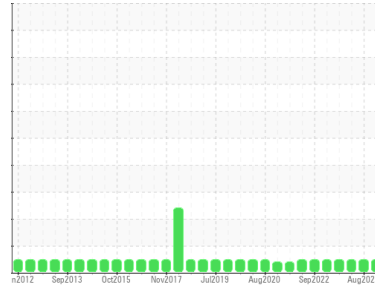




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**AREA III [500314926]**  
 Machine Id  
**LIGHTNIN A9321 (S/N AD-15-27)**  
 Component  
**Gearbox**  
 Fluid  
**ROYAL PURPLE SYNERGY 90/150 (7 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>WC0844028</b>	WC0810658	WC0810150
Sample Date	Client Info		<b>14 Nov 2023</b>	21 Aug 2023	30 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>NORMAL</b>	NORMAL	NORMAL

## 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>142</b>	154	133
Chromium	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	<1	0
Lead	ppm	ASTM D5185m >100	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >200	<b>6</b>	2	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>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>	3	<1
Molybdenum	ppm	ASTM D5185m	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	1	1
Magnesium	ppm	ASTM D5185m	<b>2</b>	4	<1
Calcium	ppm	ASTM D5185m	<b>1</b>	2	2
Phosphorus	ppm	ASTM D5185m 200	<b>289</b>	284	313
Zinc	ppm	ASTM D5185m	<b>4</b>	8	4
Sulfur	ppm	ASTM D5185m	<b>27387</b>	29230	33102

## CONTAMINANTS

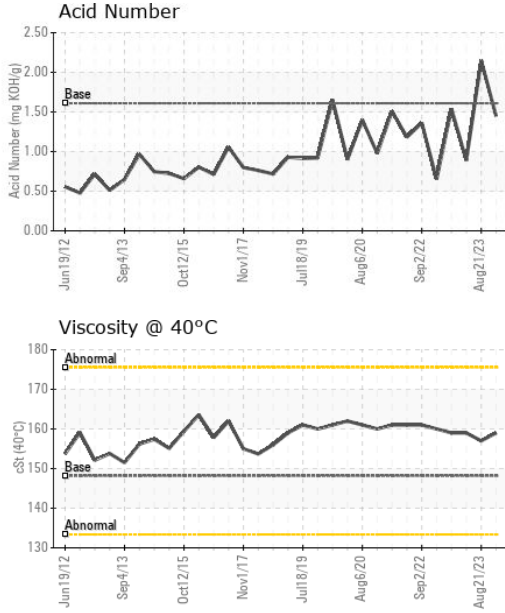
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>1</b>	2	<1
Sodium	ppm	ASTM D5185m	<b>1</b>	0	<1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.61	<b>1.45</b>	2.149	0.89



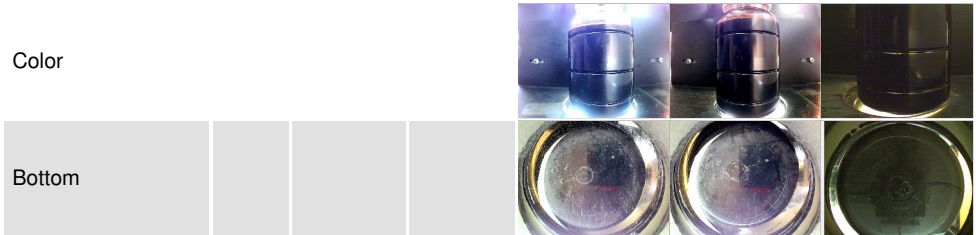
# OIL ANALYSIS REPORT



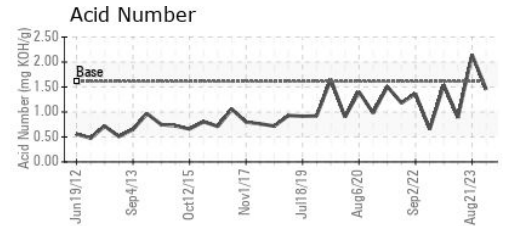
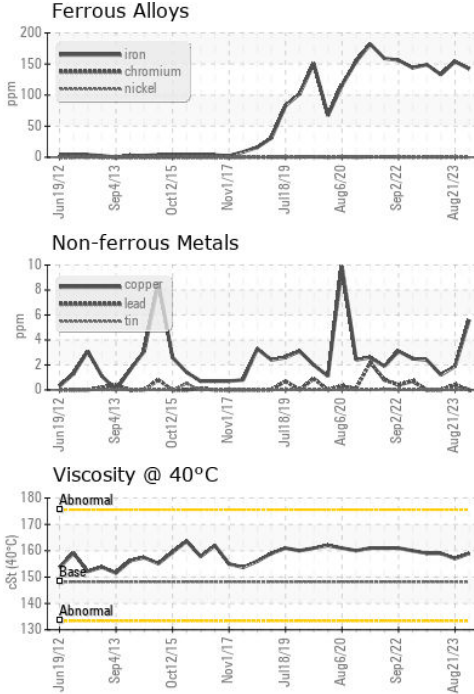
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	148.2	159	157

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



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0844028 **Recieved** : 17 Jan 2024  
**Lab Number** : 06063729 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10835111 **Diagnostician** : Doug Bogart  
**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)