



# PROBLEM SUMMARY

Sample Rating Trend



ISO



Machine Id

## PALFINGER T87

Component

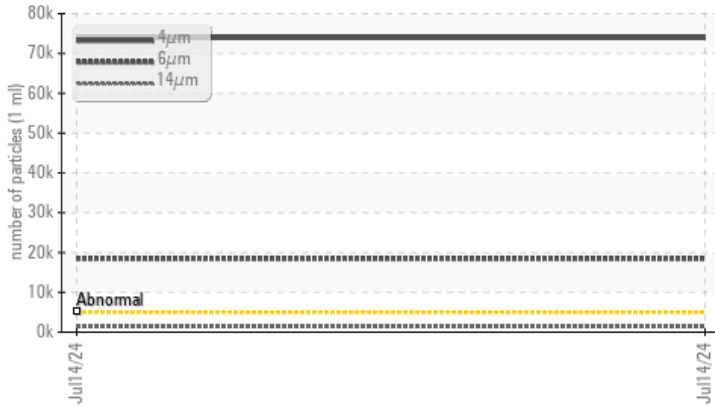
### Hydraulic System

Fluid

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

## 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. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 32. Please confirm.

## PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	---	---
Particles >4µm	ASTM D7647	>5000	▲ 73930	---	---
Particles >6µm	ASTM D7647	>1300	▲ 18459	---	---
Particles >14µm	ASTM D7647	>160	▲ 1337	---	---
Particles >21µm	ASTM D7647	>40	▲ 334	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 23/21/18	---	---

Customer Id: PALTIF  
Sample No.: WC0897358  
Lab Number: 06235869  
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.
Alert	---	---	?	The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 32. Please confirm.
Information Required	---	---	?	The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 32. Please confirm.
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



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

## PALFINGER T87

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. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 32. Please confirm.

##### 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>WC0897358</b>	---	---
Sample Date	Client Info			<b>14 Jul 2024</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>SEVERE</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 D5185m	>20	<b>8</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	---	---
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m	>75	<b>1</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</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>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	25	<b>3</b>	---	---
Calcium	ppm	ASTM D5185m	200	<b>15</b>	---	---
Phosphorus	ppm	ASTM D5185m	300	<b>227</b>	---	---
Zinc	ppm	ASTM D5185m	370	<b>280</b>	---	---
Sulfur	ppm	ASTM D5185m	2500	<b>1161</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<b>4</b>	---	---
Sodium	ppm	ASTM D5185m		<b>0</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	---	---

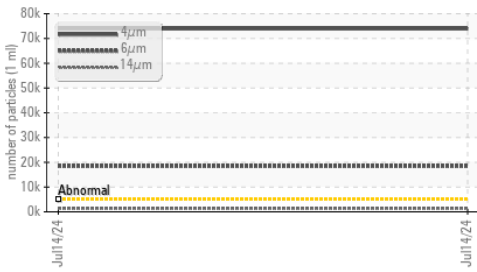
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>▲ 73930</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 18459</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>▲ 1337</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>▲ 334</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>8</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 23/21/18</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.27</b>	---	---

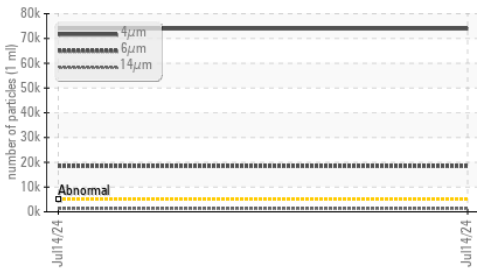


# OIL ANALYSIS REPORT

### ▲ Particle Trend



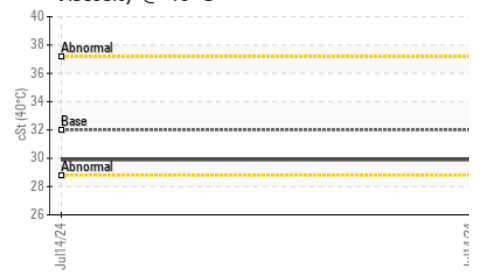
### ▲ Particle Trend



### Acid Number



### Viscosity @ 40°C



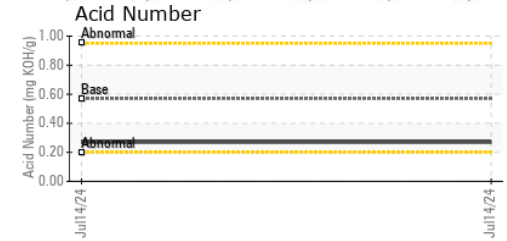
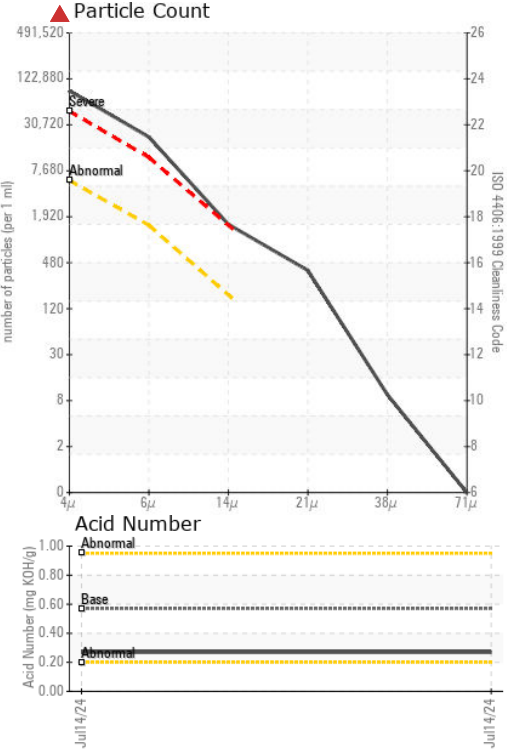
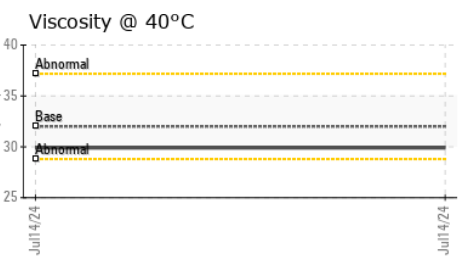
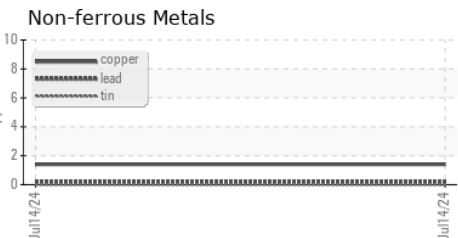
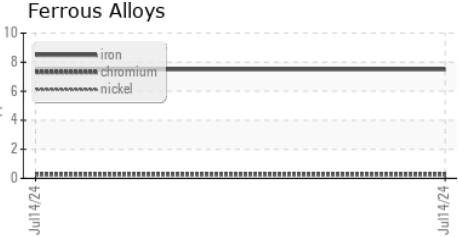
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
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	29.9	---	---

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

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0897358      **Received** : 15 Jul 2024  
**Lab Number** : 06235869      **Tested** : 16 Jul 2024  
**Unique Number** : 11124703      **Diagnosed** : 16 Jul 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)