



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**PALFINGER 100733525 - UNITED RENTALS**

Component  
**Hydraulic System**

Fluid  
**AW HYDRAULIC OIL ISO 32 (--- GAL)**

## DIAGNOSIS

### Recommendation

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. 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 light amount of silt (particulates < 14 microns in size) present in the oil.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0897231</b>	---	---
Sample Date	Client Info			<b>09 Apr 2024</b>	---	---
Machine Age	hrs	Client Info		<b>27</b>	---	---
Oil Age	hrs	Client Info		<b>27</b>	---	---
Oil Changed	Client Info			<b>Not Changed</b>	---	---
Sample Status				<b>ATTENTION</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>0</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>0</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>0</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>0</b>	---	---
Manganese	ppm	ASTM D5185m		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m	25	<b>0</b>	---	---
Calcium	ppm	ASTM D5185m	200	<b>57</b>	---	---
Phosphorus	ppm	ASTM D5185m	300	<b>308</b>	---	---
Zinc	ppm	ASTM D5185m	370	<b>424</b>	---	---
Sulfur	ppm	ASTM D5185m	2500	<b>1230</b>	---	---

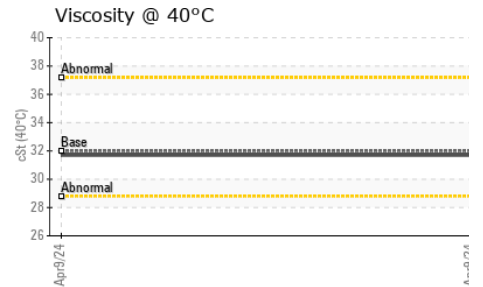
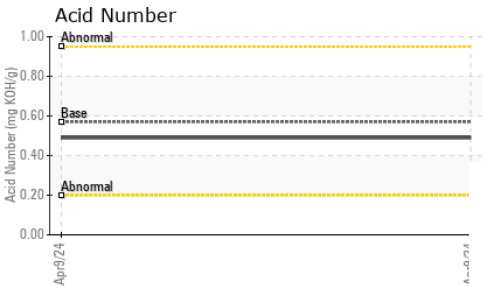
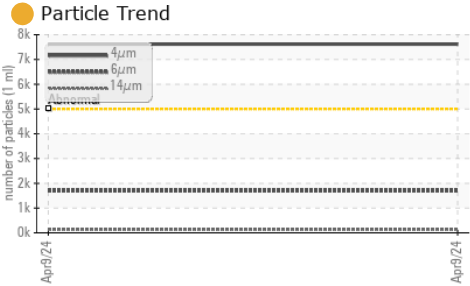
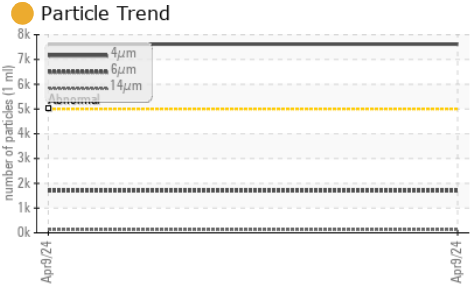
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>7618</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>1697</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>131</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>40</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>3</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>20/18/14</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.49</b>	---	---



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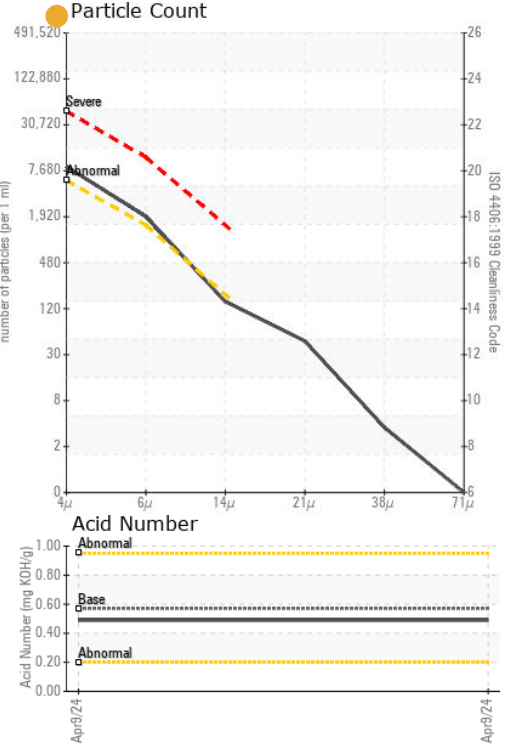
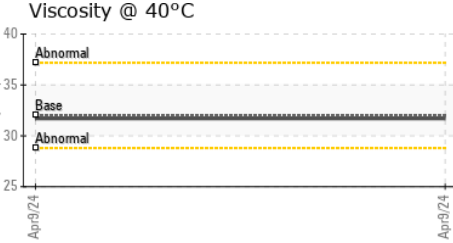
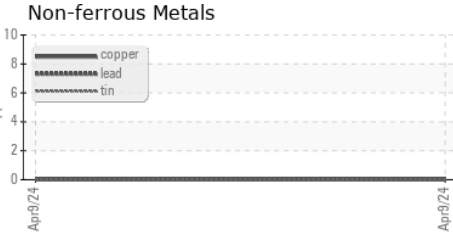
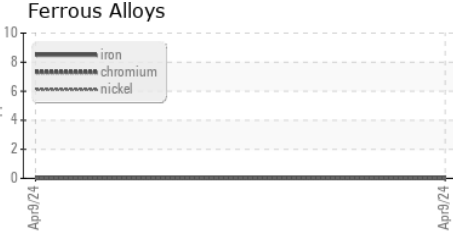
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	LIGHT	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
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	31.7	---	---

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 USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0897231      **Received** : 26 Apr 2024  
**Lab Number** : 06161391      **Tested** : 29 Apr 2024  
**Unique Number** : 10996814      **Diagnosed** : 29 Apr 2024 - Wes Davis  
**Test Package** : CONST

**PALFINGER - BRANCH 410**  
 632 CEDAR SWAMP RD  
 JACKSON, NJ 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)