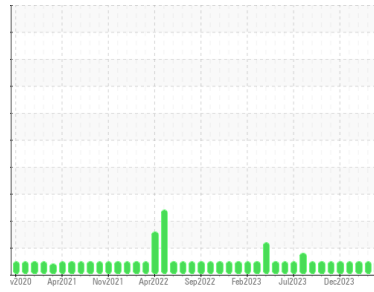




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**FINISHING**

Machine Id

**Sander Outfeed Stacker Hydraulic Unit (S/N SA105C35H)**

Component

**Hydraulic System**

Fluid

**VALVOLINE AW HYDRAULIC 68 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with 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>WC0895073</b>	WC0895047	WC0834701
Sample Date	Client Info	<b>08 Apr 2024</b>	11 Mar 2024	15 Feb 2024
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.05	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	0
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	2	0
Lead	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m >20	<b>15</b>	16	15
Tin	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 2.6	<b>&lt;1</b>	0	2
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>2</b>	2	1
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m 1.9	<b>11</b>	11	11
Calcium	ppm	ASTM D5185m 81	<b>90</b>	83	81
Phosphorus	ppm	ASTM D5185m 350	<b>359</b>	320	313
Zinc	ppm	ASTM D5185m 445	<b>428</b>	435	419
Sulfur	ppm	ASTM D5185m 1850	<b>926</b>	850	827

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>0</b>	0	<1
Sodium	ppm	ASTM D5185m	<b>1</b>	0	4
Potassium	ppm	ASTM D5185m >20	<b>2</b>	1	<1

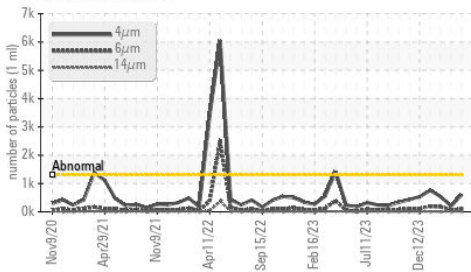
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >1300	<b>605</b>	204	537
Particles >6µm	ASTM D7647 >320	<b>96</b>	70	175
Particles >14µm	ASTM D7647 >40	<b>9</b>	11	9
Particles >21µm	ASTM D7647 >10	<b>3</b>	2	2
Particles >38µm	ASTM D7647 >3	<b>0</b>	0	0
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >17/15/12	<b>16/14/10</b>	15/13/11	16/15/10

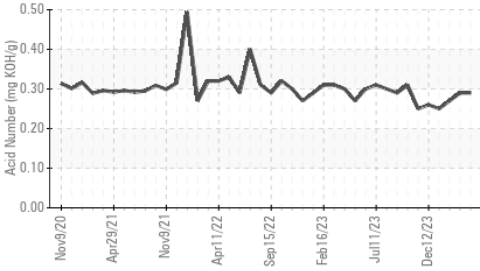
## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.29</b>	0.29	0.27

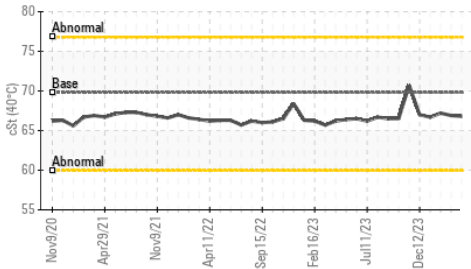
### Particle Trend



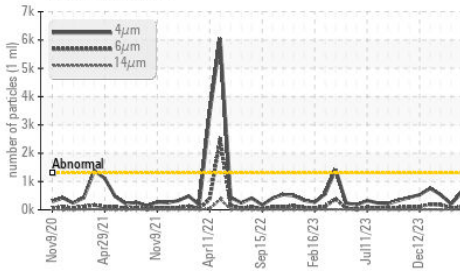
### Acid Number



### Viscosity @ 40°C



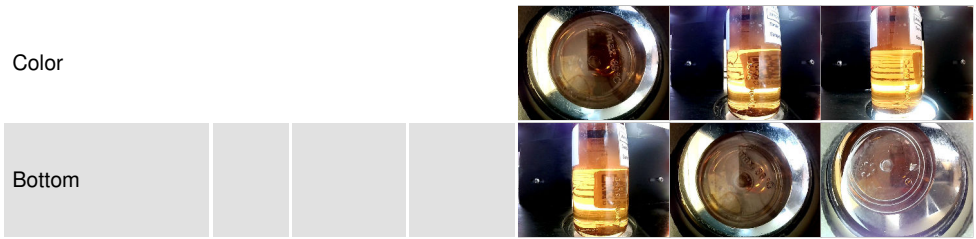
### Particle Trend



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	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

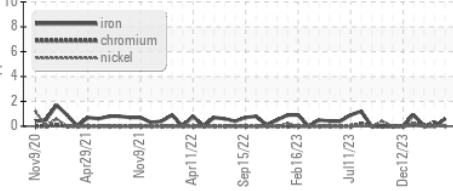
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	69.8	66.8	66.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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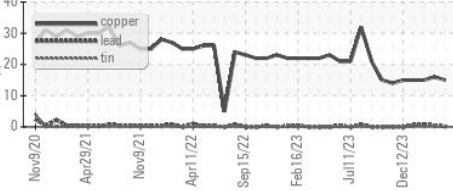


### GRAPHS

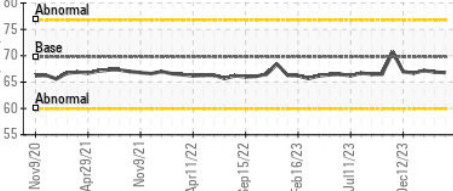
#### Ferrous Alloys



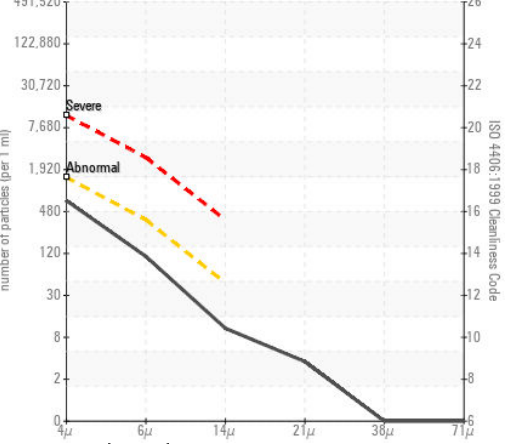
#### Non-ferrous Metals



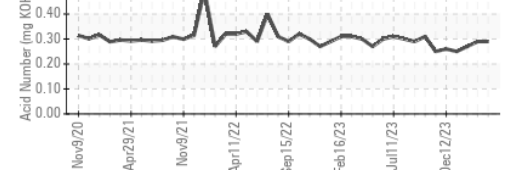
#### Viscosity @ 40°C



#### Particle Count



#### Acid Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0895073  
**Lab Number** : 06145290  
**Unique Number** : 10970098  
**Test Package** : IND 2  
**Received** : 10 Apr 2024  
**Tested** : 12 Apr 2024  
**Diagnosed** : 12 Apr 2024 - Wes Davis

**J.M. Huber Corporation**  
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 Contact: Ted Hudson  
 ted.hudson@huber.com  
 T: (434)476-6628  
 F: (434)476-8133

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)