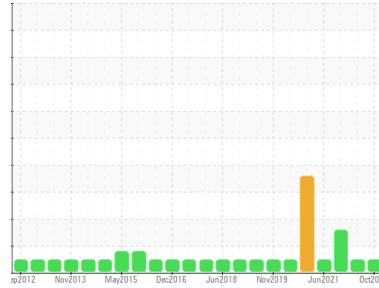




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**AREA I [500307177]**  
 Machine Id  
**LIGHTNIN A1440 (S/N AD-25-12)**  
 Component  
**Gearbox**  
 Fluid  
**ROYAL PURPLE SYNFILM GT 220 (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>WC0844048</b>	WC0804406	WC0735627
Sample Date	Client Info		<b>26 Oct 2023</b>	03 May 2023	31 Oct 2022
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	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	ABNORMAL

## 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	
Iron	ppm	ASTM D5185m	>200	<b>111</b>	23	21
Chromium	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>27</b>	6	9
Lead	ppm	ASTM D5185m	>100	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>200	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>25	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185m	>5	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</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>1</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>109</b>	83	44
Calcium	ppm	ASTM D5185m		<b>21</b>	5	3
Phosphorus	ppm	ASTM D5185m		<b>21</b>	9	16
Zinc	ppm	ASTM D5185m		<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m		<b>22409</b>	22568	20949

## CONTAMINANTS

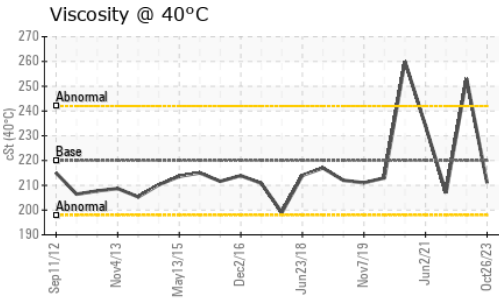
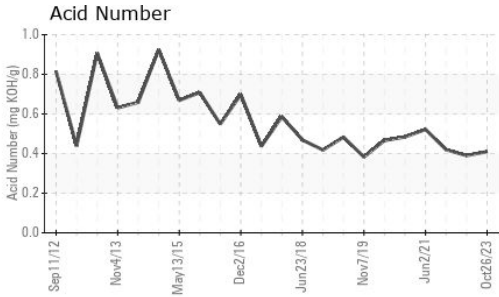
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	<b>13</b>	4	3
Sodium	ppm	ASTM D5185m		<b>2</b>	1	2
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.41</b>	0.39	0.42



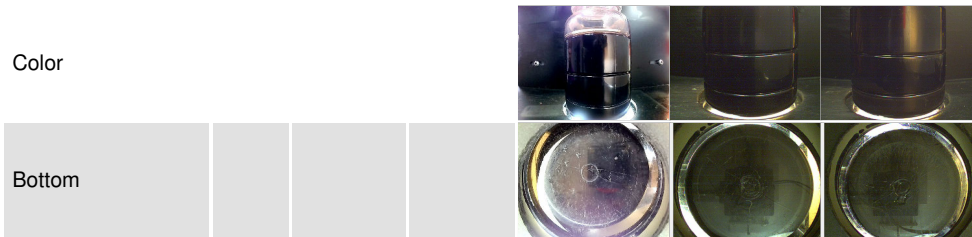
# OIL ANALYSIS REPORT



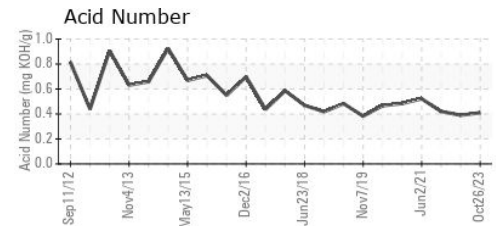
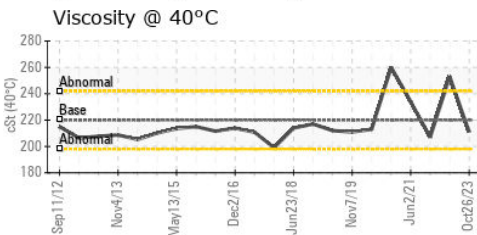
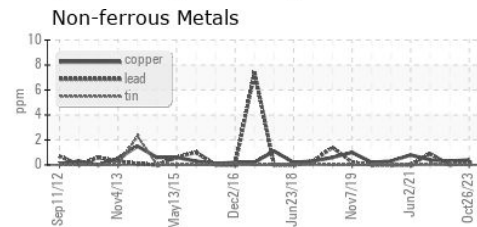
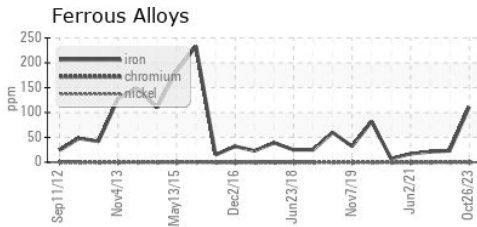
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	MODER
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE
Sand/Dirt	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	<b>211</b>	253

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.** : WC0844048 **Received** : 21 Nov 2023  
**Lab Number** : 06014579 **Diagnosed** : 24 Nov 2023  
**Unique Number** : 10753723 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2

**SI GROUP INC - ALBEMARLE**  
 725 CANNON BRIDGE RD  
 ORANGEBURG, SC  
 US 29115

Contact: ERIC PROVEAUX  
 eric.proveaux@contractors.sigroup.com  
 T: (803)539-5228  
 F: (803)539-5426

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)