



# OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area

**Action Newark**

Machine Id

**TUG 5600 - TUG**

Component

**Transmission (Auto)**

Fluid

{not provided} (--- GAL)



## DIAGNOSIS

### ▲ Recommendation

We recommend that you drain the fluid and perform a filter service on this component if not already done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

### ▲ Wear

The iron level is severe. The aluminum level is abnormal.

### ▲ Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material.

### Fluid Condition

The fluid is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0850651</b>	---	---
Sample Date	Client Info			<b>25 Mar 2024</b>	---	---
Machine Age	hrs	Client Info		<b>4851</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>SEVERE</b>	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	<b>NEG</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>160	<b>▲ 324</b>	---	---
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>50	<b>▲ 60</b>	---	---
Lead	ppm	ASTM D5185m	>50	<b>10</b>	---	---
Copper	ppm	ASTM D5185m	>225	<b>143</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>9</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>38</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>2</b>	---	---
Manganese	ppm	ASTM D5185m		<b>10</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>13</b>	---	---
Calcium	ppm	ASTM D5185m		<b>229</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>258</b>	---	---
Zinc	ppm	ASTM D5185m		<b>151</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>1878</b>	---	---

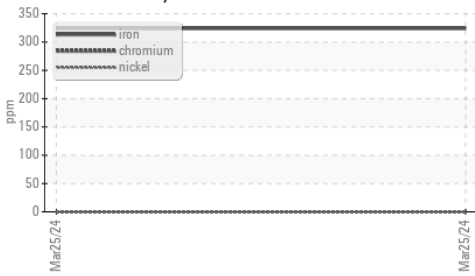
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<b>▲ 24</b>	---	---
Sodium	ppm	ASTM D5185m		<b>15</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	---	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	---	---
Free Water	scalar	*Visual		<b>NEG</b>	---	---

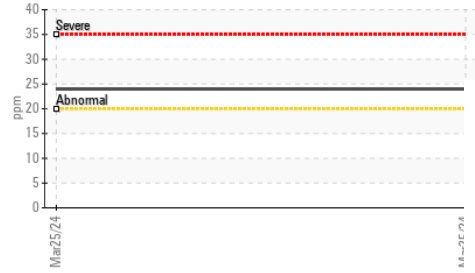


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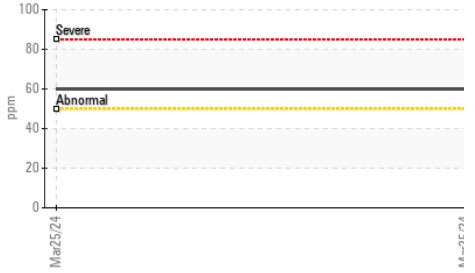
## ▲ Ferrous Alloys



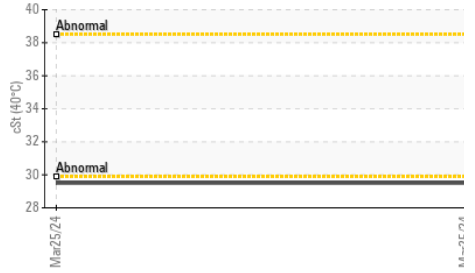
## ▲ Silicon (ppm)



## ▲ Aluminum (ppm)



## Viscosity @ 40°C



## FLUID PROPERTIES

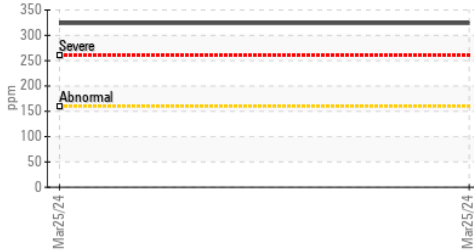
method	limit/base	current	history1	history2
Visc @ 40°C	cSt	29.5	---	---

## SAMPLE IMAGES

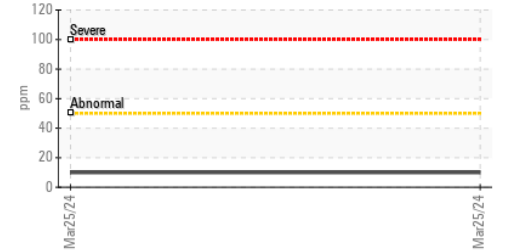
method	limit/base	current	history1	history2
Color		no image	no image	no image
Bottom		no image	no image	no image

## GRAPHS

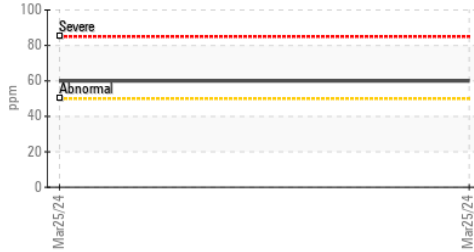
### ▲ Iron (ppm)



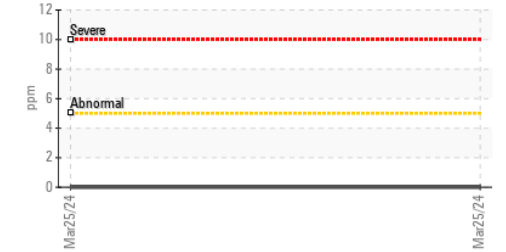
### Lead (ppm)



### ▲ Aluminum (ppm)



### Chromium (ppm)



### ▲ Copper (ppm)



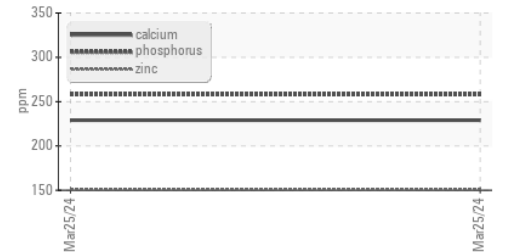
### ▲ Silicon (ppm)



### Viscosity @ 40°C



### Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0850651

Lab Number : 06140337

Unique Number : 10965145

Test Package : MOB 1

Received : 05 Apr 2024

Tested : 08 Apr 2024

Diagnosed : 09 Apr 2024 - Don Baldrige

INTERSTATE WASTE-NEWARK

110 EVERGREEN AVE, BAY 3

NEWARK, NJ

US 07114

Contact: Robert Witynski

RWitynski@interstatewaste.com

T:

F:

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)