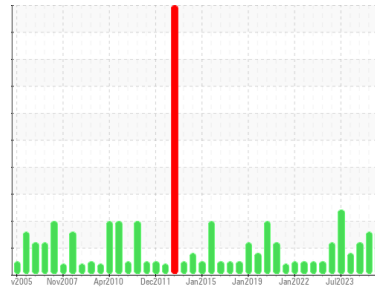




# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**082CM12002**  
 Component  
**Turbine**  
 Fluid  
**ROYAL PURPLE SYNFILM GT 32 (500 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**  
 Elemental level of silicon (Si) above normal. 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>RP0041037</b>	RP0041053	RP0028190
Sample Date	Client Info	<b>11 Jul 2024</b>	09 Apr 2024	21 Jan 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>ABNORMAL</b>	ABNORMAL	ATTENTION

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >15	<b>0</b>	0	0
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>	0	0
Lead	ppm	ASTM D5185m	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >5	<b>14</b>	14	15
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>	0	<1
Magnesium	ppm	ASTM D5185m	<b>6</b>	13	34
Calcium	ppm	ASTM D5185m	<b>&lt;1</b>	0	2
Phosphorus	ppm	ASTM D5185m	<b>&lt;1</b>	15	0
Zinc	ppm	ASTM D5185m	<b>0</b>	0	0

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>▲ 16</b>	1	<1
Sodium	ppm	ASTM D5185m	<b>2</b>	0	<1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	0
Water	%	ASTM D6304 >0.03	<b>0.006</b>	0.012	0.008
ppm Water	ppm	ASTM D6304 >300	<b>65</b>	121	88

## FLUID CLEANLINESS

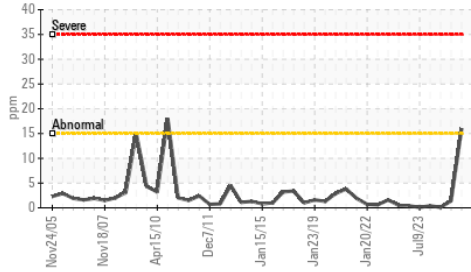
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>1258</b>	16175	2590
Particles >6µm	ASTM D7647 >1300	<b>467</b>	▲ 3342	1214
Particles >14µm	ASTM D7647 >160	<b>62</b>	● 265	● 184
Particles >21µm	ASTM D7647 >40	<b>22</b>	● 77	● 59
Particles >38µm	ASTM D7647 >10	<b>1</b>	1	3
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/14	<b>17/16/13</b>	▲ 21/19/15	● 19/17/15

## FLUID DEGRADATION

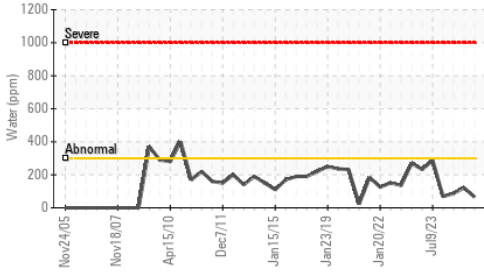
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.37</b>	0.39	0.38

# OIL ANALYSIS REPORT

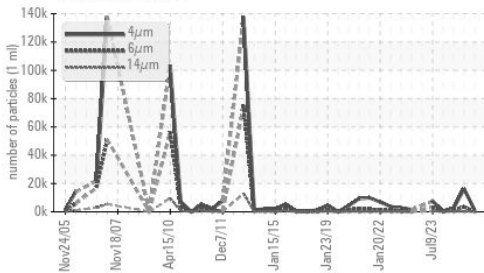
## ▲ Silicon (ppm)



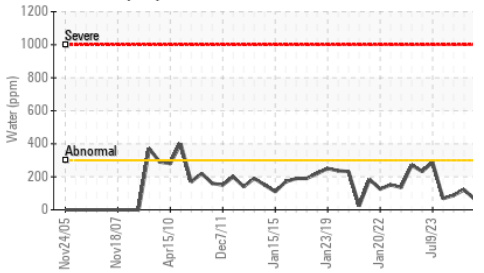
## Water (KF)



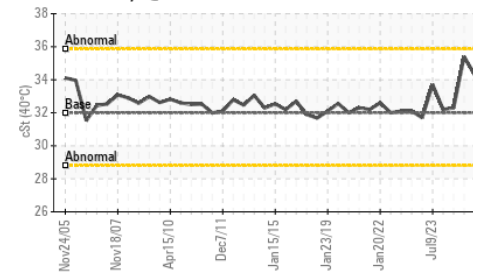
## Particle Trend



## Water (KF)



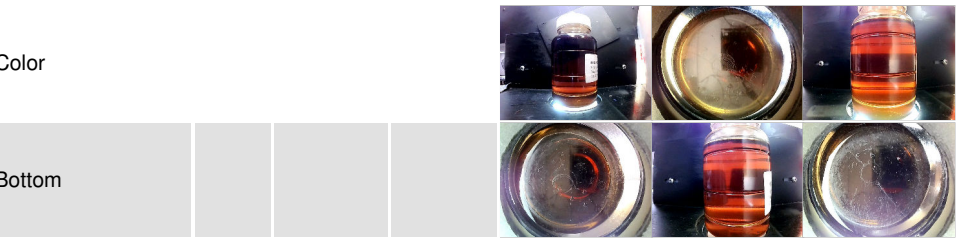
## Viscosity @ 40°C



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

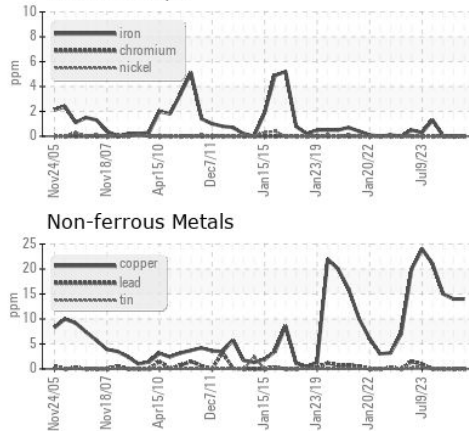
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	<b>34.3</b>	35.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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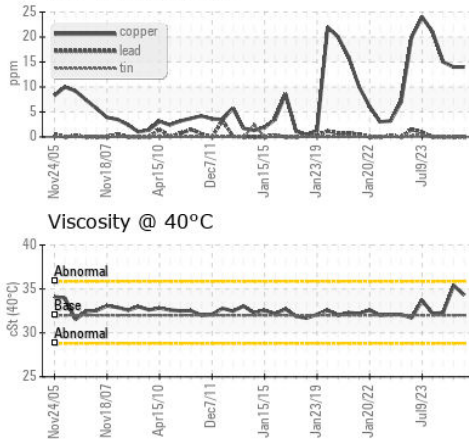


## GRAPHS

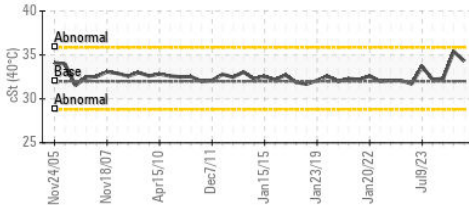
### Ferrous Alloys



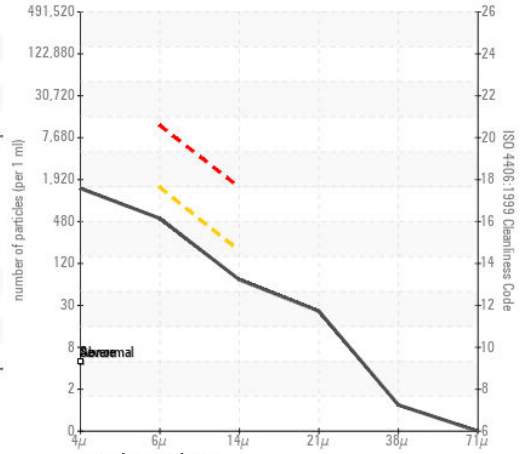
### Non-ferrous Metals



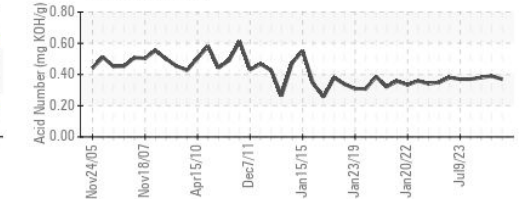
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : RP0041037

**Lab Number** : 06234925

**Unique Number** : 11123759

**Test Package** : IND 2 ( Additional Tests: PrtCount )

**Received** : 12 Jul 2024

**Tested** : 15 Jul 2024

**Diagnosed** : 15 Jul 2024 - Don Baldrige

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)

**ENTERPRISE PRODUCTS**

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