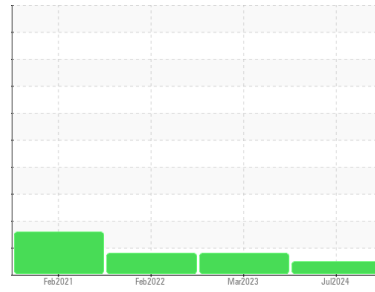




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**T-106**

Component

**Hydraulic System**

Fluid

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

## DIAGNOSIS

### Recommendation

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

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### 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>WC0897361</b>	WC0747133	WC0648798
Sample Date	Client Info	<b>14 Jul 2024</b>	12 Mar 2023	13 Feb 2022
Machine Age	mls	Client Info	<b>0</b>	0
Oil Age	mls	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	ATTENTION	ABNORMAL

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>20	<b>6</b>	5
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0
Silver	ppm	ASTM D5185m		<b>0</b>	0
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	<1
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0
Copper	ppm	ASTM D5185m	>75	<b>1</b>	0
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	5	<b>0</b>	0
Barium	ppm	ASTM D5185m	5	<b>0</b>	0
Molybdenum	ppm	ASTM D5185m	5	<b>&lt;1</b>	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1
Magnesium	ppm	ASTM D5185m	25	<b>2</b>	6
Calcium	ppm	ASTM D5185m	200	<b>36</b>	48
Phosphorus	ppm	ASTM D5185m	300	<b>248</b>	239
Zinc	ppm	ASTM D5185m	370	<b>331</b>	314
Sulfur	ppm	ASTM D5185m	2500	<b>2086</b>	2101

## CONTAMINANTS

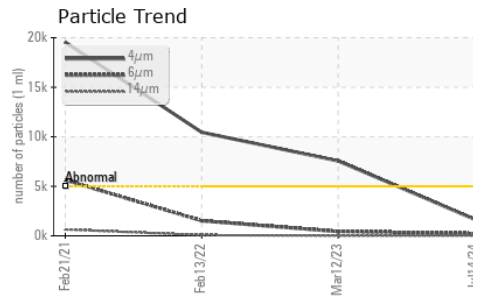
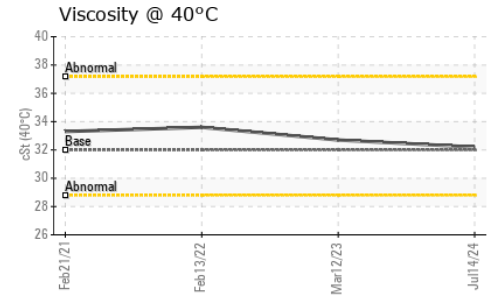
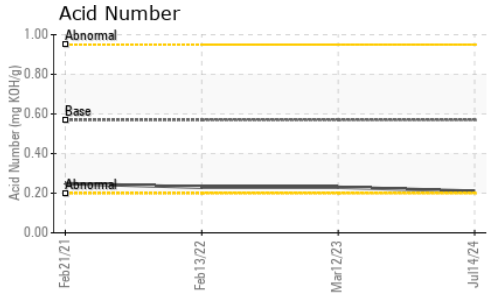
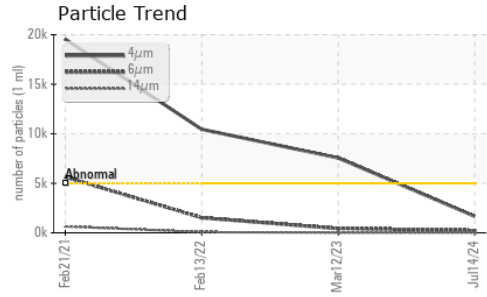
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>20	<b>1</b>	1
Sodium	ppm	ASTM D5185m		<b>0</b>	<1
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>1667</b>	7562
Particles >6µm	ASTM D7647	>1300	<b>228</b>	436
Particles >14µm	ASTM D7647	>160	<b>21</b>	14
Particles >21µm	ASTM D7647	>40	<b>6</b>	4
Particles >38µm	ASTM D7647	>10	<b>1</b>	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>18/15/12</b>	20/16/11



# OIL ANALYSIS REPORT

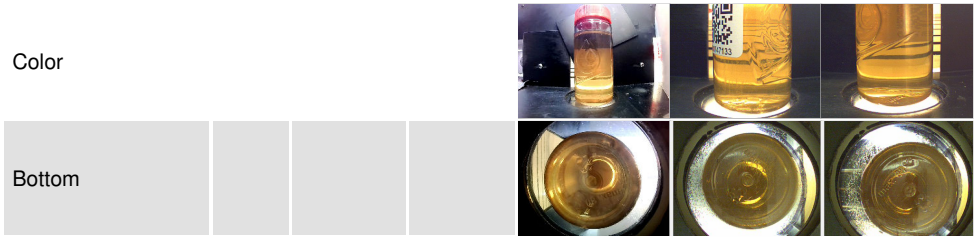


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.21</b>	0.23	0.23

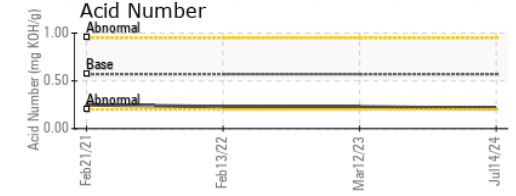
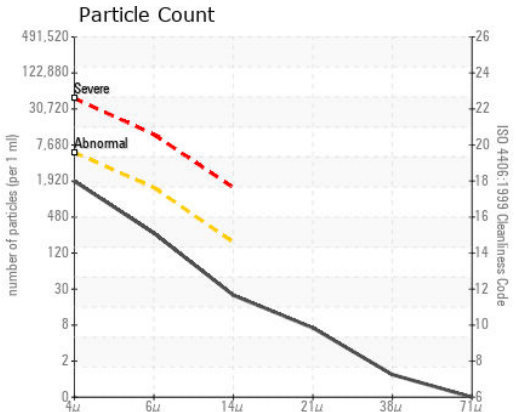
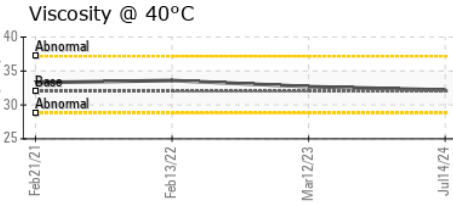
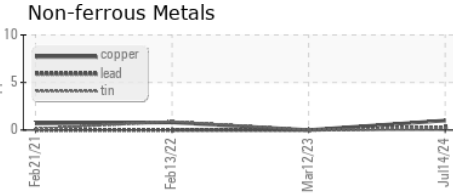
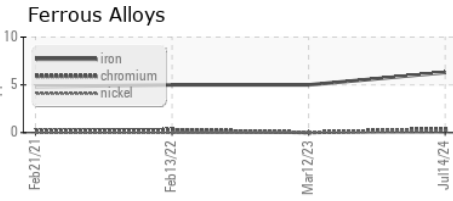
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	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>32.2</b>	32.7	33.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0897361      **Received** : 15 Jul 2024  
**Lab Number** : 06235867      **Tested** : 16 Jul 2024  
**Unique Number** : 11124701      **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)