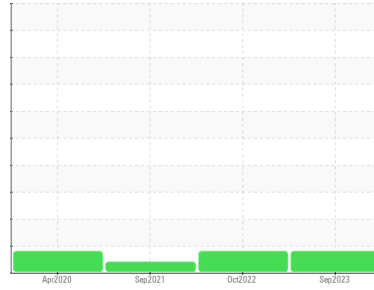




# PROBLEM SUMMARY

## Sample Rating Trend



ISO



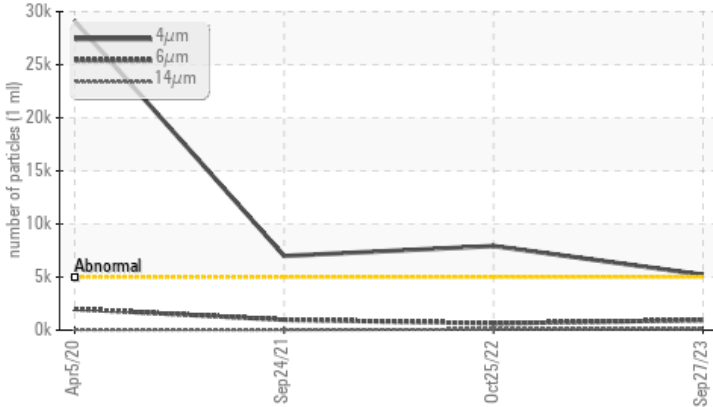
Machine Id  
**BL166HP00011**

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. 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.

## PROBLEMATIC TEST RESULTS

Sample Status		ATTENTION	ATTENTION	ATTENTION
Particles >4µm	ASTM D7647 >5000	▲ 5219	▲ 7926	▲ 6986
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 20/17/14	▲ 20/16/13	▲ 20/17/13

Customer Id: PALTIF  
 Sample No.: WC0839863  
 Lab Number: 06007604  
 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
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.

## HISTORICAL DIAGNOSIS

### 25 Oct 2022 Diag: Angela Borella

ISO



No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 6 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](#)



### 24 Sep 2021 Diag: Jonathan Hester

ISO



No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 6 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](#)



### 05 Apr 2020 Diag: Jonathan Hester

ISO



No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high 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.

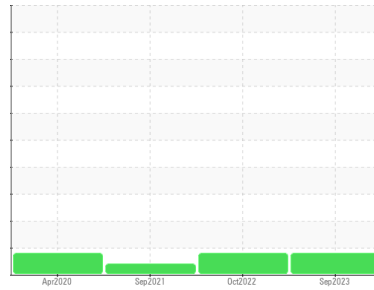
[view report](#)





# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Machine Id  
**BL166HP00011**

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 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 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>WC0839863</b>	WC0724053	WC0597973
Sample Date	Client Info		<b>27 Sep 2023</b>	25 Oct 2022	24 Sep 2021
Machine Age	mths	Client Info	<b>0</b>	0	0
Oil Age	mths	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Sample Status			<b>ATTENTION</b>	ATTENTION	ATTENTION

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>4</b>	7	4
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>0</b>	0	0
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >75	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
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	2
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 5	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 25	<b>0</b>	<1	2
Calcium	ppm	ASTM D5185m 200	<b>52</b>	73	66
Phosphorus	ppm	ASTM D5185m 300	<b>317</b>	388	357
Zinc	ppm	ASTM D5185m 370	<b>369</b>	477	456
Sulfur	ppm	ASTM D5185m 2500	<b>1075</b>	1563	1163

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

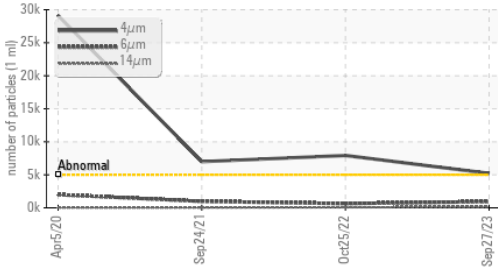
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 5219</b>	▲ 7926	▲ 6986
Particles >6µm	ASTM D7647	>1300	<b>946</b>	637	977
Particles >14µm	ASTM D7647	>160	<b>107</b>	79	45
Particles >21µm	ASTM D7647	>40	<b>33</b>	25	15
Particles >38µm	ASTM D7647	>10	<b>2</b>	2	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 20/17/14</b>	▲ 20/16/13	▲ 20/17/13

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.57	<b>0.31</b>	0.35	0.361

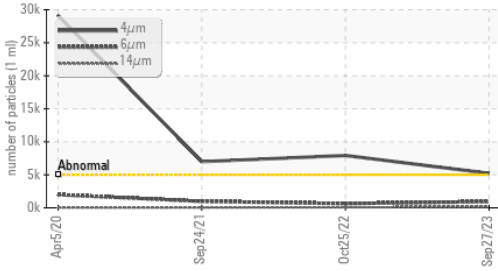


# OIL ANALYSIS REPORT

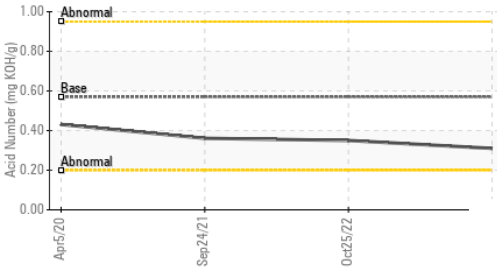
▲ Particle Trend



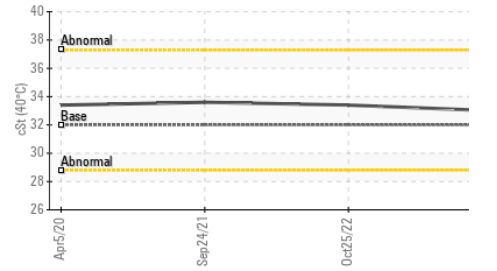
▲ Particle Trend



Acid Number



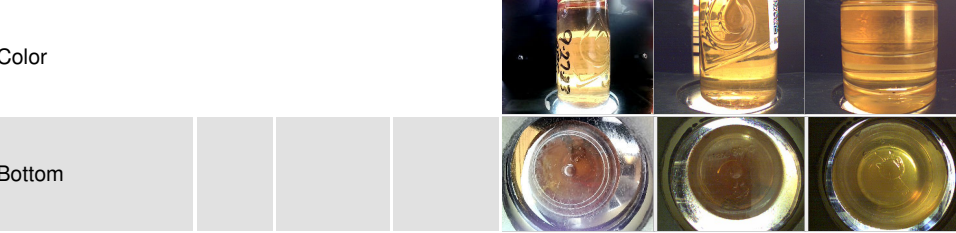
Viscosity @ 40°C



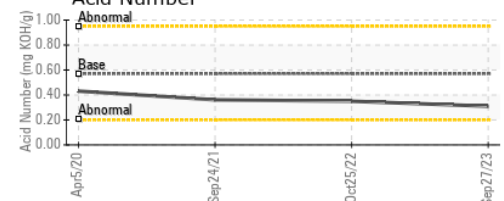
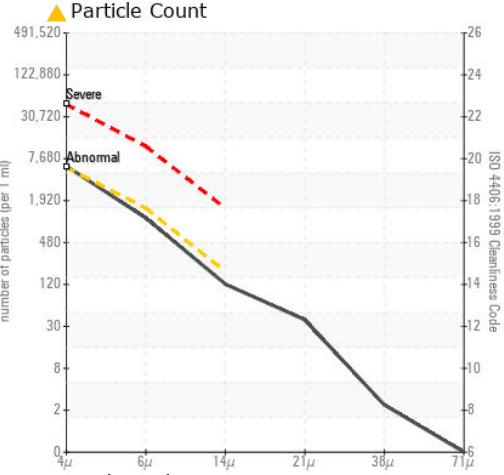
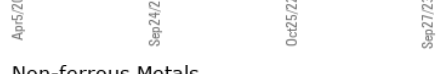
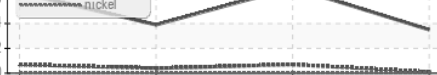
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 32	<b>33.0</b>	33.4	33.6

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



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0839863 Received : 14 Nov 2023  
 Lab Number : 06007604 Diagnosed : 15 Nov 2023  
 Unique Number : 10741366 Diagnostician : Wes Davis  
 Test Package : CONST ( Additional Tests: PrtCount )

**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)