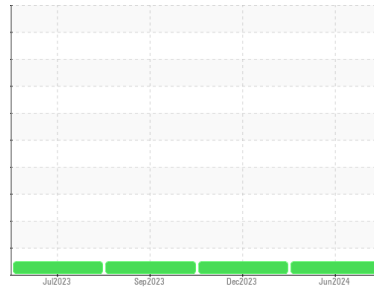




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**IR COMPRESSOR 4 (S/N F37161U00007)**  
 Component  
**Screw Compressor**  
 Fluid  
**ROYAL PURPLE SYNFILM 46 (26 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The water content is negligible. 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>RP0037236</b>	RP0035996	RP0035989
Sample Date	Client Info			<b>01 Jun 2024</b>	06 Dec 2023	10 Sep 2023
Machine Age	hrs	Client Info		<b>35413</b>	32404	31298
Oil Age	hrs	Client Info		<b>0</b>	0	31298
Oil Changed	Client Info			<b>Not Changed</b>	N/A	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>60	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m		<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	>5	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>30	<b>&lt;1</b>	2	2
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

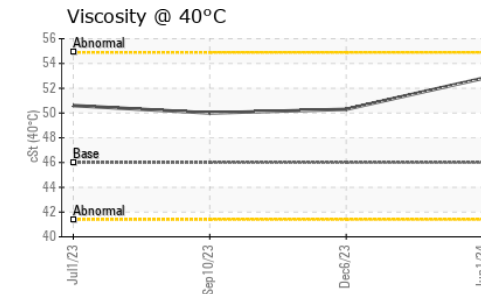
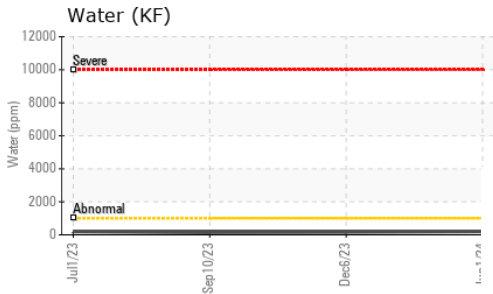
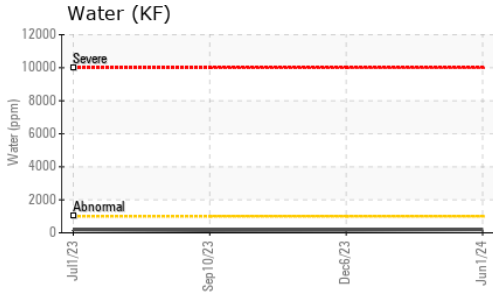
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>54</b>	52	35
Calcium	ppm	ASTM D5185m		<b>&lt;1</b>	2	0
Phosphorus	ppm	ASTM D5185m		<b>&lt;1</b>	<1	4
Zinc	ppm	ASTM D5185m		<b>19</b>	0	12

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185m		<b>6</b>	9	6
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	1
Water	%	ASTM D6304	>0.1	<b>0.019</b>	0.015	0.014
ppm Water	ppm	ASTM D6304	>1000	<b>199</b>	158	141.5

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.25	<b>0.35</b>	0.30	0.30

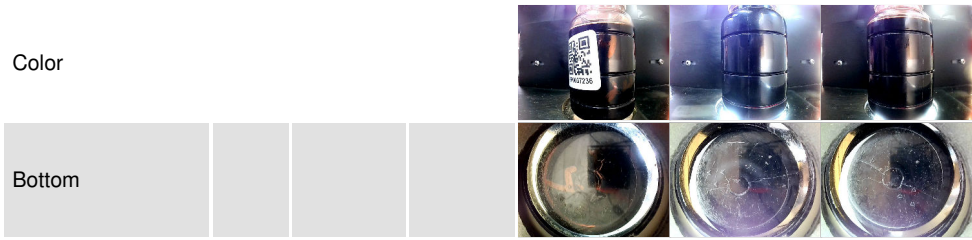
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

# OIL ANALYSIS REPORT

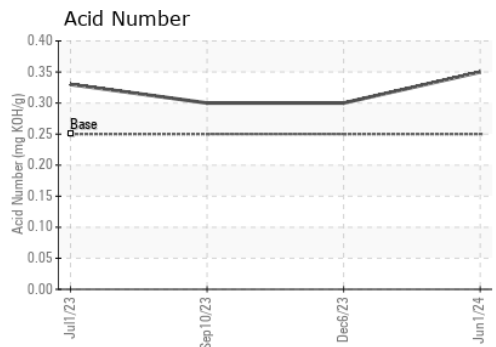
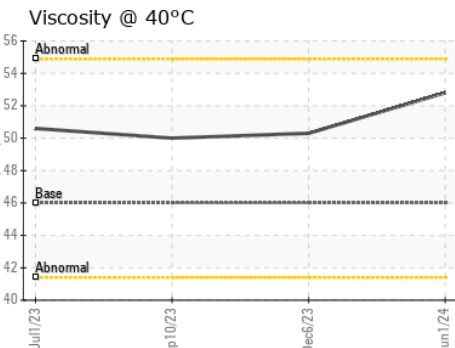
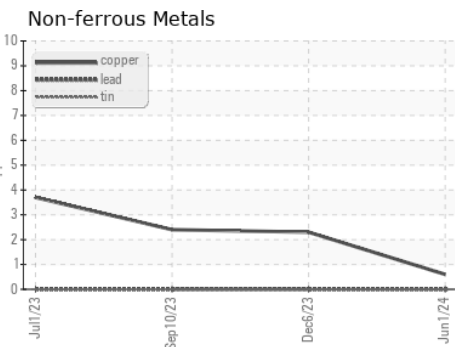
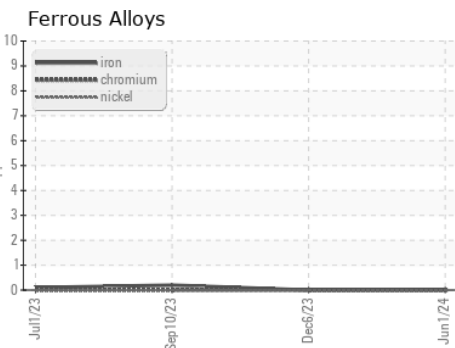


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	<b>52.8</b>	50.3	50.0

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0037236  
**Lab Number** : **06202866**  
**Unique Number** : 11070327  
**Test Package** : IND 2

**Received** : 07 Jun 2024  
**Tested** : 10 Jun 2024  
**Diagnosed** : 10 Jun 2024 - Don Baldrige

**CARLSTAR GROUP**  
 520 JD YARNELL INDUSTRIAL PKWY  
 CLINTON, TN  
 US 37716  
 Contact: JOEL SPROW

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: (865)463-3665

F: (865)463-3696