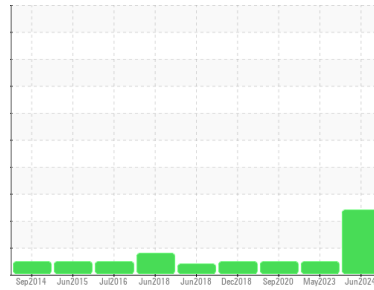




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**MARIN 1025146 BALER KERNIC (S/N C1245/98)**  
 Component  
**Hydraulic System**  
 Fluid  
**APRIL SUPERFLO CLEAR AW HYDRAULIC OIL AW 32 (40 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.

### 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>WC0896761</b>	WC0776679	WC943389
Sample Date	Client Info		<b>25 Jun 2024</b>	25 May 2023	08 Sep 2020
Machine Age	hrs	Client Info	<b>17000</b>	17000	0
Oil Age	hrs	Client Info	<b>19214</b>	17000	0
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	N/A
Sample Status			<b>ABNORMAL</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 D5185(m) >20	<b>1</b>	<1	<1
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m) >20	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m) >20	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m) >20	<b>7</b>	7	7
Tin	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	<b>&lt;1</b>	0	<1
Barium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	<b>3</b>	<1	1
Calcium	ppm	ASTM D5185(m)	<b>69</b>	67	67
Phosphorus	ppm	ASTM D5185(m)	<b>304</b>	338	333
Zinc	ppm	ASTM D5185(m)	<b>339</b>	339	370
Sulfur	ppm	ASTM D5185(m)	<b>4281</b>	4678	4774
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

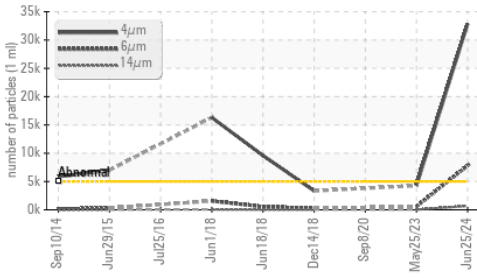
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<b>3</b>	4	3
Sodium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1

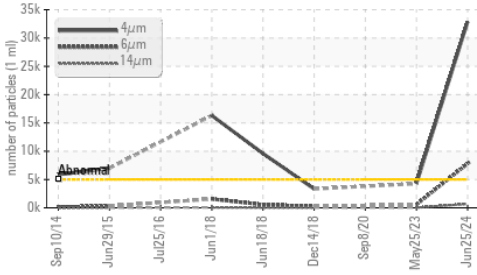
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 32846</b>	4273	---
Particles >6µm	ASTM D7647	>1300	<b>▲ 7818</b>	582	---
Particles >14µm	ASTM D7647	>160	<b>▲ 681</b>	28	---
Particles >21µm	ASTM D7647	>40	<b>▲ 187</b>	9	---
Particles >38µm	ASTM D7647	>10	<b>● 17</b>	1	---
Particles >71µm	ASTM D7647	>3	<b>2</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 22/20/17</b>	19/16/12	---

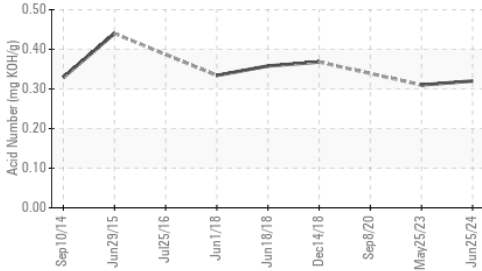
### Particle Trend



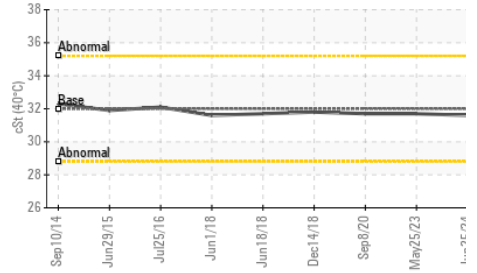
### Particle Trend



### Acid Number



### Viscosity @ 40°C



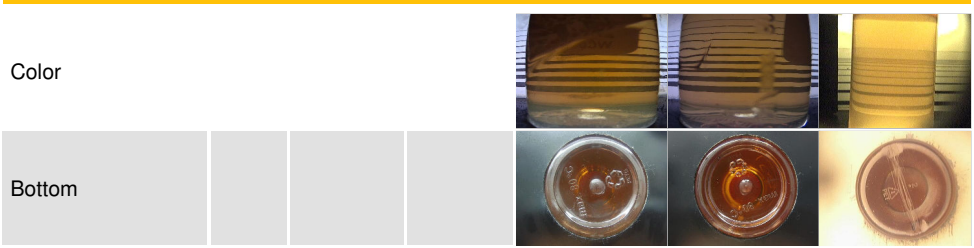
### FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN) mg KOH/g	ASTM D974*	<b>0.32</b>	0.31	---		
VISUAL						
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	VLITE
Sand/Dirt	scalar	Visual*	NONE	<b>VLITE</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*	>0.05	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

### FLUID PROPERTIES

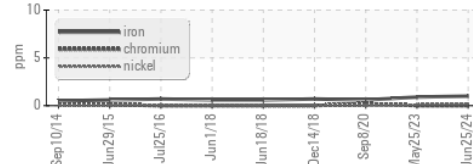
method	limit/base	current	history1	history2		
Visc @ 40°C	cSt	ASTM D7279(m)	32	<b>31.6</b>	31.7	31.7

### SAMPLE IMAGES

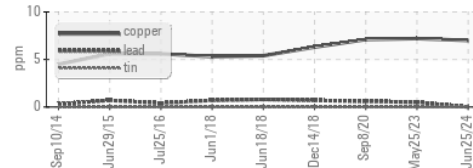


### GRAPHS

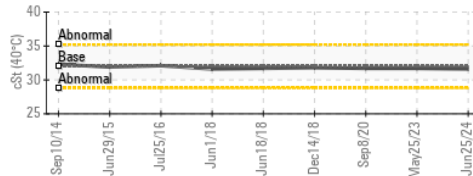
#### Ferrous Alloys



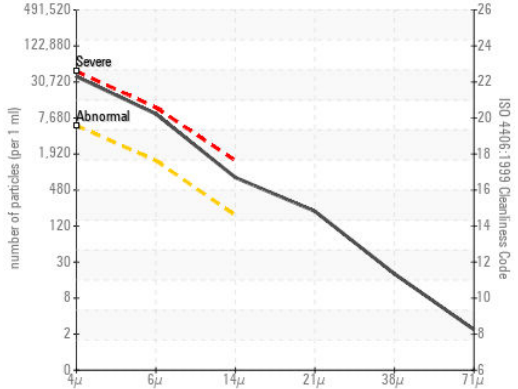
#### Non-ferrous Metals



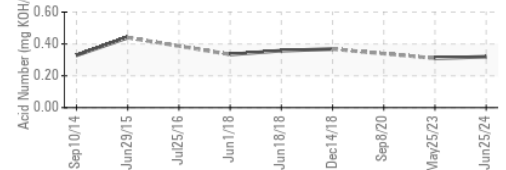
#### Viscosity @ 40°C



#### Particle Count



#### Acid Number



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0896761  
**Lab Number** : 02644353  
**Unique Number** : 5801892  
**Test Package** : IND 2 ( Additional Tests: TAN Man )  
**Received** : 27 Jun 2024  
**Tested** : 28 Jun 2024  
**Diagnosed** : 28 Jun 2024 - Kevin Marson

**Watch Tower Bible and Tract Society of Canada**  
 13893 Highway 7  
 Georgetown, ON  
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 Contact: Purchasing Department  
 purchase.ca@jw.org  
 T: (905)873-4101  
 F: (905)873-4508

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.