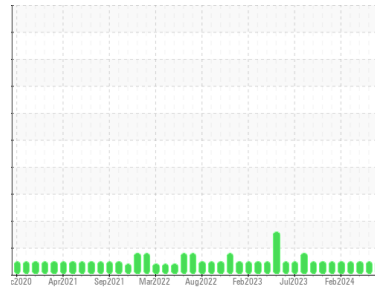




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**CRM64**

Machine Id

**CRM 64 MOTOR LUBRICATION SYSTEM (S/N 16-2300-0710)**

Component

**Tank Hydraulic System**

Fluid

**AW HYDRAULIC OIL ISO 46 (92 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. 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>RP0044025</b>	RP0044054	RP0042499
Sample Date	Client Info	<b>10 Jul 2024</b>	14 Jun 2024	08 May 2024
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	<b>1</b>	2	0
Chromium	ppm	ASTM D5185m >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	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>	0	0
Lead	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >20	<b>1</b>	2	0
Tin	ppm	ASTM D5185m >20	<b>4</b>	5	6
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 5	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 5	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m 25	<b>0</b>	<1	0
Calcium	ppm	ASTM D5185m 200	<b>51</b>	51	50
Phosphorus	ppm	ASTM D5185m 300	<b>321</b>	333	333
Zinc	ppm	ASTM D5185m 370	<b>377</b>	419	416

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>1</b>	2	1
Sodium	ppm	ASTM D5185m	<b>2</b>	1	<1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Water	%	ASTM D6304 >0.05	<b>0.003</b>	0.003	0.004
ppm Water	ppm	ASTM D6304 >500	<b>35</b>	37	41

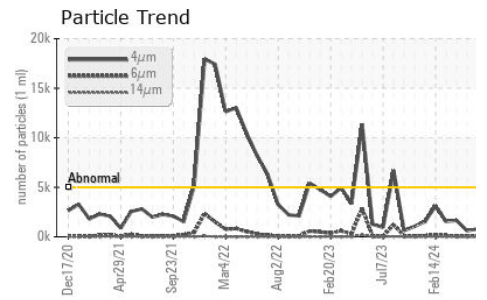
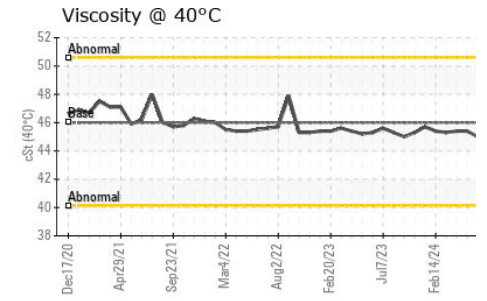
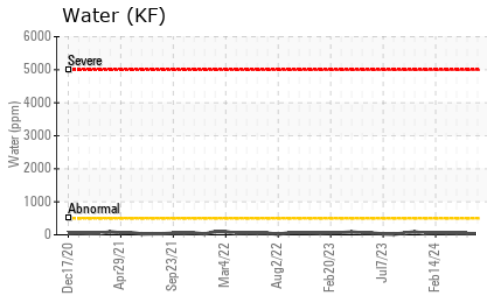
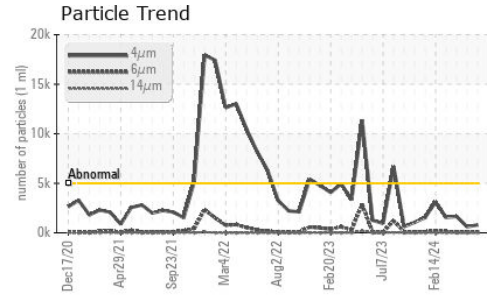
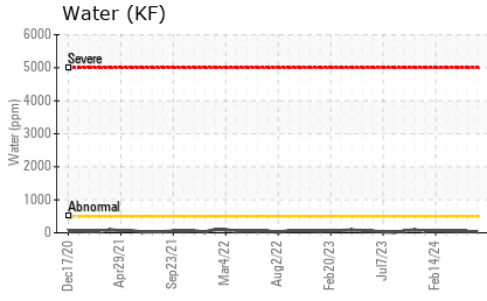
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>802</b>	612	1653
Particles >6µm	ASTM D7647 >1300	<b>103</b>	90	69
Particles >14µm	ASTM D7647 >160	<b>8</b>	8	7
Particles >21µm	ASTM D7647 >40	<b>1</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>17/14/10</b>	16/14/10	18/13/10

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.57	<b>0.37</b>	0.40	0.37

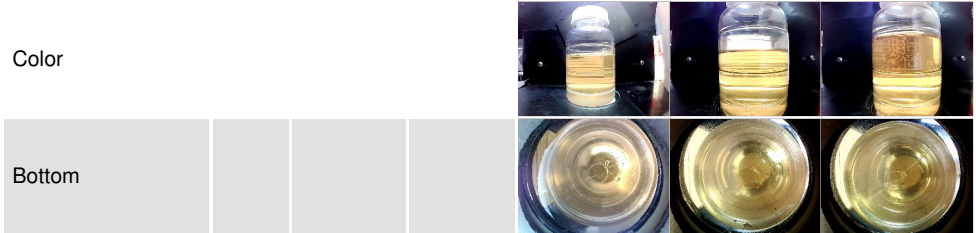
# OIL ANALYSIS REPORT



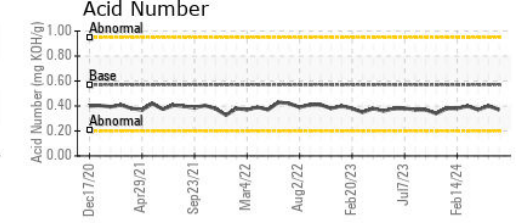
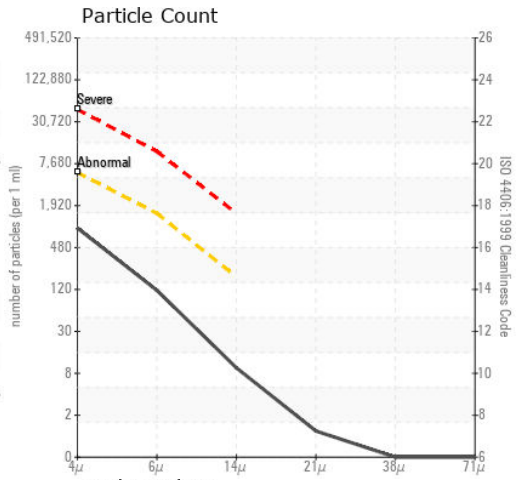
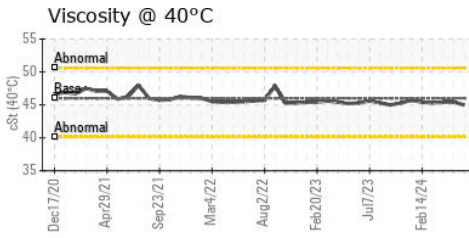
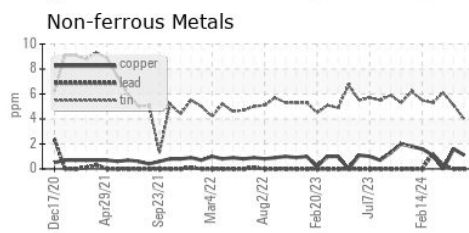
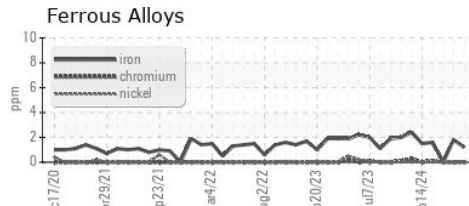
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	46	45.0	45.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0044025 **Received** : 12 Jul 2024  
**Lab Number** : 06234937 **Tested** : 15 Jul 2024  
**Unique Number** : 11123771 **Diagnosed** : 15 Jul 2024 - Wes Davis  
**Test Package** : IND 2

**OUTOKUMPU STAINLESS USA**  
 HWY 43 N  
 CALVERT, AL  
 US 36513  
 Contact: MARIO JOHNSON  
 Mario.johnson@outokumpu.com  
 T: (251)321-4105  
 F: x:

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)