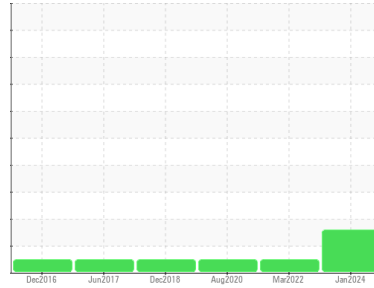


# OIL ANALYSIS REPORT

Sample Rating Trend



Area  
**Expansion Standardizing [908088376]**  
 Machine Id  
**[Expansion Standardizing] TK-86037 TK-86037**  
 Component  
**Gearbox**  
 Fluid  
**SYN 220 BLUE FOOD GRADE (--- QTS)**

## DIAGNOSIS

**Recommendation**  
 We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

**Wear**  
 All component wear rates are normal.

**Contamination**  
 Elemental level of silicon (Si) above normal.

**Fluid Condition**  
 The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PCA0098865</b>	PCA0012706	PCAI210391
Sample Date	Client Info	<b>13 Jan 2024</b>	27 Mar 2022	18 Aug 2020
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184	<b>16</b>	12	20
Iron	ppm ASTM D5185m >200	<b>6</b>	6	0
Chromium	ppm ASTM D5185m >15	<b>&lt;1</b>	0	0
Nickel	ppm ASTM D5185m >15	<b>0</b>	<1	<1
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm ASTM D5185m	<b>0</b>	<1	0
Aluminum	ppm ASTM D5185m >25	<b>1</b>	<1	0
Lead	ppm ASTM D5185m >100	<b>0</b>	0	0
Copper	ppm ASTM D5185m >200	<b>&lt;1</b>	0	0
Tin	ppm ASTM D5185m >25	<b>&lt;1</b>	<1	0
Antimony	ppm ASTM D5185m >5	<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	0
Barium	ppm ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Manganese	ppm ASTM D5185m	<b>0</b>	<1	0
Magnesium	ppm ASTM D5185m	<b>0</b>	0	0
Calcium	ppm ASTM D5185m	<b>0</b>	0	0
Phosphorus	ppm ASTM D5185m	<b>485</b>	588	615
Zinc	ppm ASTM D5185m	<b>0</b>	6	0
Sulfur	ppm ASTM D5185m	<b>910</b>	434	465

## CONTAMINANTS

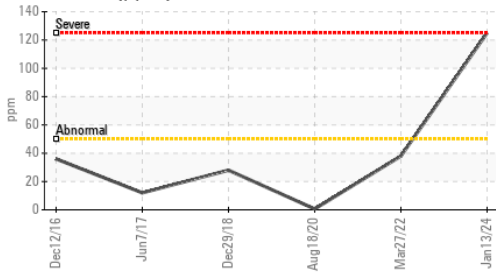
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >50	<b>▲ 125</b>	38	<1
Sodium	ppm ASTM D5185m	<b>0</b>	<1	0
Potassium	ppm ASTM D5185m >20	<b>&lt;1</b>	0	0

## FLUID DEGRADATION

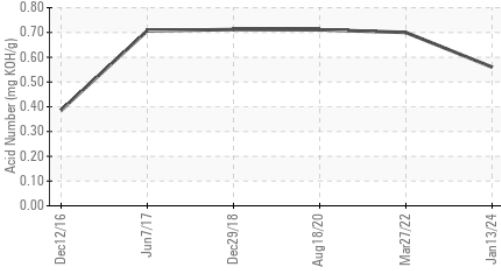
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	<b>0.56</b>	0.70	0.711

# OIL ANALYSIS REPORT

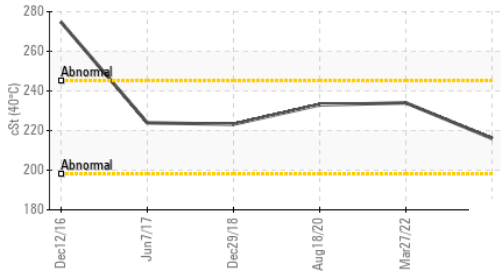
**▲ Silicon (ppm)**



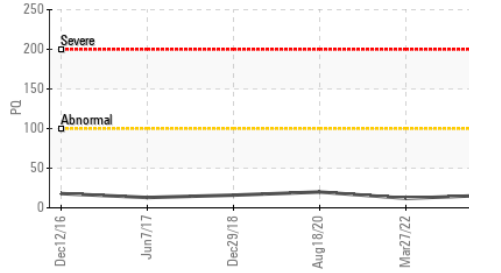
**Acid Number**



**Viscosity @ 40°C**



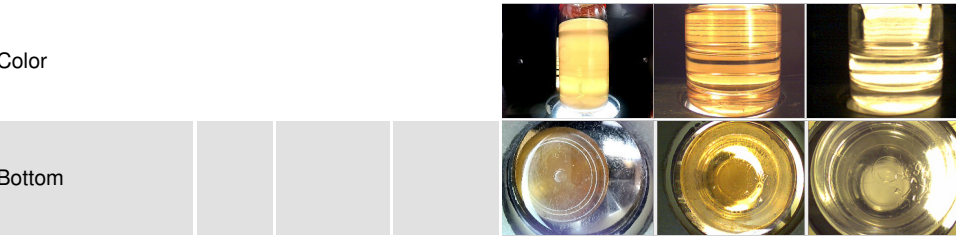
**PQ**



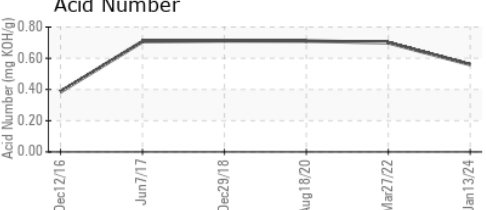
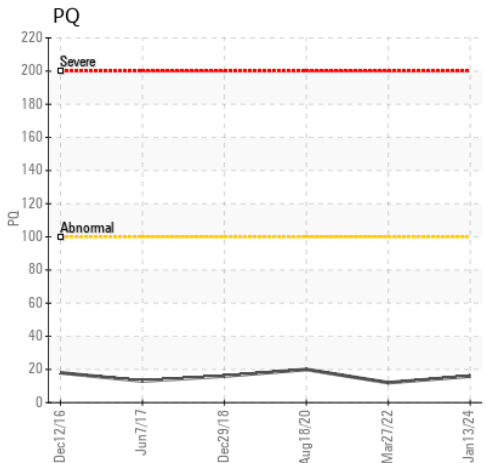
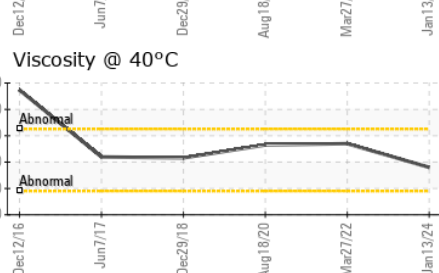
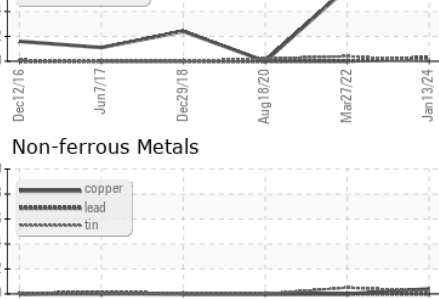
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	216	234	233

**SAMPLE IMAGES**



**GRAPHS**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0098865 **Received** : 24 Jan 2024  
**Lab Number** : 06069638 **Diagnosed** : 26 Jan 2024  
**Unique Number** : 10846315 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: PQ )

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)

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