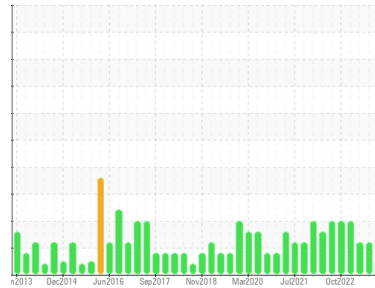




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**Morony**  
 Machine Id  
**MRN02 Generator Thrust / Guide Bearing**  
 Component  
**Reservoir Journal Bearing**  
 Fluid  
**CONOCO TURBINE OIL 68 (30 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

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>WC0843437</b>	WC0715264	WC0757808
Sample Date	Client Info		<b>17 Oct 2023</b>	15 Jul 2023	01 May 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>	ATTENTION	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >60	<b>48</b>	50	50
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m >250	<b>&lt;1</b>	3	3
Copper	ppm	ASTM D5185m >125	<b>13</b>	13	14
Tin	ppm	ASTM D5185m >80	<b>2</b>	1	1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>275</b>	297	304
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>0</b>	2	3
Calcium	ppm	ASTM D5185m	<b>18</b>	21	21
Phosphorus	ppm	ASTM D5185m	<b>195</b>	177	174
Zinc	ppm	ASTM D5185m	<b>154</b>	160	167
Sulfur	ppm	ASTM D5185m	<b>7008</b>	5775	5855

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>1</b>	<1	<1
Sodium	ppm	ASTM D5185m	<b>6</b>	2	2
Potassium	ppm	ASTM D5185m >20	<b>0</b>	1	2

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>640	<b>409</b>	▲ 766	▲ 2197
Particles >6µm	ASTM D7647	>160	<b>140</b>	▲ 249	▲ 626
Particles >14µm	ASTM D7647	>40	<b>10</b>	27	36
Particles >21µm	ASTM D7647	>10	<b>3</b>	7	6
Particles >38µm	ASTM D7647	>3	<b>0</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>16/14/12	<b>16/14/10</b>	▲ 17/15/12	▲ 18/16/12

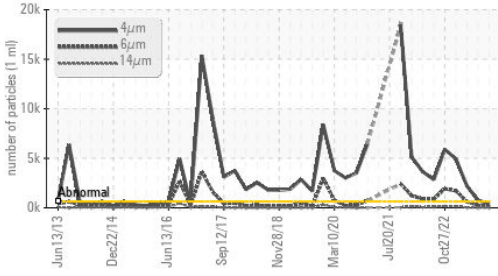
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.08	<b>1.51</b>	1.73	1.55

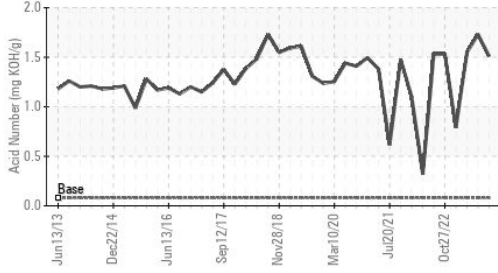


# OIL ANALYSIS REPORT

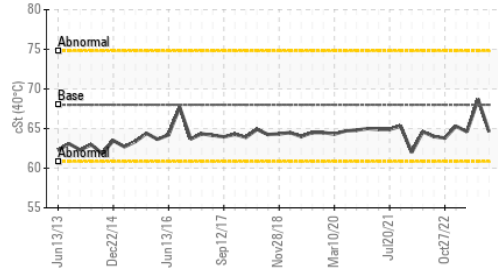
### Particle Trend



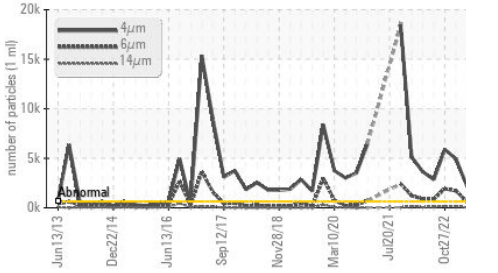
### Acid Number



### Viscosity @ 40°C



### Particle Trend

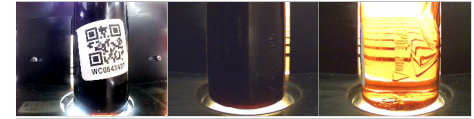


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 68	64.6	68.7	64.6

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

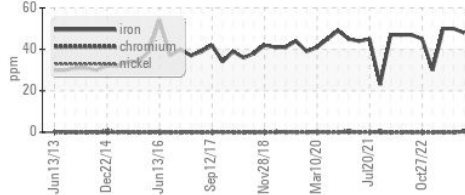


### Bottom

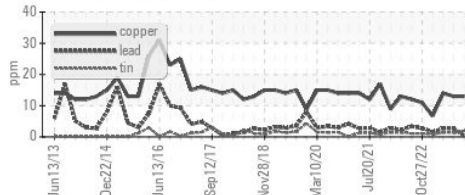


## GRAPHS

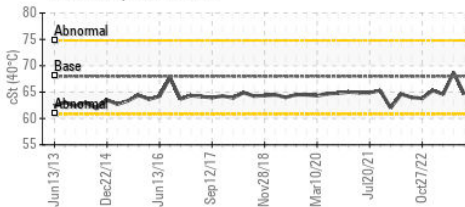
### Ferrous Alloys



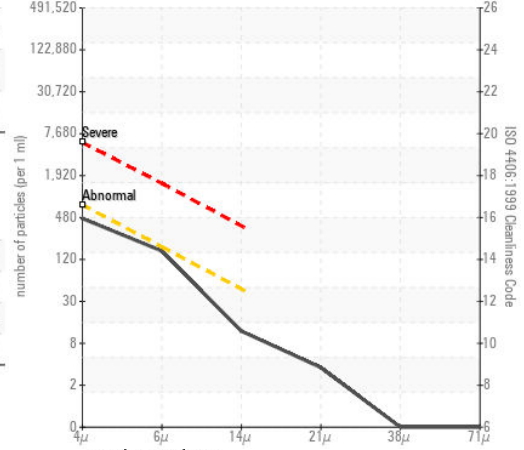
### Non-ferrous Metals



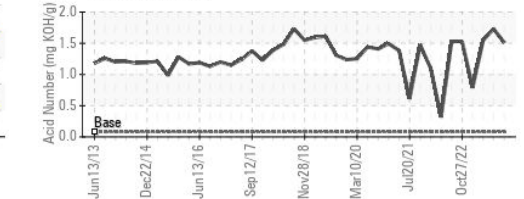
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0843437 **Received** : 31 Oct 2023  
**Lab Number** : 05994337 **Diagnosed** : 01 Nov 2023  
**Unique Number** : 10722697 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

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)

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