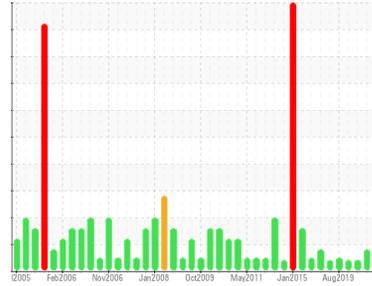




# PROBLEM SUMMARY

Sample Rating Trend



## VISUAL METAL



Machine Id  
**38**  
 Component  
**Turbine**  
 Fluid  
**R&O OIL ISO 68 (--- QTS)**

### COMPONENT CONDITION SUMMARY

No relevant graphs to display

### RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample.

### PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
White Metal	scalar	*Visual	NONE	<b>▲ MODER</b>	NONE	LIGHT

**Customer Id:** COLALB  
**Sample No.:** WC0813259  
**Lab Number:** 05923384  
**Test Package:** IND 2



*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

*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.
Alert	---	---	?	We were unable to perform a particle count due to metal particles present in this sample.

## HISTORICAL DIAGNOSIS

### 14 Sep 2022 Diag: Angela Borella

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



### 16 Nov 2021 Diag: Doug Bogart

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



### 08 Sep 2020 Diag: Don Baldrige

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.

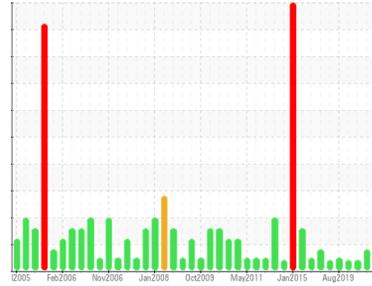
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



## VISUAL METAL



Machine Id  
**38**  
 Component  
**Turbine**  
 Fluid  
**R&O OIL ISO 68 (--- QTS)**

### DIAGNOSIS

#### Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample.

#### Wear

Moderate concentration of visible metal present. All component wear rates are normal.

#### Contamination

No other contaminants were detected 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>WC0813259</b>	WC0700750	WC0577570
Sample Date	Client Info		<b>13 Aug 2023</b>	14 Sep 2022	16 Nov 2021
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>ABNORMAL</b>	ABNORMAL	ABNORMAL

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >15	<b>15</b>	11	13
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>1</b>	2	0
Lead	ppm	ASTM D5185m	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >5	<b>2</b>	1	1
Tin	ppm	ASTM D5185m >5	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</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>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m 5	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 5	<b>6</b>	0	0
Calcium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m 100	<b>4</b>	0	3
Zinc	ppm	ASTM D5185m 25	<b>20</b>	1	0
Sulfur	ppm	ASTM D5185m 1500	<b>22</b>	39	122

### CONTAMINANTS

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

### FLUID CLEANLINESS

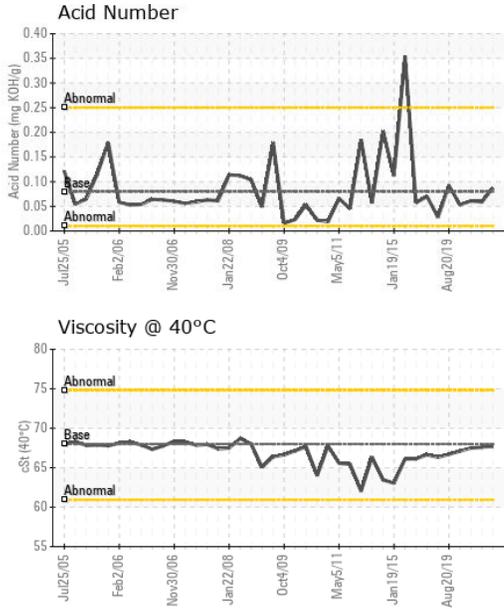
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>---</b>	82689	80402
Particles >6µm	ASTM D7647	>1300	<b>---</b>	▲ 7177	▲ 5881
Particles >14µm	ASTM D7647	>160	<b>---</b>	43	49
Particles >21µm	ASTM D7647	>40	<b>---</b>	2	5
Particles >38µm	ASTM D7647	>10	<b>---</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>---</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/14	<b>---</b>	▲ 24/20/13	▲ 24/20/13

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.08	<b>0.087</b>	0.059	0.061



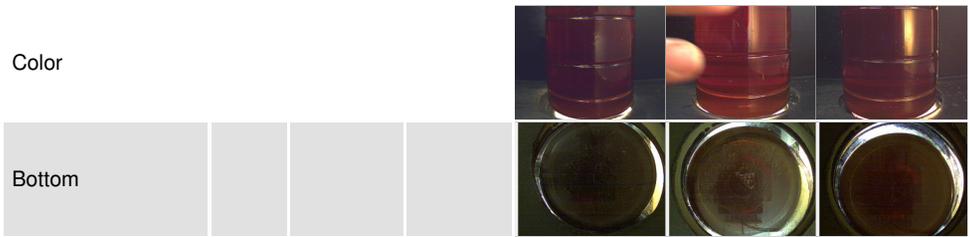
# OIL ANALYSIS REPORT



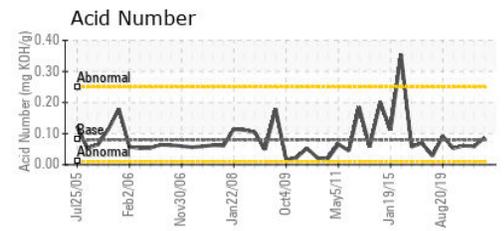
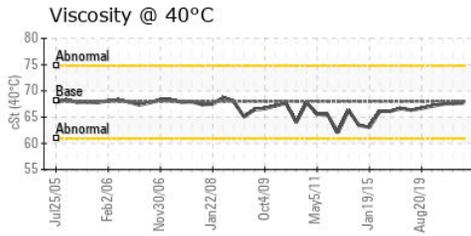
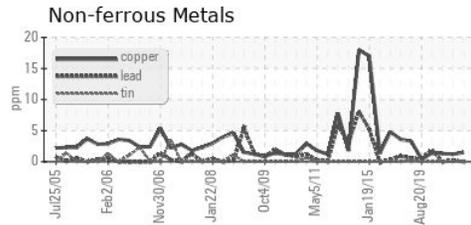
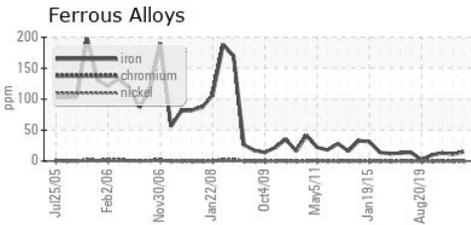
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	▲ MODER	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.03	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	68	67.7	67.6	67.5

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0813259 **Received** : 14 Aug 2023  
**Lab Number** : 05923384 **Diagnosed** : 15 Aug 2023  
**Unique Number** : 10603331 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2

**AURIA SOLUTIONS**  
 P.O. Box 580  
 Albemarle, NC  
 US 28001  
 Contact: STEPHEN MOSS  
 smoss@iacna.com  
 T: (704)983-8334  
 F: (704)983-8372

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)