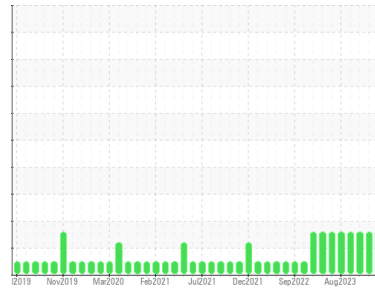




# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area

**GFM**  
Machine Id

## CHUCKHEAD B RESERVOIR

Component

**Gearbox**

Fluid

**ROYAL PURPLE SYNERGY 140/680 (220 GAL)**

### DIAGNOSIS

#### ▲ Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

#### ▲ Wear

Bearing and/or bushing wear is indicated.

#### 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>WC0905641</b>	WC0905604	WC0826336
Sample Date	Client Info		<b>09 Apr 2024</b>	04 Mar 2024	29 Nov 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	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>65</b>	70	60
Chromium	ppm	ASTM D5185m >15	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m >15	<b>6</b>	6	5
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>6</b>	6	6
Lead	ppm	ASTM D5185m >100	<b>6</b>	5	4
Copper	ppm	ASTM D5185m >200	<b>▲ 326</b>	▲ 371	▲ 316
Tin	ppm	ASTM D5185m >25	<b>▲ 29</b>	▲ 33	▲ 29
Vanadium	ppm	ASTM D5185m	<b>&lt;1</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>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>1</b>	<1	0
Manganese	ppm	ASTM D5185m	<b>2</b>	<1	1
Magnesium	ppm	ASTM D5185m	<b>27</b>	29	30
Calcium	ppm	ASTM D5185m 34	<b>22</b>	0	16
Phosphorus	ppm	ASTM D5185m 200	<b>254</b>	215	207
Zinc	ppm	ASTM D5185m	<b>465</b>	464	436
Sulfur	ppm	ASTM D5185m	<b>17278</b>	14925	13490

### CONTAMINANTS

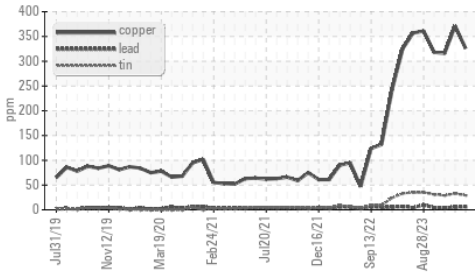
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>8</b>	9	8
Sodium	ppm	ASTM D5185m	<b>2</b>	2	2
Potassium	ppm	ASTM D5185m >20	<b>2</b>	1	1

### FLUID DEGRADATION

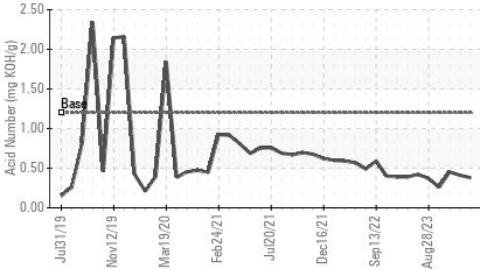
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.2	<b>0.38</b>	0.41	0.453

# OIL ANALYSIS REPORT

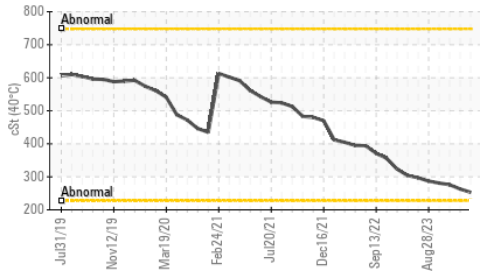
### Non-ferrous Metals



### Acid Number



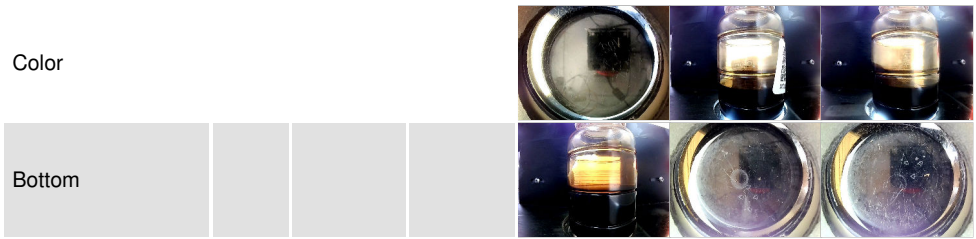
### Viscosity @ 40°C



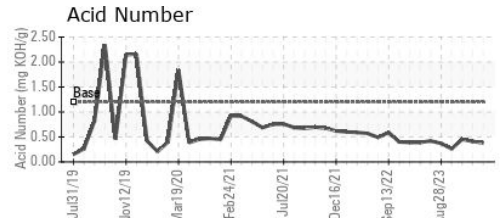
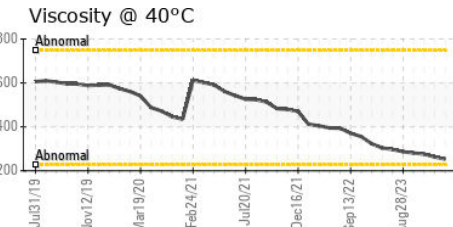
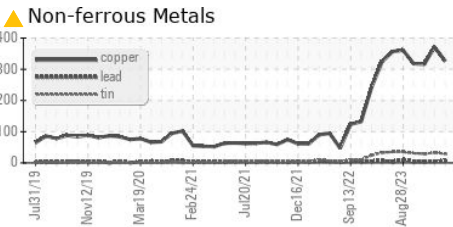
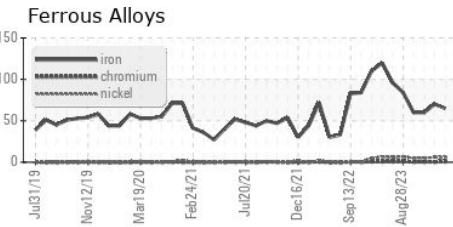
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	<b>253</b>	263	276

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0905641      **Received** : 10 Apr 2024  
**Lab Number** : **06144465**      **Tested** : 11 Apr 2024  
**Unique Number** : 10969273      **Diagnosed** : 12 Apr 2024 - Angela Borella  
**Test Package** : IND 2

**ALLVAC SAF CONDITIONING**  
 3750 ALLOY WAY  
 MONROE, NC  
 US 28110  
 Contact: JEREMY ALMOND  
 jeremy.almond@atimetals.com

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)