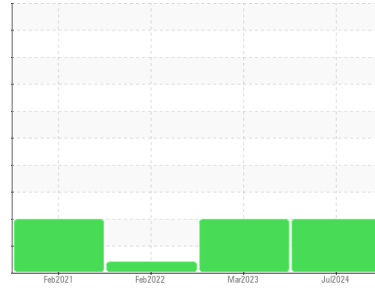




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

## T-115

Component

### Hydraulic System

Fluid

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

#### DIAGNOSIS

##### Recommendation

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. 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 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>WC0897359</b>	WC0747131	WC0648799
Sample Date	Client Info			<b>14 Jul 2024</b>	12 Mar 2023	16 Feb 2022
Machine Age	mls	Client Info		<b>0</b>	0	0
Oil Age	mls	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ATTENTION

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>12</b>	10	13
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	<1	1
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>2</b>	1	2
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

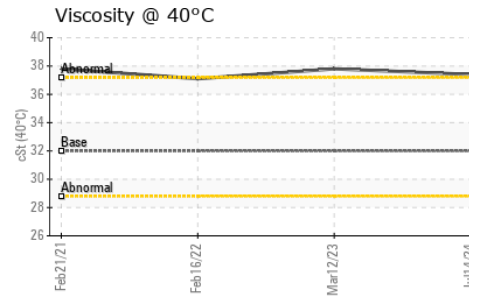
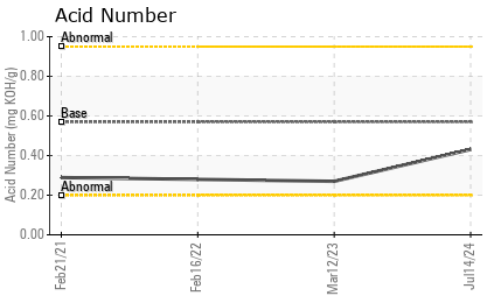
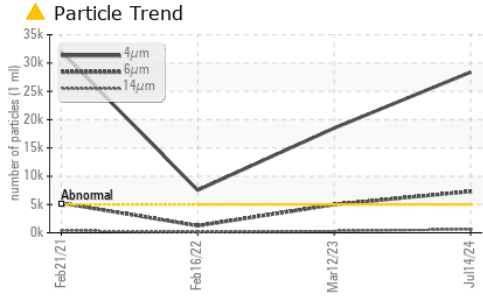
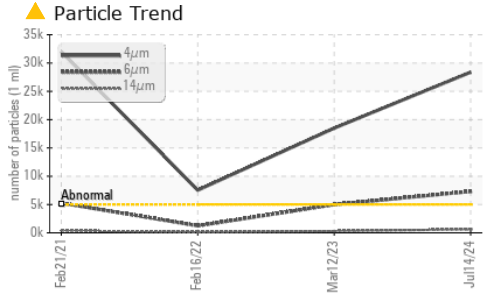
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	<b>2</b>	<1	3
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	5	<b>2</b>	1	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	25	<b>13</b>	14	14
Calcium	ppm	ASTM D5185m	200	<b>130</b>	142	164
Phosphorus	ppm	ASTM D5185m	300	<b>216</b>	212	237
Zinc	ppm	ASTM D5185m	370	<b>275</b>	257	270
Sulfur	ppm	ASTM D5185m	2500	<b>1878</b>	1877	1908

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<b>18</b>	17	20
Sodium	ppm	ASTM D5185m		<b>2</b>	3	4
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>▲ 28380</b>	▲ 18499	● 7532
Particles >6µm		ASTM D7647	>1300	<b>▲ 7325</b>	▲ 4993	1238
Particles >14µm		ASTM D7647	>160	<b>▲ 606</b>	▲ 300	107
Particles >21µm		ASTM D7647	>40	<b>▲ 174</b>	▲ 77	14
Particles >38µm		ASTM D7647	>10	<b>8</b>	3	0
Particles >71µm		ASTM D7647	>3	<b>1</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 22/20/16</b>	▲ 21/19/15	● 20/17/14



# OIL ANALYSIS REPORT

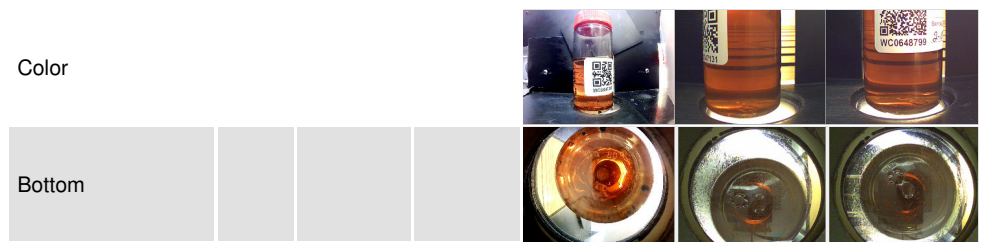


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.431</b>	0.27	0.28

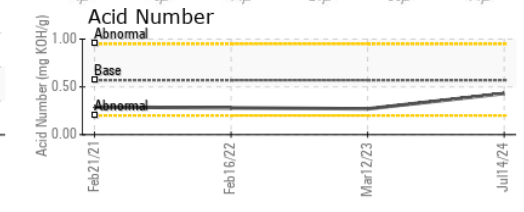
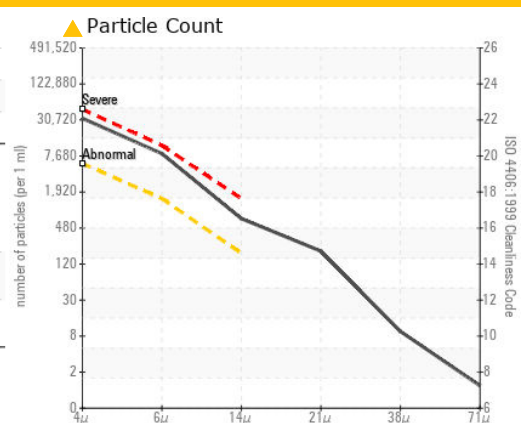
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	<b>37.4</b>	37.8	37.1

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0897359      **Received** : 15 Jul 2024  
**Lab Number** : 06235881      **Tested** : 16 Jul 2024  
**Unique Number** : 11124715      **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)