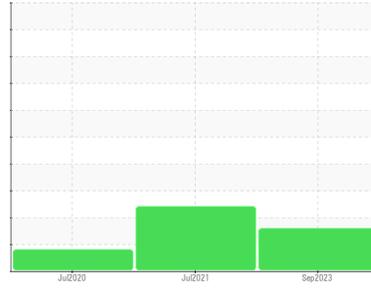




# PROBLEM SUMMARY

Sample Rating Trend



ISO



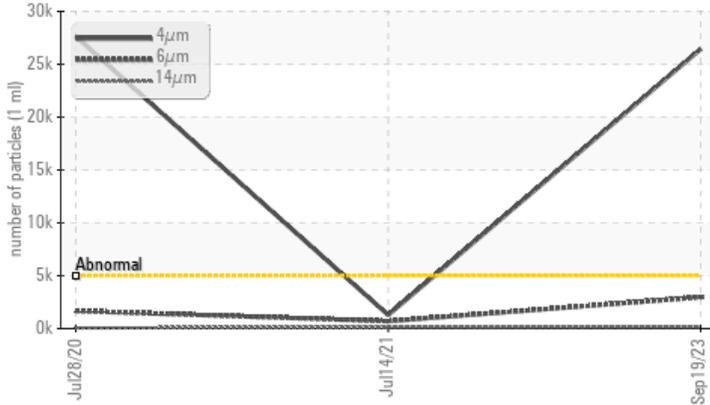
Machine Id  
**424815 - NYSEG**

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 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			ABNORMAL	ABNORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>5000	▲ 26445	1283	▲ 27630
Particles >6µm	ASTM D7647	>1300	▲ 2969	699	▲ 1668
Particles >14µm	ASTM D7647	>160	▲ 161	119	54
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 22/19/15	17/17/14	▲ 22/18/13

Customer Id: PALJACNJ  
 Sample No.: WC0839989  
 Lab Number: 05961730  
 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. Please specify the component make and model with your next sample.

## HISTORICAL DIAGNOSIS

### 14 Jul 2021 Diag: Jonathan Hester

#### WATER



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. Appearance is hazy. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



### 28 Jul 2020 Diag: Doug Bogart

#### 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.

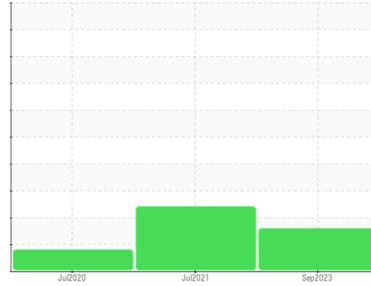
[view report](#)





# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Machine Id  
**424815 - NYSEG**

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 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 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>WC0839989</b>	WC0555093	WC0443371
Sample Date	Client Info	<b>19 Sep 2023</b>	14 Jul 2021	28 Jul 2020
Machine Age	yrs Client Info	<b>0</b>	0	0
Oil Age	yrs Client Info	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	Not Changd	Not Changd
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

### WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	<b>4</b>	9	9
Chromium	ppm ASTM D5185m >10	<b>0</b>	<1	<1
Nickel	ppm ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm ASTM D5185m	<b>0</b>	<1	0
Aluminum	ppm ASTM D5185m >10	<b>3</b>	<1	<1
Lead	ppm ASTM D5185m >10	<b>0</b>	<1	<1
Copper	ppm ASTM D5185m >75	<b>1</b>	2	2
Tin	ppm ASTM D5185m >10	<b>&lt;1</b>	0	0
Antimony	ppm ASTM D5185m	<b>---</b>	0	0
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1

### ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 5	<b>5</b>	12	8
Barium	ppm ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 5	<b>0</b>	<1	<1
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 25	<b>4</b>	7	7
Calcium	ppm ASTM D5185m 200	<b>316</b>	332	302
Phosphorus	ppm ASTM D5185m 300	<b>396</b>	360	356
Zinc	ppm ASTM D5185m 370	<b>422</b>	319	300
Sulfur	ppm ASTM D5185m 2500	<b>1666</b>	1873	2564

### CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	<b>2</b>	2	3
Sodium	ppm ASTM D5185m	<b>1</b>	3	3
Potassium	ppm ASTM D5185m >20	<b>1</b>	0	<1

### FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>▲ 26445</b>	1283	▲ 27630
Particles >6µm	ASTM D7647 >1300	<b>▲ 2969</b>	699	▲ 1668
Particles >14µm	ASTM D7647 >160	<b>▲ 161</b>	119	54
Particles >21µm	ASTM D7647 >40	<b>49</b>	40	10
Particles >38µm	ASTM D7647 >10	<b>3</b>	6	0
Particles >71µm	ASTM D7647 >3	<b>1</b>	1	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>▲ 22/19/15</b>	17/17/14	▲ 22/18/13

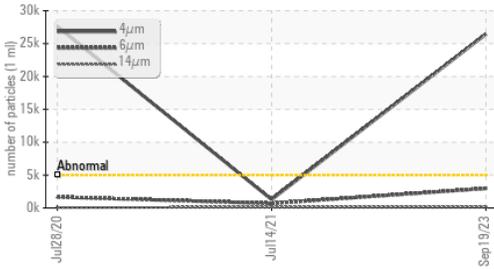
### FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 0.57	<b>0.52</b>	0.439	0.452

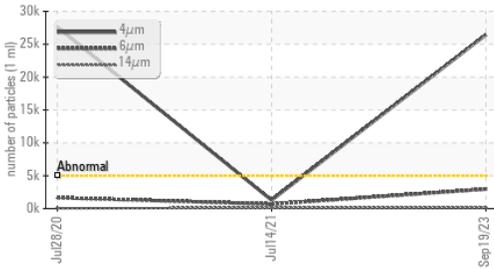


# OIL ANALYSIS REPORT

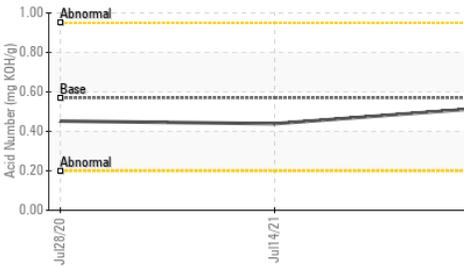
▲ Particle Trend



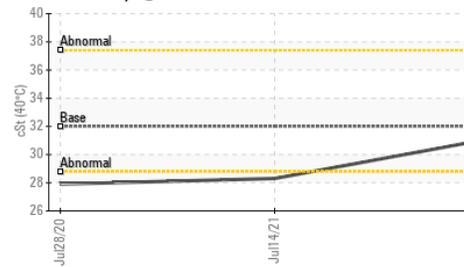
▲ Particle Trend



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	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	▲ HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	31.1	28.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

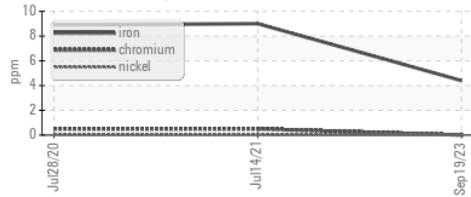


Bottom

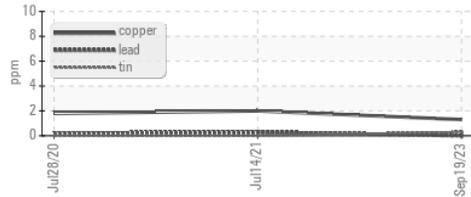


## GRAPHS

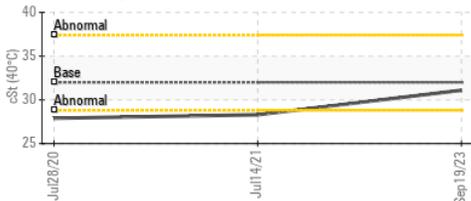
Ferrous Alloys



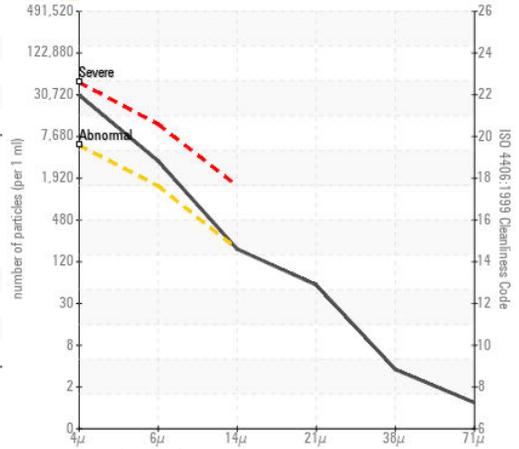
Non-ferrous Metals



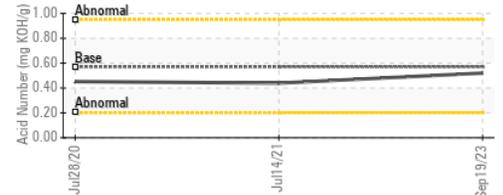
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0839989 Received : 26 Sep 2023  
 Lab Number : 05961730 Diagnosed : 28 Sep 2023  
 Unique Number : 10662943 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: