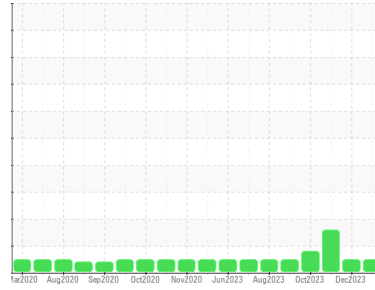




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**W13 (S/N 31030)**  
 Component  
**Hydraulic System**  
 Fluid  
**MIL-PRF-83282 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Discrete particle counts [100 ml] 5-15µm = 43200, 15-25µm = 2200, 25-50µm = 800, 50-100µm = 0, >100µm = 0. The water content is negligible. The amount and size of particulates present in the system are acceptable. Chlorine value is 250.

### 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>WC0874950</b>	WC0874938	WC0874934
Sample Date	Client Info	<b>09 Jan 2024</b>	06 Dec 2023	10 Nov 2023
Machine Age	hrs	Client Info	0	11420
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	Not Changd	N/A
Sample Status		<b>NORMAL</b>	NORMAL	ABNORMAL

## WEAR METALS

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

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>0</b>	11	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	2	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	<b>1</b>	8	0
Calcium	ppm	ASTM D5185m	<b>1</b>	8	0
Phosphorus	ppm	ASTM D5185m	<b>693</b>	639	712
Zinc	ppm	ASTM D5185m	<b>0</b>	4	0
Sulfur	ppm	ASTM D5185m	<b>70</b>	9	43

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>8</b>	8	8
Sodium	ppm	ASTM D5185m	<b>0</b>	0	2
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	0
Chlorine Content	ppm	ASTM D5185m	<b>250</b>	298	280
Water	%	ASTM D6304 >0.05	<b>0.009</b>	0.004	0.010
ppm Water	ppm	ASTM D6304 >500	<b>93</b>	42	109

## FLUID CLEANLINESS

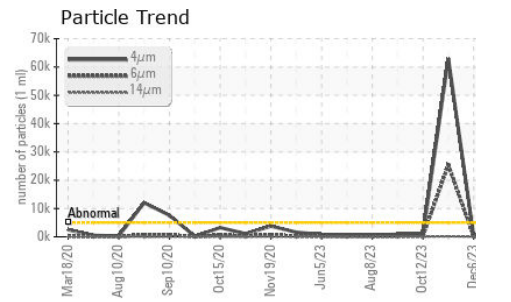
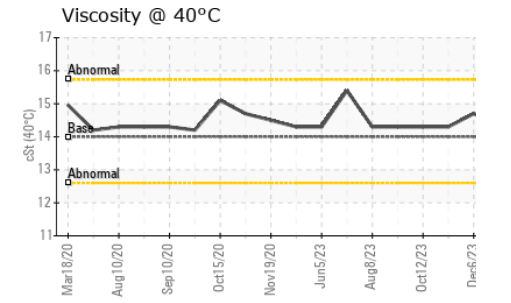
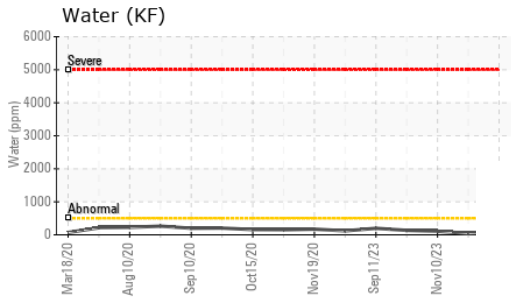
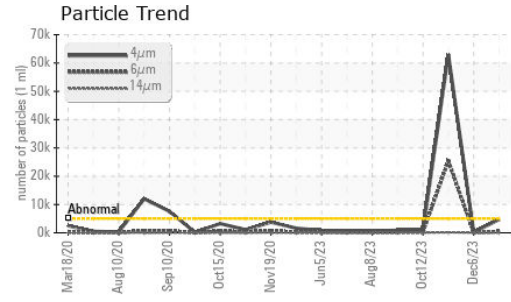
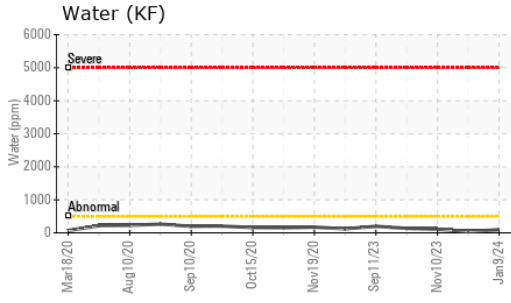
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>4713</b>	197	▲ 62988
Particles >6µm	ASTM D7647 >1300	<b>462</b>	78	▲ 25461
Particles >14µm	ASTM D7647 >160	<b>30</b>	8	▲ 165
Particles >21µm	ASTM D7647 >40	<b>8</b>	2	7
Particles >38µm	ASTM D7647 >10	<b>0</b>	0	1
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>19/16/12</b>	15/13/10	▲ 23/22/15

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.1	<b>0.058</b>	0.047	0.091



# OIL ANALYSIS REPORT

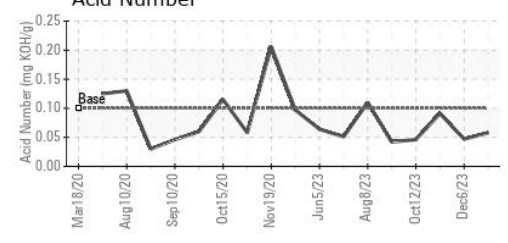
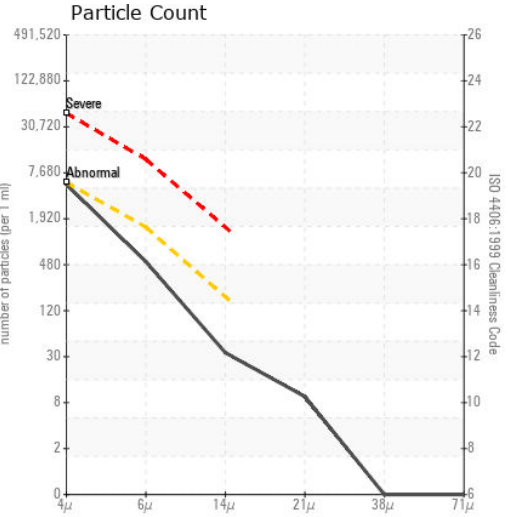
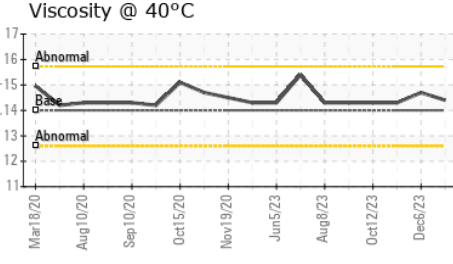
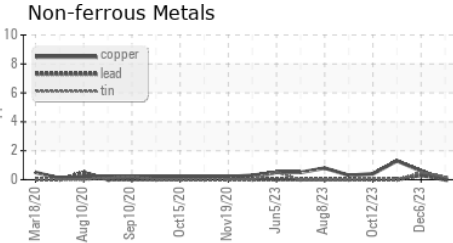
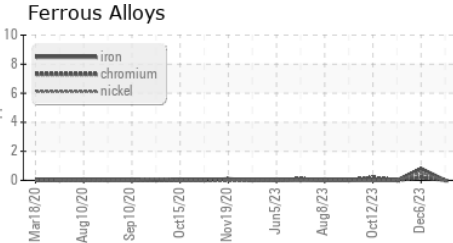


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	14.0	14.4	14.7	14.3

SAMPLE IMAGES	method	limit/base	current	history1	history2	
Color				no image	no image	no image
Bottom				no image	no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0874950 **Received** : 18 Jan 2024  
**Lab Number** : 06064338 **Diagnosed** : 22 Jan 2024  
**Unique Number** : 10835720 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: CHLORINEXRF, KF )

**NORTHLAND-WILLETTE INC**  
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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)