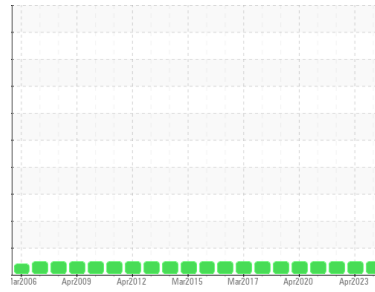




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**PHILADELPHIA P-50 X-4910 (S/N 04 UDH0868)**  
 Component  
**Gearbox**  
 Fluid  
**ROYAL PURPLE SYNERGY 140/320 (6 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### 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>RP0035874</b>	RP0028427	RP0018243
Sample Date	Client Info		<b>17 Apr 2024</b>	23 Apr 2023	01 May 2022
Machine Age	mths	Client Info	<b>0</b>	0	0
Oil Age	mths	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	<b>15</b>	19	15
Chromium	ppm	ASTM D5185m >15	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >15	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>4</b>	<1	3
Lead	ppm	ASTM D5185m >100	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m >200	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >25	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m >5	<b>---</b>	---	---
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	<1
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>3</b>	4	3
Calcium	ppm	ASTM D5185m	<b>419</b>	407	326
Phosphorus	ppm	ASTM D5185m 200	<b>222</b>	211	203
Zinc	ppm	ASTM D5185m	<b>0</b>	6	1

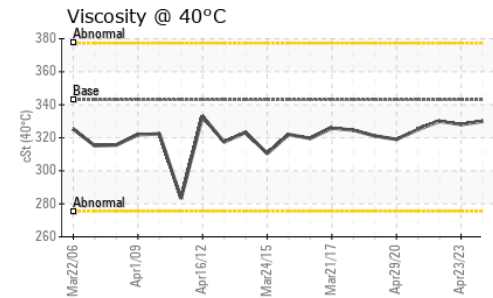
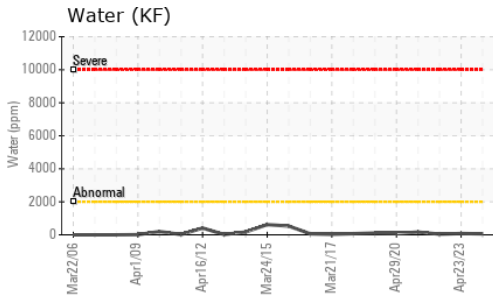
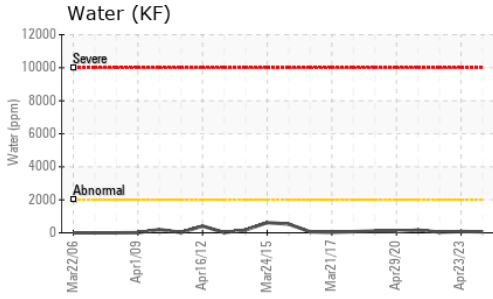
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>11</b>	16	13
Sodium	ppm	ASTM D5185m	<b>3</b>	1	0
Potassium	ppm	ASTM D5185m >20	<b>2</b>	1	2
Water	%	ASTM D6304 >0.2	<b>0.005</b>	0.007	0.004
ppm Water	ppm	ASTM D6304 >2000	<b>60</b>	79.3	42.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.2	<b>0.82</b>	0.73	0.732

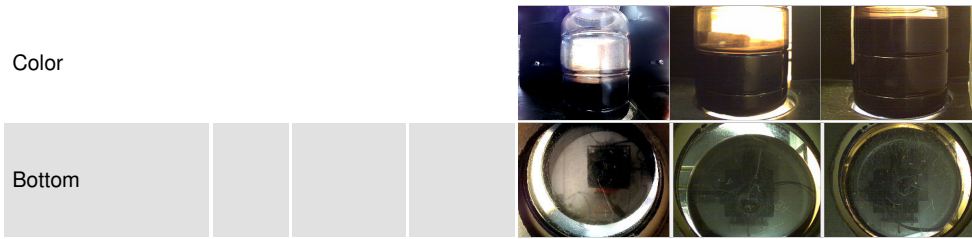
# OIL ANALYSIS REPORT



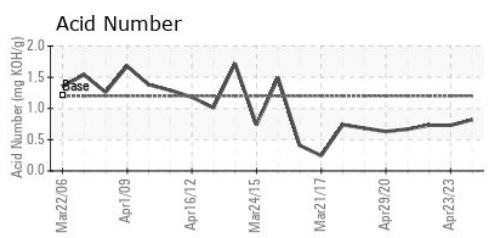
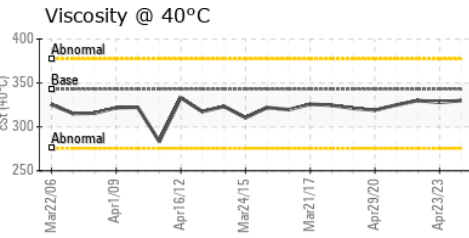
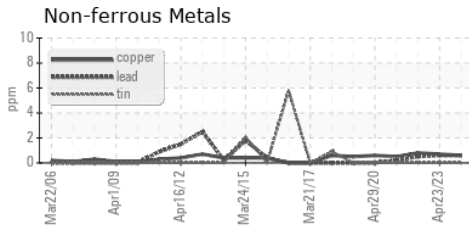
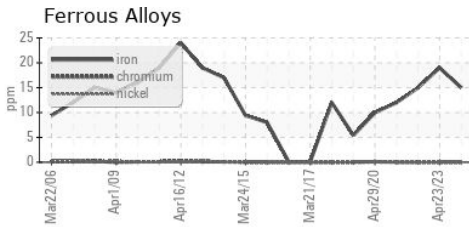
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 343	330	328	330

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



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0035874  
**Lab Number** : 06153208  
**Unique Number** : 10983286  
**Test Package** : IND 2  
**Received** : 18 Apr 2024  
**Tested** : 19 Apr 2024  
**Diagnosed** : 22 Apr 2024 - Don Baldrige

**SOLVAY**  
 7910 MT JOY RD  
 MOUNT PLEASANT, TN  
 US 38474  
 Contact: JASON MILLER  
 JASON.MILLER@syensqo.com  
 T: (931)379-3257  
 F: (931)379-1477

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)