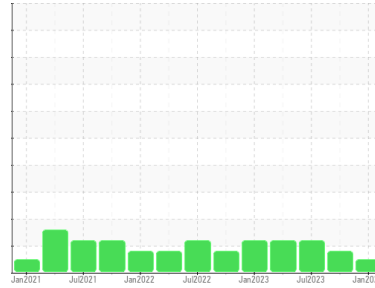




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**Bulk Oil Storage**  
 Machine Id  
**RP 460 Storage**

Component  
**Reservoir Pump**  
 Fluid  
**ROYAL PURPLE SYNERGY 140/460 (55 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. 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>WC0886169</b>	WC0816892	WC0726069
Sample Date	Client Info		<b>24 Jan 2024</b>	30 Oct 2023	26 Jul 2023
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>	ABNORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>90	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>3	<b>&lt;1</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>0</b>	0	1
Copper	ppm	ASTM D5185m	>30	<b>0</b>	<1	0
Tin	ppm	ASTM D5185m	>9	<b>&lt;1</b>	0	<1
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>	0	0
Magnesium	ppm	ASTM D5185m		<b>3</b>	1	15
Calcium	ppm	ASTM D5185m		<b>0</b>	2	<1
Phosphorus	ppm	ASTM D5185m	200	<b>472</b>	512	324
Zinc	ppm	ASTM D5185m		<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m		<b>12635</b>	14213	15052

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>60	<b>2</b>	5	2
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	2

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>1688</b>	▲ 13961	▲ 100534
Particles >6µm	ASTM D7647	>1300	<b>253</b>	1207	▲ 10061
Particles >14µm	ASTM D7647	>160	<b>6</b>	18	15
Particles >21µm	ASTM D7647	>40	<b>1</b>	4	4
Particles >38µm	ASTM D7647	>10	<b>0</b>	1	3
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	2
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>18/15/10</b>	▲ 21/17/11	▲ 24/21/11

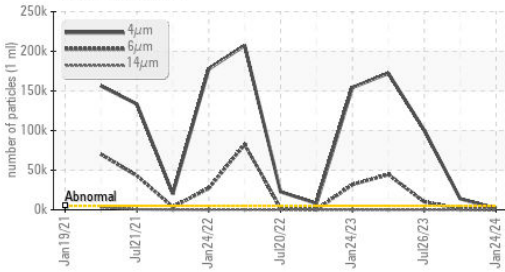
## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	1.2	<b>0.97</b>	0.86	0.90

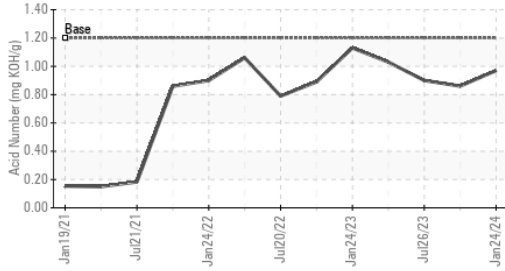


# OIL ANALYSIS REPORT

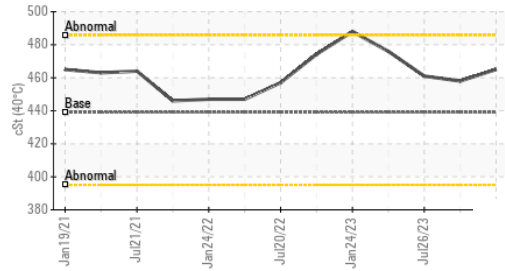
Particle Trend



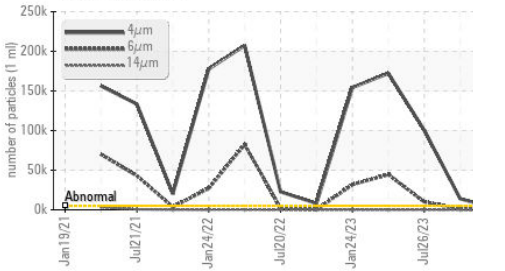
Acid Number



Viscosity @ 40°C



Particle Trend



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	>.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

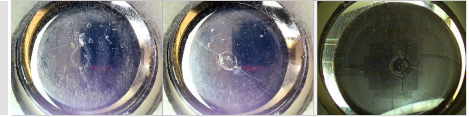
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 439	465	458	461

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

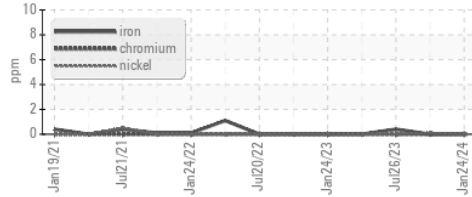


Bottom

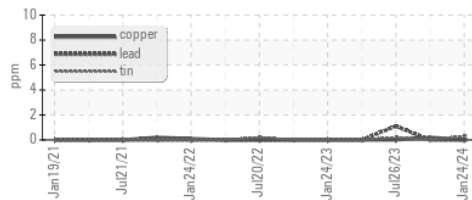


## GRAPHS

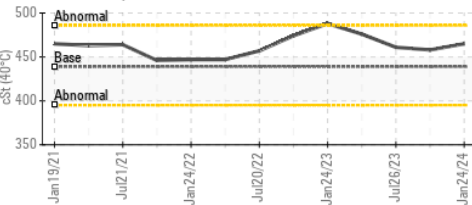
Ferrous Alloys



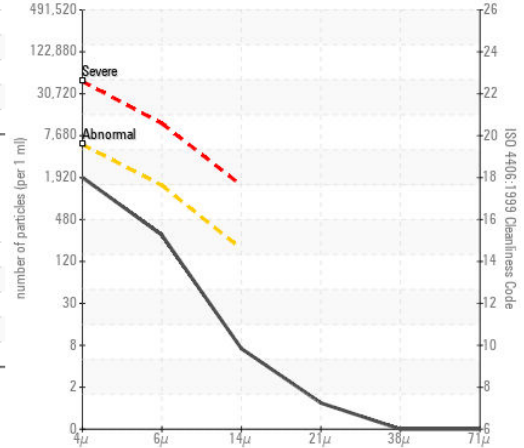
Non-ferrous Metals



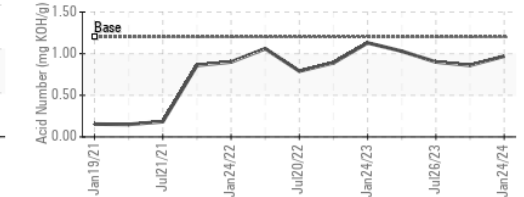
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0886169      Received : 31 Jan 2024  
 Lab Number : 06075706      Diagnosed : 01 Feb 2024  
 Unique Number : 10857797      Diagnostician : Don Baldrige

Test Package : IND 2 ( Additional Tests: PrtCount )

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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