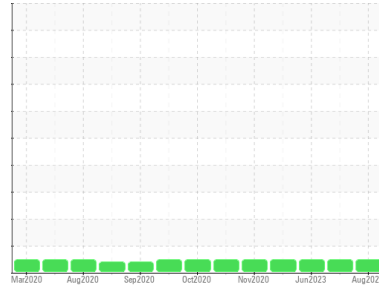




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**W13 (S/N 31030)**  
 Component  
**Hydraulic System**  
 Fluid  
**MIL-PRF-83282 (--- 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. Please specify the component make and model with your next sample.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target SAE AS4059 (replaces NAS 1638) 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>WC0768782</b>	WC0768767	WC0768913
Sample Date	Client Info		<b>08 Aug 2023</b>	10 Jul 2023	05 Jun 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Chngd</b>	Filtered	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

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

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	<b>6</b>	2	<1
Calcium	ppm	ASTM D5185m	<b>0</b>	0	<1
Phosphorus	ppm	ASTM D5185m	<b>587</b>	671	699
Zinc	ppm	ASTM D5185m	<b>14</b>	0	0
Sulfur	ppm	ASTM D5185m	<b>34</b>	50	89

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>8</b>	8	8
Sodium	ppm	ASTM D5185m	<b>1</b>	<1	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	1	0

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>672</b>	673	826
Particles >6µm	ASTM D7647	>1300	<b>211</b>	195	223
Particles >14µm	ASTM D7647	>160	<b>28</b>	19	24
Particles >21µm	ASTM D7647	>40	<b>5</b>	4	6
Particles >38µm	ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>17/15/12</b>	17/15/11	17/15/12

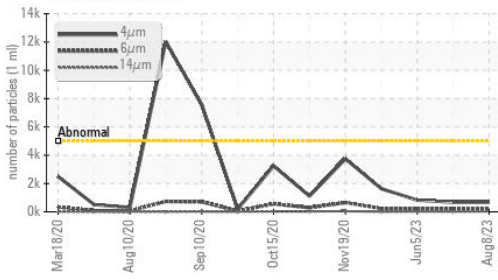
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.1	<b>0.11</b>	0.051	0.064

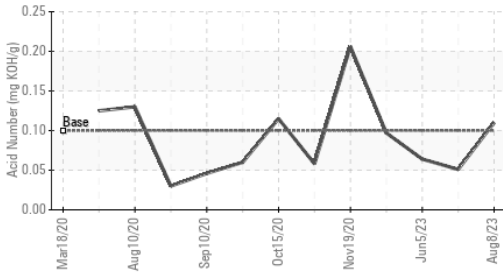


# OIL ANALYSIS REPORT

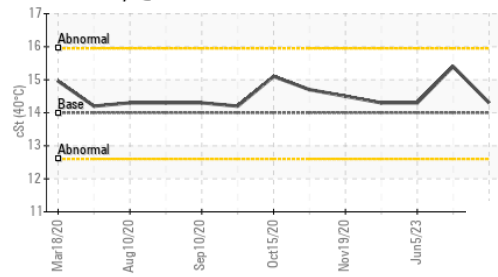
Particle Trend



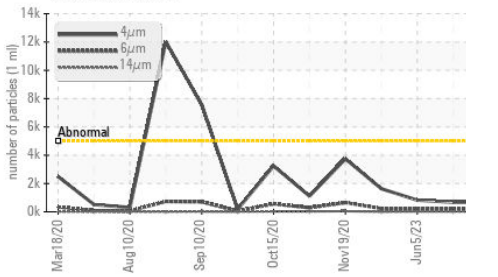
Acid Number



Viscosity @ 40°C



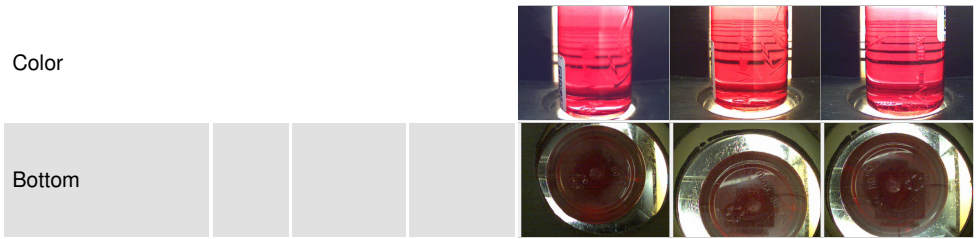
Particle Trend



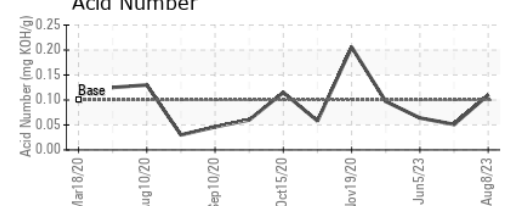
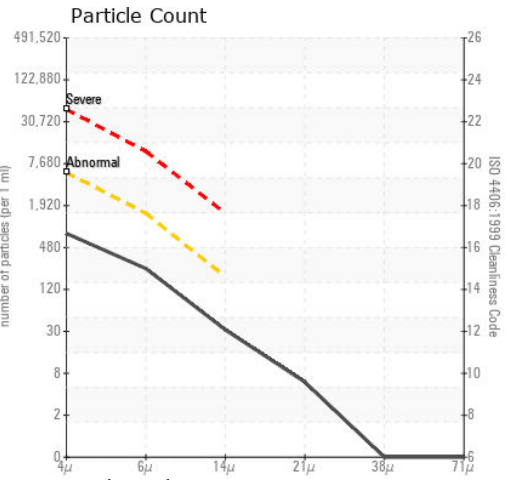
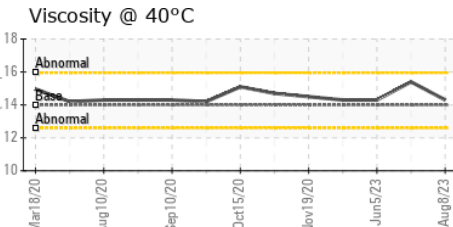
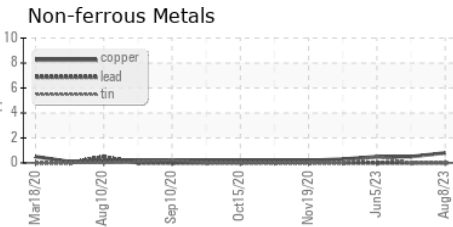
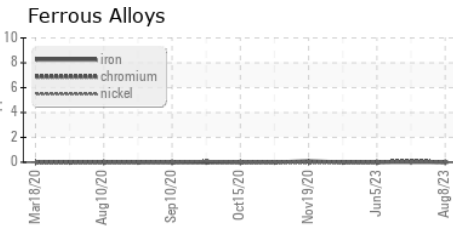
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	14.0	14.3	15.4

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0768782 **Received** : 14 Aug 2023  
**Lab Number** : 05923363 **Diagnosed** : 15 Aug 2023  
**Unique Number** : 10603310 **Diagnostician** : Wes Davis  
**Test Package** : IND 2

**NORTHLAND-WILLETTE INC**  
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 PLAINVILLE, MA  
 US 02762  
 Contact: MIKE BOUCHER  
 mboucher@nwhydinc.com  
 T: (508)699-4016  
 F: (508)699-4017

Certificate L2367  
 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)