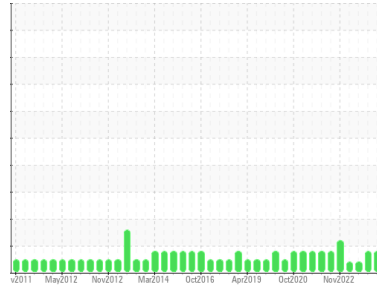




# PROBLEM SUMMARY

Sample Rating Trend



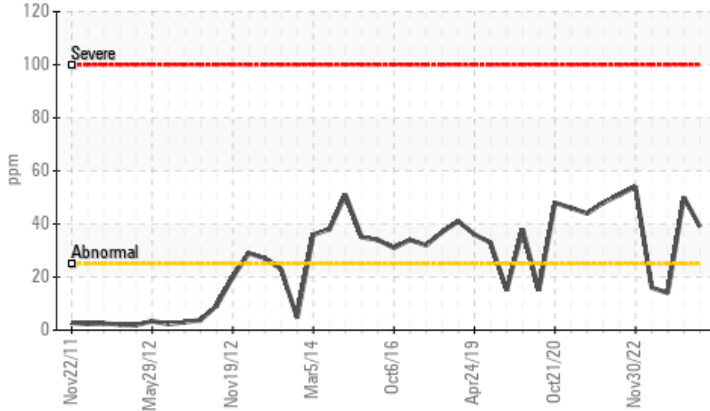
**WEAR**



Area  
**AREA III [500313623]**  
 Machine Id  
**LIGHTNIN A9125 (S/N AD-15-29)**  
 Component  
**Gearbox**  
 Fluid  
**ROYAL PURPLE SYNERGY 90/150 (8 GAL)**

## COMPONENT CONDITION SUMMARY

▲ Aluminum (ppm)



## RECOMMENDATION

No corrective action is recommended at this time.  
 Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status	ABNORMAL	ABNORMAL	ATTENTION		
Aluminum	ppm	ASTM D5185m >25	▲ 39	▲ 50	14

Customer Id: ALBORA  
 Sample No.: WC0810647  
 Lab Number: 06014574  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 09 Aug 2023 Diag: Don Baldrige

#### WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. The aluminum level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 10 May 2023 Diag: Don Baldrige

#### VISCOSITY



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is higher than normal. Confirm oil type. The AN level is acceptable for this fluid.

view report



### 07 Feb 2023 Diag: Don Baldrige

#### VISCOSITY



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is higher than normal. Confirm oil type. The AN level is acceptable for this fluid.

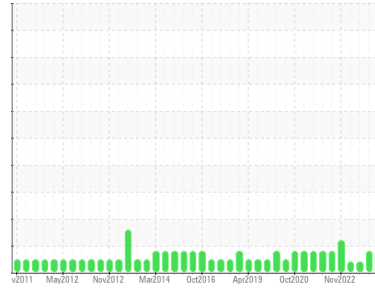
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area  
**AREA III [500313623]**  
 Machine Id  
**LIGHTNIN A9125 (S/N AD-15-29)**  
 Component  
**Gearbox**  
 Fluid  
**ROYAL PURPLE SYNERGY 90/150 (8 GAL)**

## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### ▲ Wear

The aluminum level is abnormal. All other 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>WC0810647</b>	WC0810657	WC0804404
Sample Date	Client Info		<b>31 Oct 2023</b>	09 Aug 2023	10 May 2023
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>ABNORMAL</b>	ABNORMAL	ATTENTION

## 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>6</b>	6	3
Chromium	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>▲ 39</b>	▲ 50	14
Lead	ppm	ASTM D5185m	>100	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D5185m	>200	<b>&lt;1</b>	4	<1
Tin	ppm	ASTM D5185m	>25	<b>0</b>	0	0
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	0
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	7	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	3	1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>28</b>	5	3
Calcium	ppm	ASTM D5185m		<b>4</b>	5	0
Phosphorus	ppm	ASTM D5185m	200	<b>247</b>	330	26
Zinc	ppm	ASTM D5185m		<b>8</b>	27	22
Sulfur	ppm	ASTM D5185m		<b>26436</b>	26589	22049

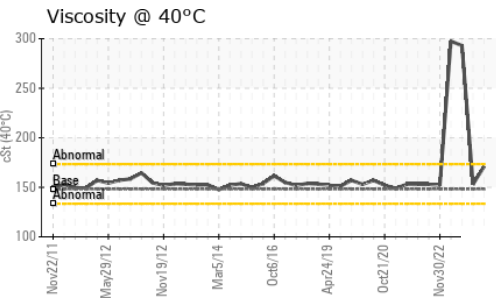
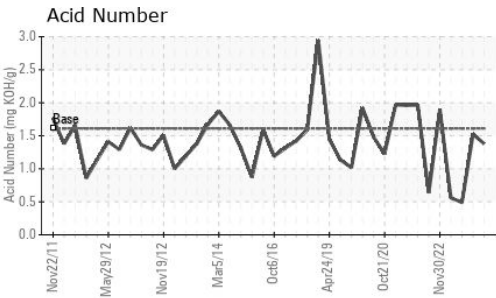
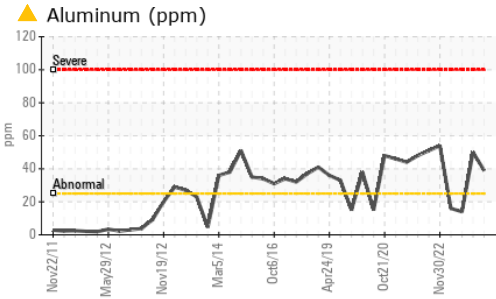
## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	<b>11</b>	13	6
Sodium	ppm	ASTM D5185m		<b>0</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	1.61	<b>1.38</b>	1.522	0.49

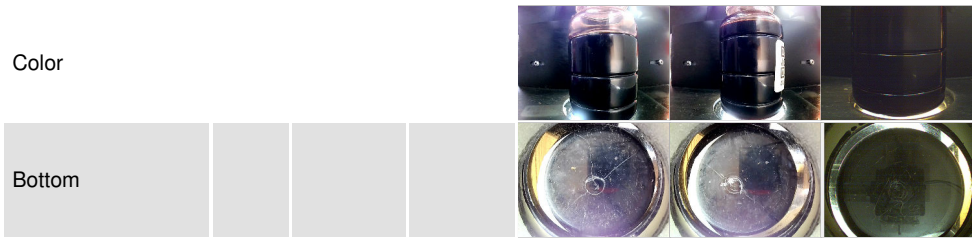
# OIL ANALYSIS REPORT



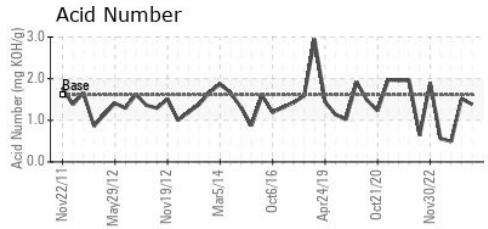
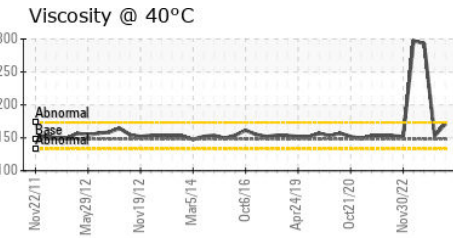
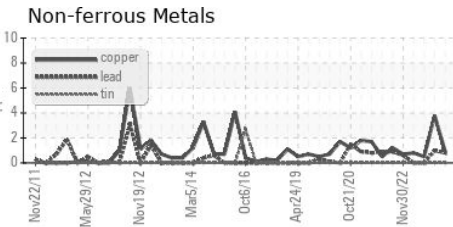
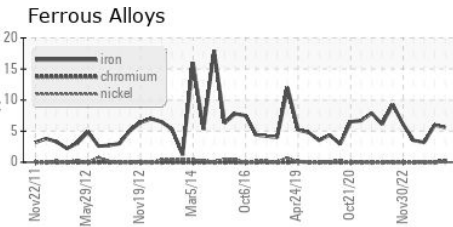
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	LIGHT	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	148.2	171	153 ▲ 293

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0810647 **Received** : 21 Nov 2023  
**Lab Number** : **06014574** **Diagnosed** : 24 Nov 2023  
**Unique Number** : 10753718 **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)