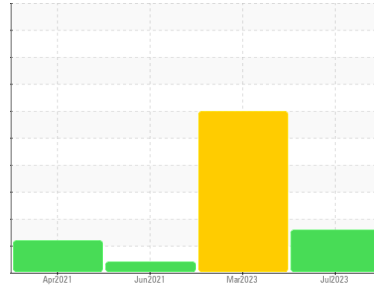


# PROBLEM SUMMARY

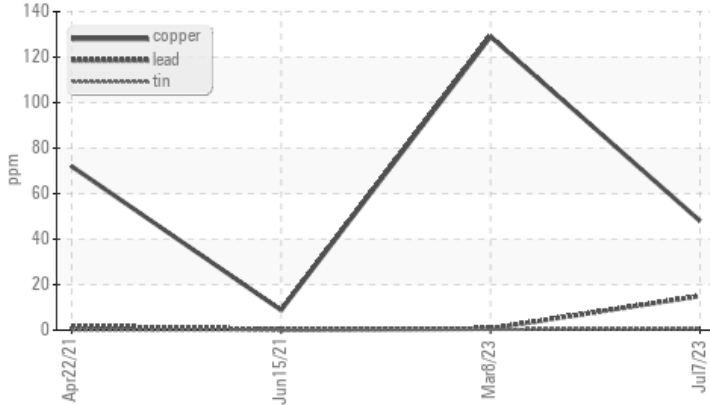
Sample Rating Trend



Machine Id  
**TWIN\_U2 TWIN\_U2\_P2**  
 Component  
**Non-Drive End Pump**  
 Fluid  
**ROYAL PURPLE SYNFILM GT 32 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Non-ferrous Metals



## RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	SEVERE	ABNORMAL
Lead	ppm	ASTM D5185m	>12	▲ 15	<1	<1
Copper	ppm	ASTM D5185m	>30	▲ 48	● 129	9

Customer Id: ENEASTPA  
 Sample No.: RP0033006  
 Lab Number: 05898668  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@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
Resample	---	---	?	We recommend an early resample to monitor this condition.

## HISTORICAL DIAGNOSIS

**08 Mar 2023 Diag: Don Baldrige**

### WEAR



We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. The copper level is severe. Bearing and/or bushing wear is indicated. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid.

view report



**15 Jun 2021 Diag: Don Baldrige**

### VIS DEBRIS



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. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



**22 Apr 2021 Diag: Angela Borella**

### WEAR



We advise that you inspect for the source(s) of wear. Resample at the next service interval to monitor. The copper level is abnormal. Bearing wear is indicated. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

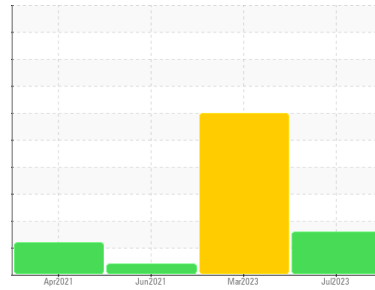
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**TWIN\_U2 TWIN\_U2\_P2**  
 Component  
**Non-Drive End Pump**  
 Fluid  
**ROYAL PURPLE SYNFILM GT 32 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

### ▲ Wear

Bearing and/or bushing wear is indicated.

### Contamination

There is no indication of any contamination 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>RP0033006</b>	RP0034755	RP0011512
Sample Date	Client Info	<b>07 Jul 2023</b>	08 Mar 2023	15 Jun 2021
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>	SEVERE	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >90	<b>12</b>	20	14
Chromium	ppm ASTM D5185m >5	<b>0</b>	<1	0
Nickel	ppm ASTM D5185m >5	<b>&lt;1</b>	2	0
Titanium	ppm ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >7	<b>&lt;1</b>	1	<1
Lead	ppm ASTM D5185m >12	<b>▲ 15</b>	<1	<1
Copper	ppm ASTM D5185m >30	<b>▲ 48</b>	129	9
Tin	ppm ASTM D5185m >9	<b>&lt;1</b>	<1	<1
Antimony	ppm ASTM D5185m	<b>---</b>	---	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	11
Barium	ppm ASTM D5185m	<b>2</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>0</b>	0	0
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m	<b>71</b>	1	57
Calcium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Phosphorus	ppm ASTM D5185m	<b>2</b>	2	6
Zinc	ppm ASTM D5185m	<b>11</b>	0	6

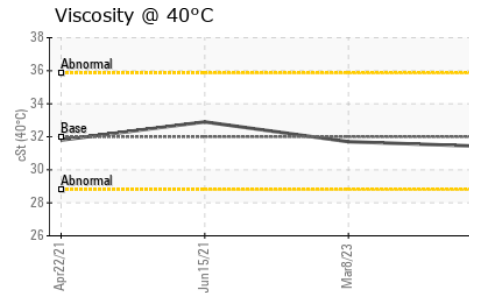
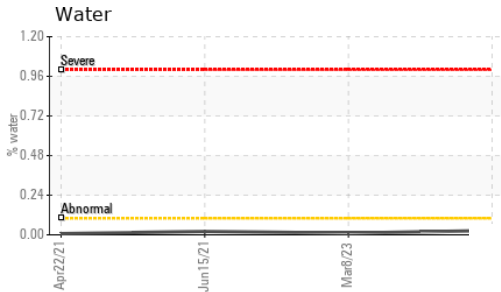
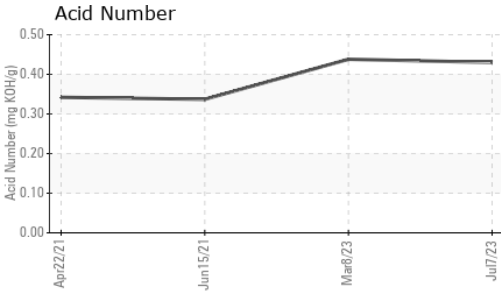
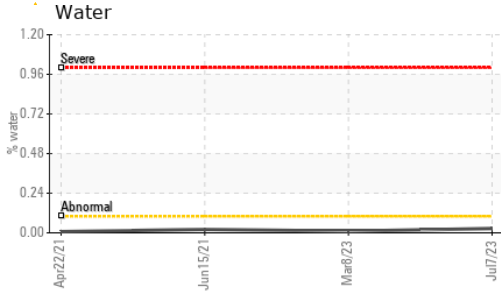
## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >60	<b>2</b>	6	<1
Sodium	ppm ASTM D5185m	<b>&lt;1</b>	0	<1
Potassium	ppm ASTM D5185m >20	<b>0</b>	<1	0
Water	% ASTM D6304	<b>0.026</b>	0.010	0.021
ppm Water	ppm ASTM D6304 >.1	<b>266.0</b>	108.3	217.9

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	<b>0.43</b>	0.438	0.337

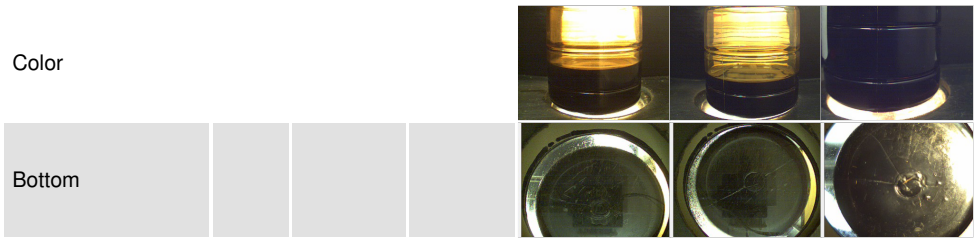
# OIL ANALYSIS REPORT



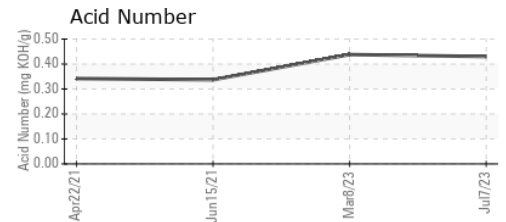
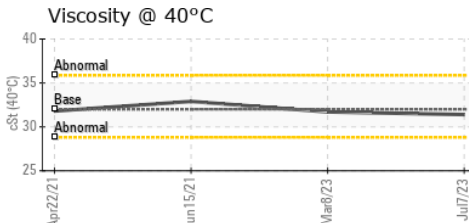
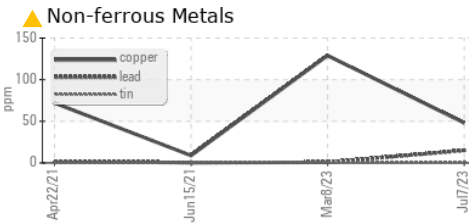
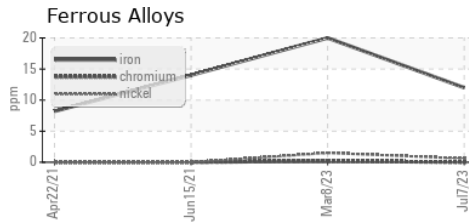
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 32	31.4	31.7	32.9

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



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0033006 **Received** : 14 Jul 2023  
**Lab Number** : 05898668 **Diagnosed** : 17 Jul 2023  
**Unique Number** : 10560024 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**ENERGY TRANSFER - TWIN OAKS**  
 144 CONCHESTER HIGHWAY  
 ASTON, PA  
 US 19014  
 Contact: QUITA MORGAN

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)

T: (610)220-8386

F: