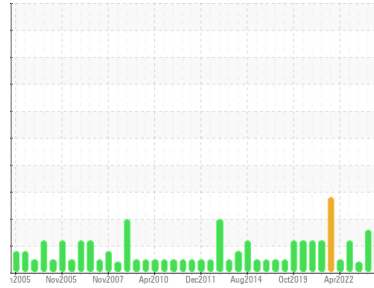




# PROBLEM SUMMARY

Sample Rating Trend



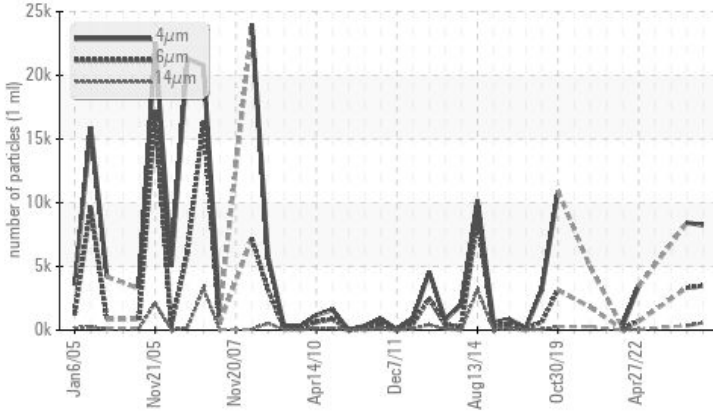
ISO



Area  
**Cogen 2**  
 Machine Id  
**016GE14003**  
 Component  
**Turbine**  
 Fluid  
**ROYAL PURPLE SYNFILM GT 32 (500 GAL)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ <b>3479</b>	▲ 3330	---
Particles >14µm	ASTM D7647	>160	▲ <b>566</b>	▲ 361	---
Particles >21µm	ASTM D7647	>40	▲ <b>173</b>	▲ 112	---
Oil Cleanliness	ISO 4406 (c)	>--/17/14	▲ <b>20/19/16</b>	▲ 20/19/16	---

Customer Id: ENTHOU  
 Sample No.: RP0020399  
 Lab Number: 05982363  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Angela Borella +1 800-237-1369  
[angela.borella@wearcheckusa.com](mailto:angela.borella@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.

## HISTORICAL DIAGNOSIS

**09 Jul 2023 Diag: Don Baldrige**

ISO



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

view report



**21 Mar 2023 Diag: Don Baldrige**

VIS DEBRIS



We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



**10 Oct 2022 Diag: Doug Bogart**

VISUAL METAL



We recommend you service the filters on this component. We advise that you inspect for possible wear. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample. Moderate concentration of visible metal present. All component wear rates are normal. No other contaminants were detected in the oil. The AN level is acceptable for this fluid.

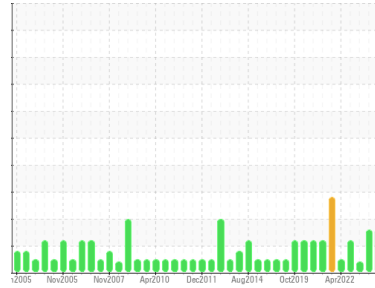
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**Cogen 2**  
Machine Id  
**016GE14003**

Component  
**Turbine**  
Fluid  
**ROYAL PURPLE SYNFILM GT 32 (500 GAL)**

## DIAGNOSIS

### Recommendation

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

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of particulates 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>RP0020399</b>	RP0027208	RP0020801
Sample Date	Client Info	<b>17 Oct 2023</b>	09 Jul 2023	21 Mar 2023
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>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >15	<b>0</b>	<1	<1
Chromium	ppm	ASTM D5185m >4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >2	<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 >10	<b>0</b>	2	1
Lead	ppm	ASTM D5185m	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m >5	<b>17</b>	17	17
Tin	ppm	ASTM D5185m >5	<b>0</b>	<1	0
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>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	<b>74</b>	33	82
Calcium	ppm	ASTM D5185m	<b>0</b>	<1	2
Phosphorus	ppm	ASTM D5185m	<b>&lt;1</b>	1	1
Zinc	ppm	ASTM D5185m	<b>0</b>	0	0

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>2</b>	2	3
Sodium	ppm	ASTM D5185m	<b>4</b>	1	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	1	0
Water	%	ASTM D6304 >0.03	<b>0.012</b>	0.022	0.017
ppm Water	ppm	ASTM D6304 >300	<b>126.1</b>	225.6	179.9

## FLUID CLEANLINESS

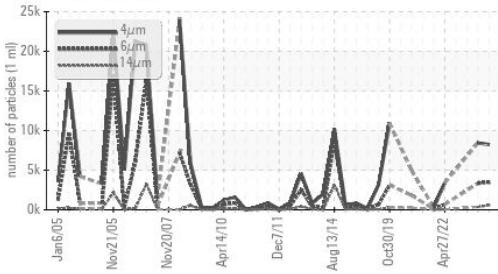
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>8235</b>	8438	---
Particles >6µm	ASTM D7647 >1300	<b>▲ 3479</b>	▲ 3330	---
Particles >14µm	ASTM D7647 >160	<b>▲ 566</b>	▲ 361	---
Particles >21µm	ASTM D7647 >40	<b>▲ 173</b>	▲ 112	---
Particles >38µm	ASTM D7647 >10	<b>10</b>	5	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/14	<b>▲ 20/19/16</b>	▲ 20/19/16	---

## FLUID DEGRADATION

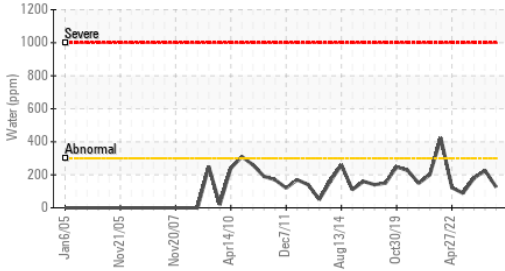
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.38</b>	0.30	0.30

# OIL ANALYSIS REPORT

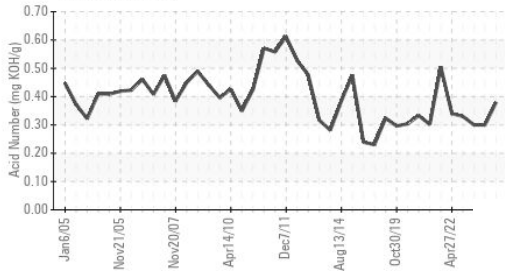
### ▲ Particle Trend



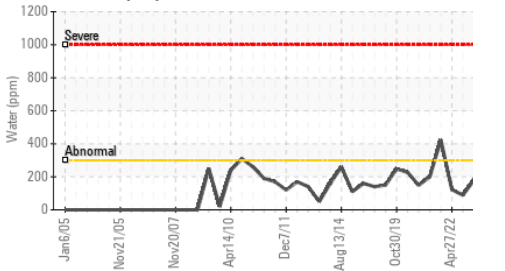
### Water (KF)



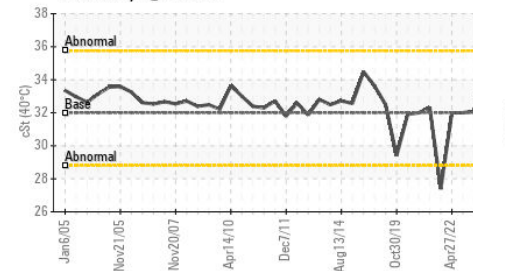
### Acid Number



### Water (KF)



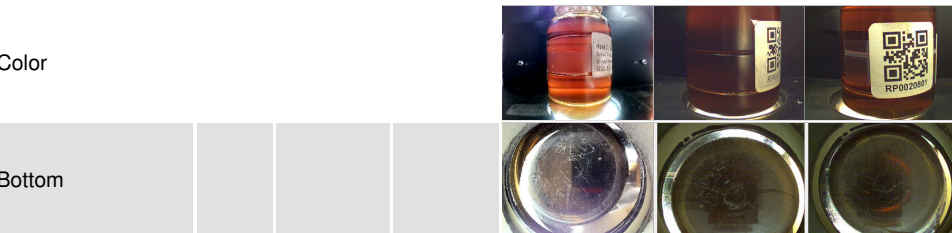
### Viscosity @ 40°C



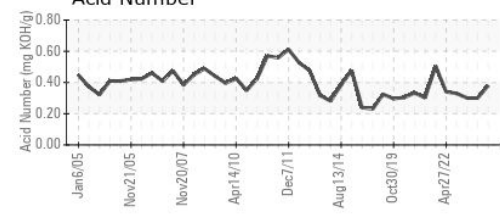
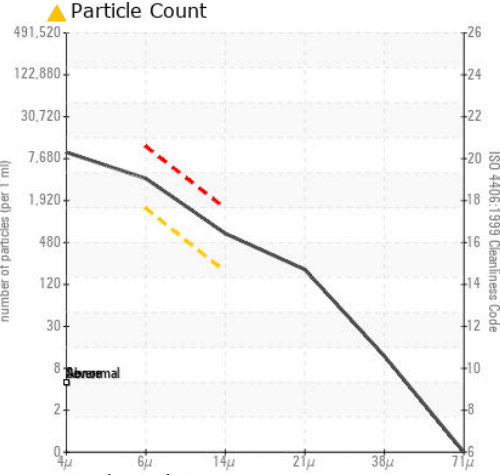
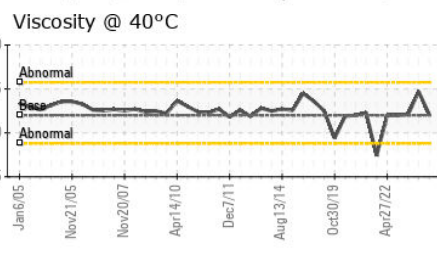
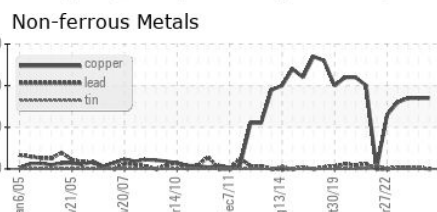
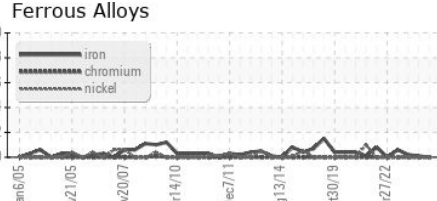
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	32.1	34.7

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0020399 **Received** : 18 Oct 2023  
**Lab Number** : 05982363 **Diagnosed** : 20 Oct 2023  
**Unique Number** : 10699658 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**ENTERPRISE PRODUCTS**  
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US 77580  
Contact: TOMMY EDWARDS  
tedwards@eprod.com  
T: (281)217-1411  
F: (281)385-4327

Certificate L2367  
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)