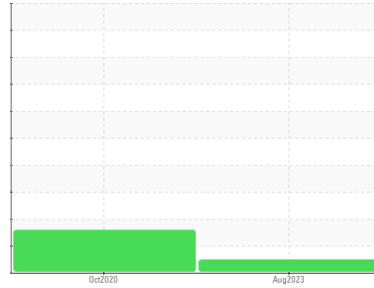




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**W5A**  
 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>WC0768779</b>	WC0499760	---
Sample Date	Client Info		<b>08 Aug 2023</b>	15 Oct 2020	---
Machine Age	hrs	Client Info	<b>0</b>	5513	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>Not Changed</b>	Not Changed	---
Sample Status			<b>NORMAL</b>	ATTENTION	---

### WEAR METALS

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

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	<1	---
Barium	ppm	ASTM D5185m	<b>2</b>	0	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185m	<b>6</b>	<1	---
Calcium	ppm	ASTM D5185m	<b>0</b>	2	---
Phosphorus	ppm	ASTM D5185m	<b>566</b>	643	---
Zinc	ppm	ASTM D5185m	<b>15</b>	0	---
Sulfur	ppm	ASTM D5185m	<b>21</b>	48	---

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>16</b>	▲ 20	---
Sodium	ppm	ASTM D5185m	<b>2</b>	2	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	---

### FLUID CLEANLINESS

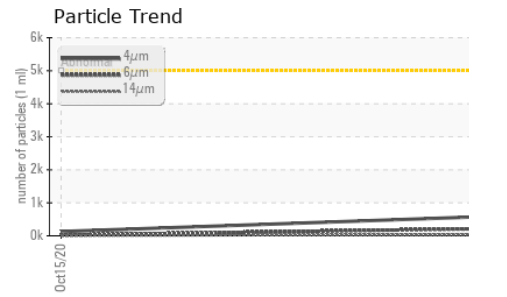
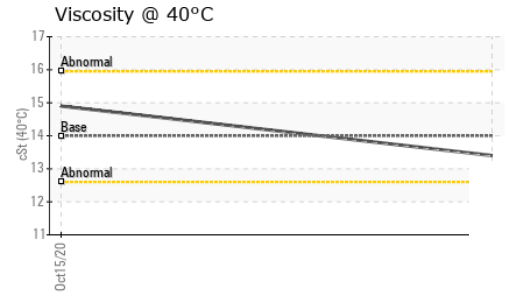
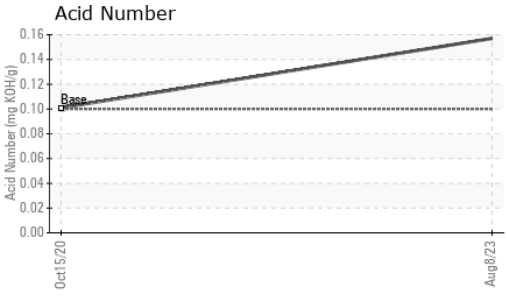
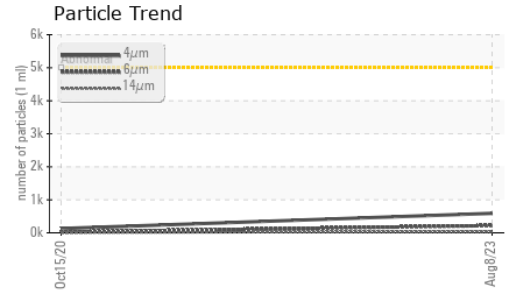
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>590</b>	130	---
Particles >6µm	ASTM D7647	>1300	<b>219</b>	22	---
Particles >14µm	ASTM D7647	>160	<b>32</b>	6	---
Particles >21µm	ASTM D7647	>40	<b>7</b>	5	---
Particles >38µm	ASTM D7647	>10	<b>0</b>	5	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	5	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>16/15/12</b>	14/12/10	---

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.1	<b>0.157</b>	0.101	---



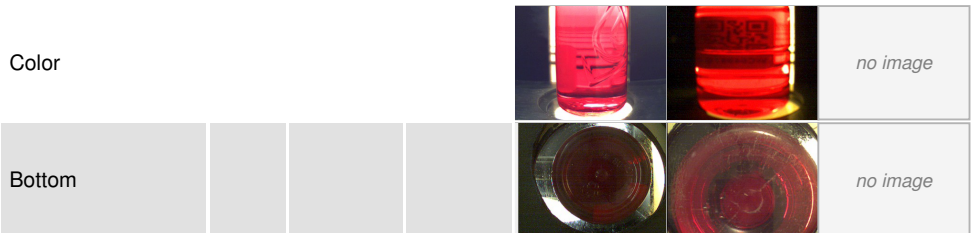
# OIL ANALYSIS REPORT



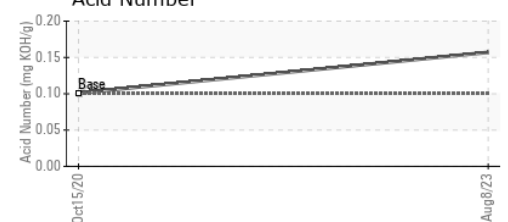
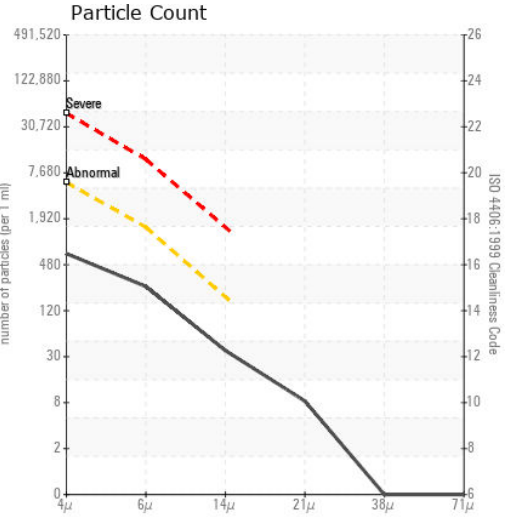
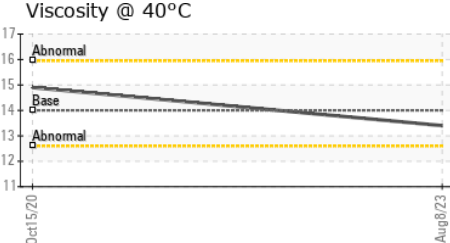
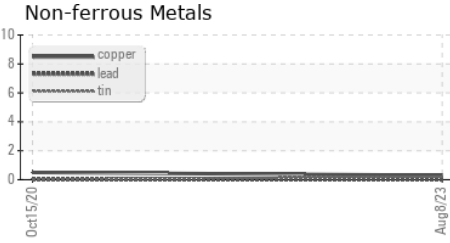
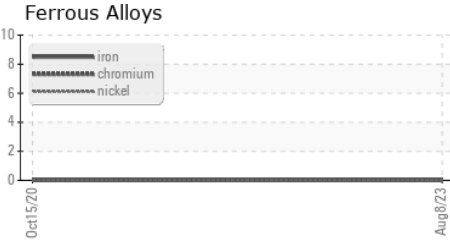
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	14.0	<b>13.4</b>	14.9

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0768779 **Received** : 14 Aug 2023  
**Lab Number** : 05923358 **Diagnosed** : 15 Aug 2023  
**Unique Number** : 10603305 **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)