

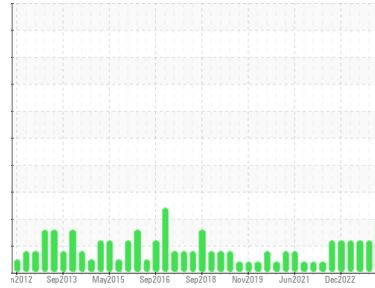


# PROBLEM SUMMARY

Sample Rating Trend

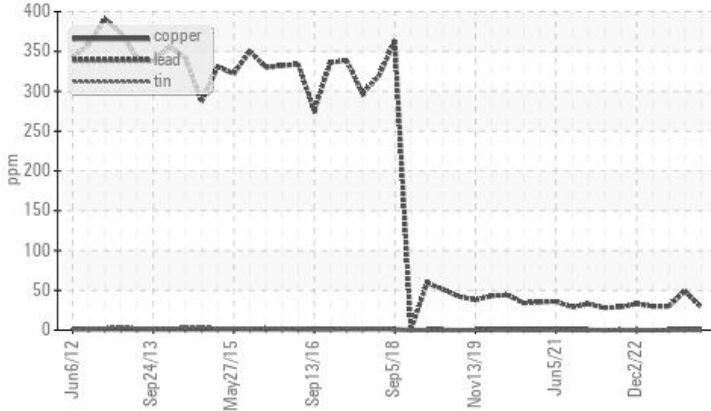
WEAR

Area  
**Cochrane**  
 Machine Id  
**CCH01 Governor Oil (S/N 448528)**  
 Component  
**Reservoir Hydraulic System**  
 Fluid  
**CONOCO MULTIPURPOSE R&O OIL ISO 68 (100 GAL)**

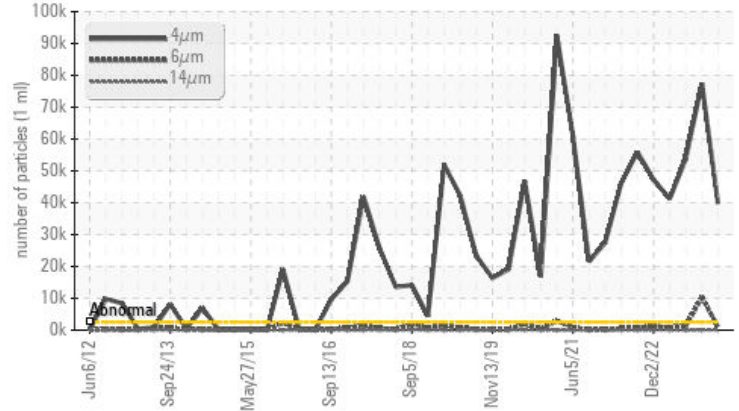


## COMPONENT CONDITION SUMMARY

### ▲ Non-ferrous Metals



### ▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	ABNORMAL
Lead	ppm	ASTM D5185m >20	▲ 49	29	30
Particles >4µm		ASTM D7647 >2500	▲ 77484	▲ 39817	▲ 53763
Particles >6µm		ASTM D7647 >640	▲ 10370	▲ 1006	▲ 1316
Oil Cleanliness		ISO 4406 (c) >18/16/13	▲ 23/21/13	▲ 22/17/11	▲ 23/18/10

Customer Id: PPLBUT  
 Sample No.: WC0757847  
 Lab Number: 05933486  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component if applicable.

## HISTORICAL DIAGNOSIS

### 12 Aug 2023 Diag: Jonathan Hester

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 28 Apr 2023 Diag: Don Baldrige

ISO



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 08 Mar 2023 Diag: Jonathan Hester

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

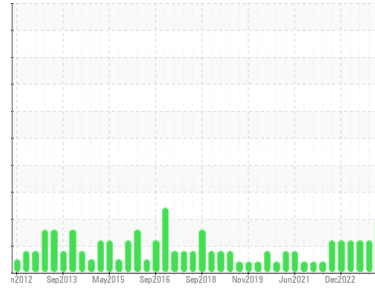
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area  
**Cochrane**  
 Machine Id  
**CCH01 Governor Oil (S/N 448528)**  
 Component  
**Reservoir Hydraulic System**  
 Fluid  
**CONOCO MULTIPURPOSE R&O OIL ISO 68 (100 GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

### Wear

The lead level is abnormal. All other component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

### 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>WC0757847</b>	WC0757848	WC0757785
Sample Date	Client Info	<b>12 Aug 2023</b>	12 Aug 2023	28 Apr 2023
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	<b>4</b>	5	5
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>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m >20	<b>▲ 49</b>	29	30
Copper	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>2</b>	2	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	<b>1</b>	0	0
Calcium	ppm	ASTM D5185m	<b>2</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>17</b>	11	15
Zinc	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Sulfur	ppm	ASTM D5185m	<b>0</b>	49	125

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>6</b>	0	0
Sodium	ppm	ASTM D5185m	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>2</b>	<1	0

## FLUID CLEANLINESS

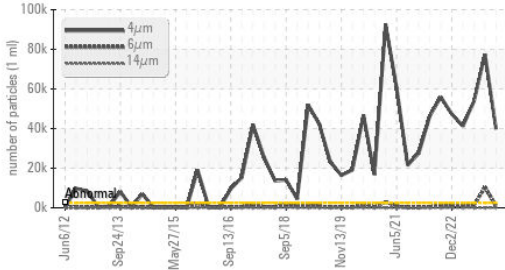
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >2500	<b>▲ 77484</b>	▲ 39817	▲ 53763
Particles >6µm	ASTM D7647 >640	<b>▲ 10370</b>	▲ 1006	▲ 1316
Particles >14µm	ASTM D7647 >80	<b>46</b>	14	6
Particles >21µm	ASTM D7647 >20	<b>4</b>	2	2
Particles >38µm	ASTM D7647 >4	<b>0</b>	0	0
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >18/16/13	<b>▲ 23/21/13</b>	▲ 22/17/11	▲ 23/18/10

## FLUID DEGRADATION

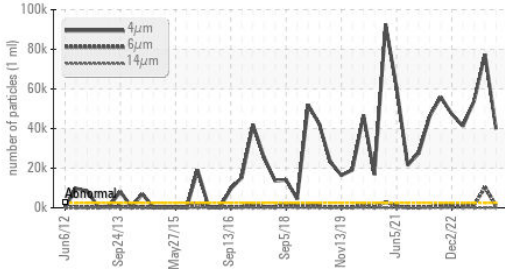
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.14	<b>0.053</b>	0.08	0.10

# OIL ANALYSIS REPORT

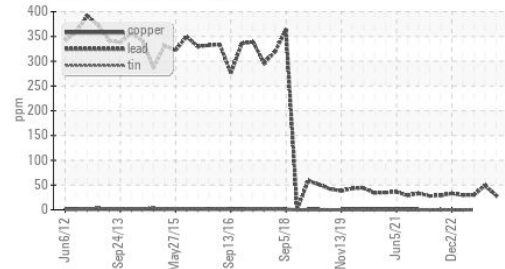
▲ Particle Trend



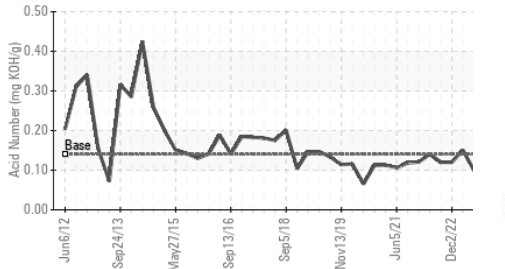
▲ Particle Trend



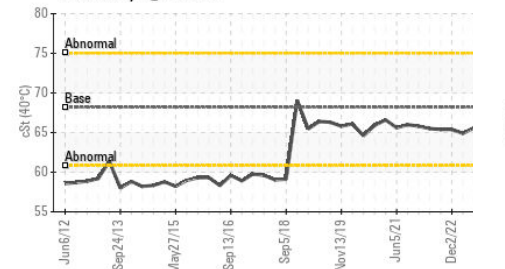
▲ Non-ferrous Metals



Acid Number



Viscosity @ 40°C



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

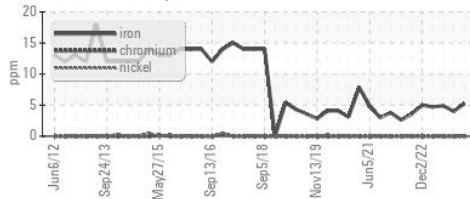
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	68.2	<b>64.3</b>	65.2	65.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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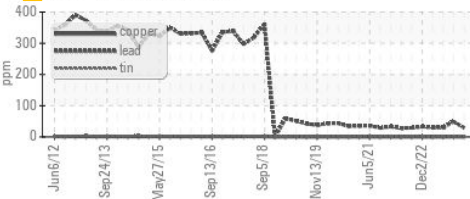


## GRAPHS

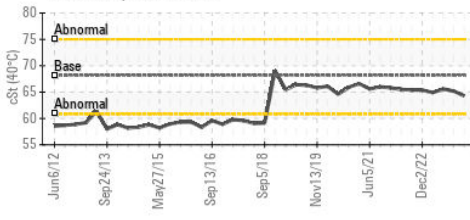
Ferrous Alloys



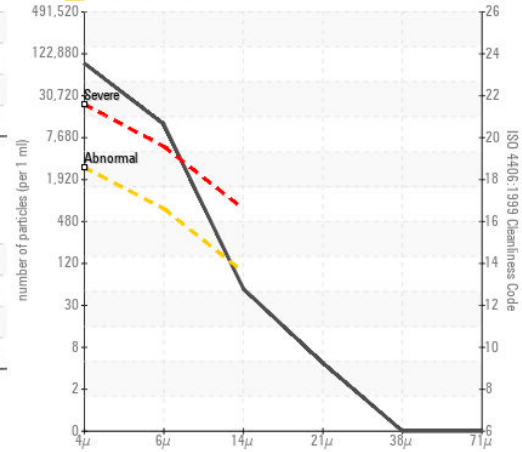
▲ Non-ferrous Metals



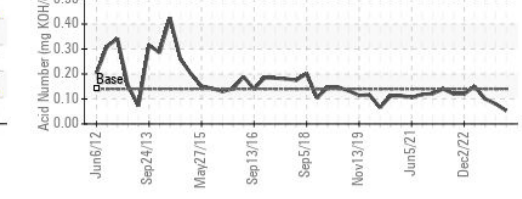
Viscosity @ 40°C



▲ Particle Count



Acid Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0757847 **Received** : 24 Aug 2023  
**Lab Number** : 05933486 **Diagnosed** : 28 Aug 2023  
**Unique Number** : 10618757 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2

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 F: (570)227-0014

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)