4406 (c)	>19/17/14	<b>▲ 21/18/14</b>	---	---

## FLUID DEGRADATION

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



# OIL ANALYSIS REPORT



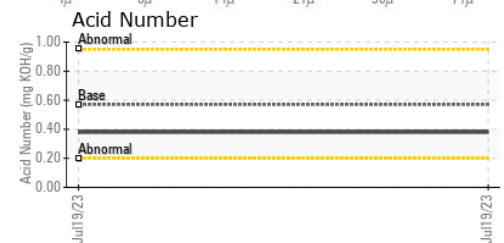
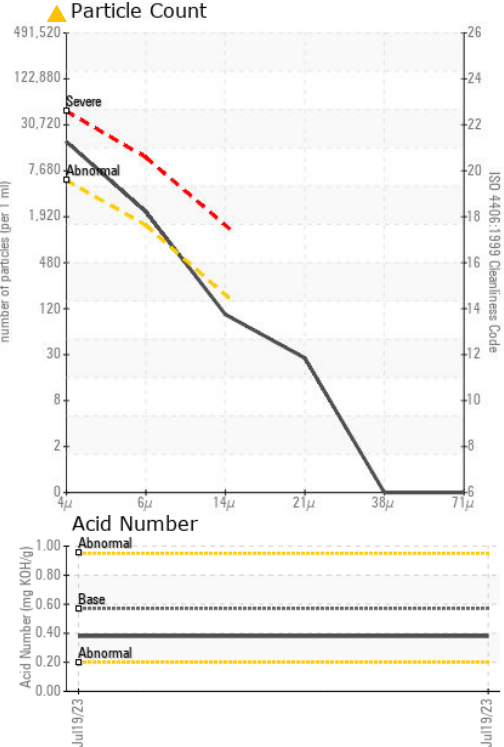
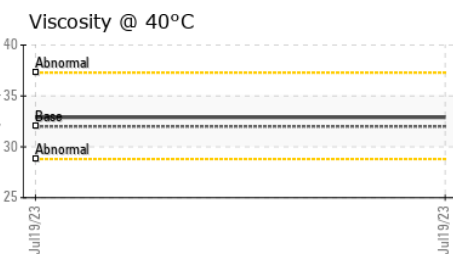
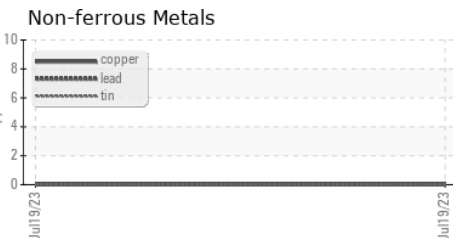
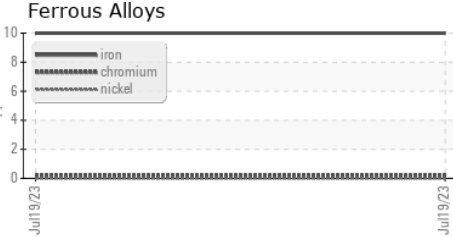
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
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 D445	32	32.9	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color				no image	no image
Bottom				no image	no image

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0747146 **Received** : 22 Aug 2023  
**Lab Number** : 05931468 **Diagnosed** : 23 Aug 2023  
**Unique Number** : 10616739 **Diagnostician** : Wes Davis  
**Test Package** : CONST

**PALFINGER - BRANCH 410**  
 632 CEDAR SWAMP RD  
 JACKSON, NJ  
 US 08527  
 Contact: ANTHONY HARTIGAN  
 a.hartigan@palfinger.com

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)

T:  
F: