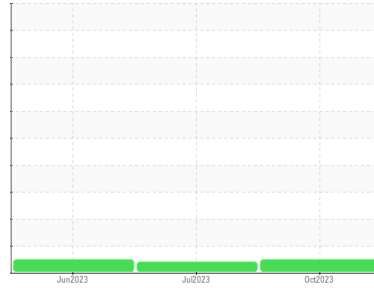




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**[CAN 86 RECD 5/20/22]**  
 Machine Id  
**ASTM IHFO 2305**  
 Component  
**Hydraulic System**  
 Fluid  
**TDH FLUID SAE 75W80 (--- QTS)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are 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>WC05982350</b>	WC05895043	WC05874457
Sample Date	Client Info		<b>17 Oct 2023</b>	10 Jul 2023	14 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>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>8</b>	10	8
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>2</b>	4	<1
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m >75	<b>4</b>	5	4
Tin	ppm	ASTM D5185m >10	<b>0</b>	1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 10	<b>16</b>	16	16
Barium	ppm	ASTM D5185m 10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 10	<b>2</b>	3	2
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 100	<b>29</b>	26	29
Calcium	ppm	ASTM D5185m 3500	<b>2443</b>	2726	2606
Phosphorus	ppm	ASTM D5185m 1150	<b>930</b>	995	947
Zinc	ppm	ASTM D5185m 1150	<b>1122</b>	1176	1161
Sulfur	ppm	ASTM D5185m 5000	<b>4071</b>	4418	5081

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>12</b>	13	11
Sodium	ppm	ASTM D5185m	<b>4</b>	0	4
Potassium	ppm	ASTM D5185m >20	<b>0</b>	3	0
Water	%	ASTM D6304 >0.1	<b>0.127</b>	0.046	0.044
ppm Water	ppm	ASTM D6304 >1000	<b>1270</b>	462.7	447.0

## FLUID CLEANLINESS

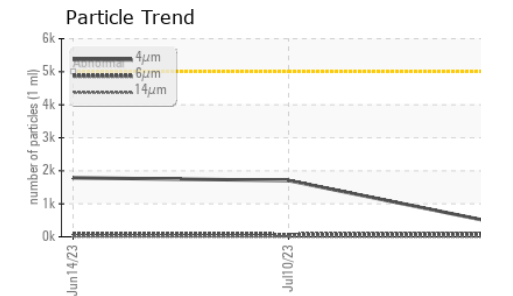
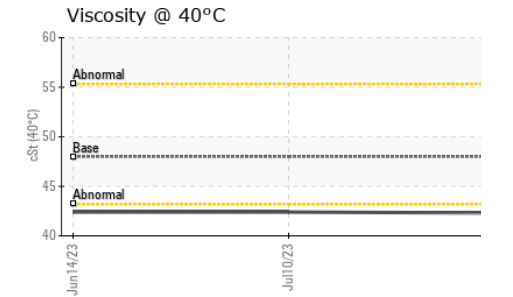
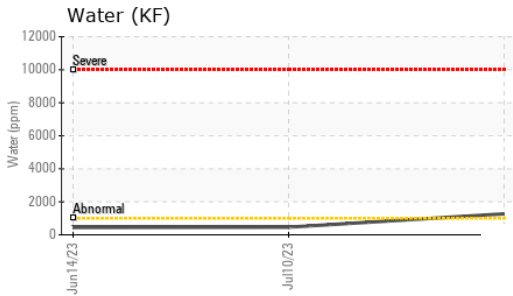
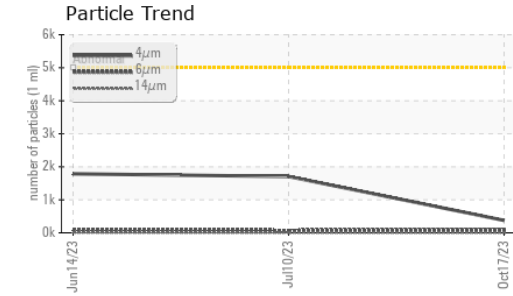
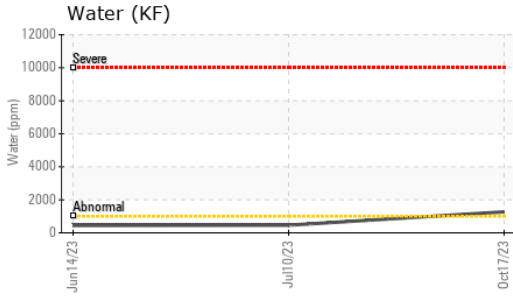
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>376</b>	1706	1787
Particles >6µm	ASTM D7647	>1300	<b>102</b>	69	92
Particles >14µm	ASTM D7647	>160	<b>7</b>	7	10
Particles >21µm	ASTM D7647	>40	<b>2</b>	3	3
Particles >38µm	ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>16/14/10</b>	18/13/10	18/14/10

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 2.25	<b>1.831</b>	1.49	1.849



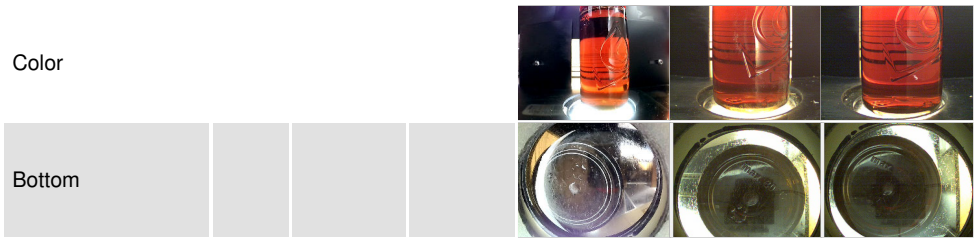
# OIL ANALYSIS REPORT



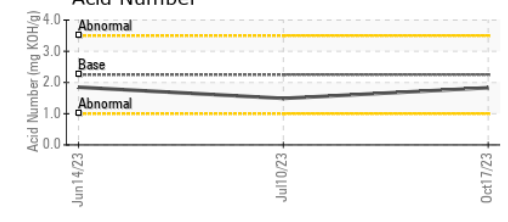
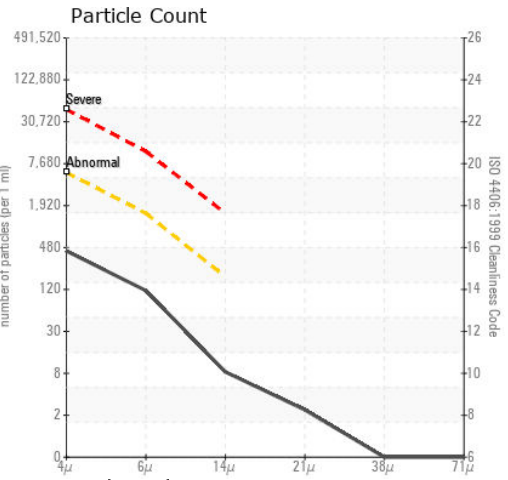
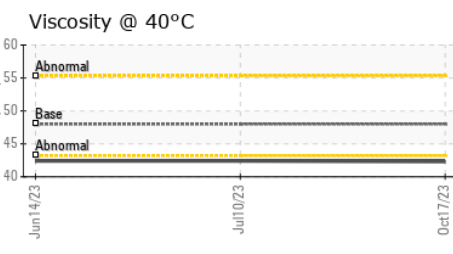
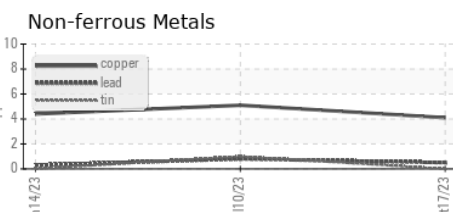
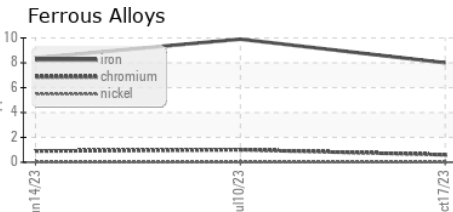
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 48	42.3	▲ 42.4	42.4

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC05982350 **Received** : 18 Oct 2023  
**Lab Number** : 05982350 **Diagnosed** : 20 Oct 2023  
**Unique Number** : 10699645 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: KF )

**WEARCHECK LUBRICATION SERVICES PT ACCOUNT**  
 501 Madison Ave  
 Cary, NC  
 US 27513  
 Contact: Doug Bogart  
 dbogart@wearcheckusa.com  
 T:  
 F: (919)379-4050

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)