



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**37371 (TRACE PO 36368)**  
 Machine Id  
**PAOTS0002-08142023TS2C**  
 Component  
**Hydraulic System**  
 Fluid  
**CASTR (--- GAL)**



## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target SAE AS4059 (replaces NAS 1638) cleanliness code. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### 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>WC05926943</b>	---	---
Sample Date	Client Info	<b>15 Aug 2023</b>	---	---
Machine Age	hrs Client Info	<b>0</b>	---	---
Oil Age	hrs Client Info	<b>0</b>	---	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>NORMAL</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185m	>20	<b>0</b>	---	---
Chromium ppm ASTM D5185m	>20	<b>0</b>	---	---
Nickel ppm ASTM D5185m	>20	<b>0</b>	---	---
Titanium ppm ASTM D5185m		<b>0</b>	---	---
Silver ppm ASTM D5185m		<b>0</b>	---	---
Aluminum ppm ASTM D5185m	>20	<b>0</b>	---	---
Lead ppm ASTM D5185m	>20	<b>0</b>	---	---
Copper ppm ASTM D5185m	>20	<b>0</b>	---	---
Tin ppm ASTM D5185m	>20	<b>0</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>0</b>	---	---
Barium ppm ASTM D5185m		<b>2</b>	---	---
Molybdenum ppm ASTM D5185m		<b>0</b>	---	---
Manganese ppm ASTM D5185m		<b>0</b>	---	---
Magnesium ppm ASTM D5185m		<b>0</b>	---	---
Calcium ppm ASTM D5185m		<b>0</b>	---	---
Phosphorus ppm ASTM D5185m		<b>&lt;1</b>	---	---
Zinc ppm ASTM D5185m		<b>0</b>	---	---
Sulfur ppm ASTM D5185m		<b>0</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m	>15	<b>&lt;1</b>	---	---
Sodium ppm ASTM D5185m		<b>0</b>	---	---
Potassium ppm ASTM D5185m	>20	<b>&lt;1</b>	---	---
Water % ASTM D6304	>0.05	<b>0.001</b>	---	---
ppm Water ppm ASTM D6304	>500	<b>14.1</b>	---	---

## FLUID CLEANLINESS

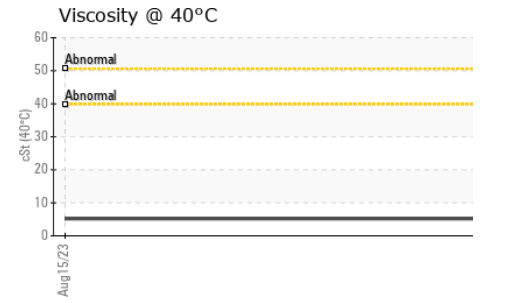
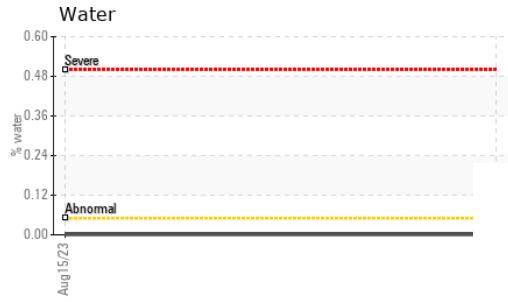
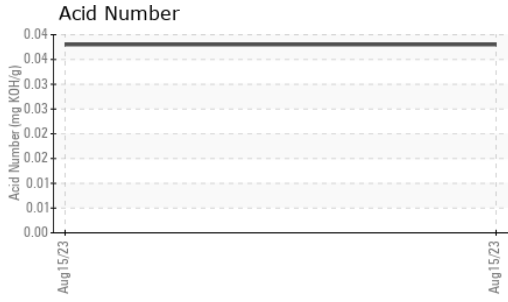
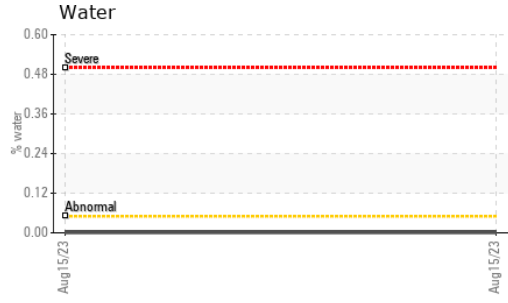
method	limit/base	current	history1	history2
Particles 5-15µm count *NAS 1638	>8000	<b>3898</b>	---	---
Particles 15-25µm count *NAS 1638	>1425	<b>589</b>	---	---
Particles 25-50µm count *NAS 1638	>253	<b>159</b>	---	---
Particles 50-100µm count *NAS 1638	>45	<b>0</b>	---	---
Particles >100µm count *NAS 1638	>8	<b>0</b>	---	---
NAS 1638 Class *NAS 1638	>5	<b>5</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D8045		<b>0.038</b>	---	---



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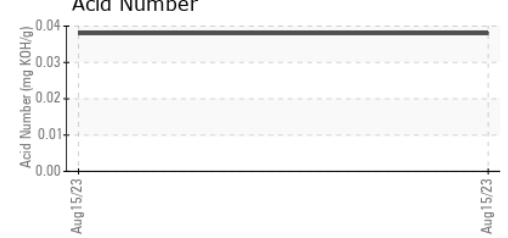
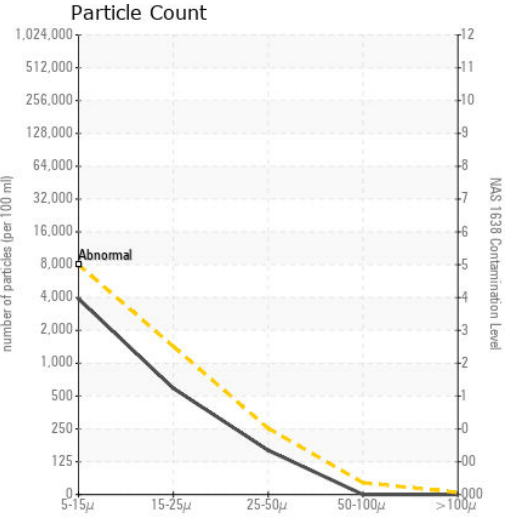
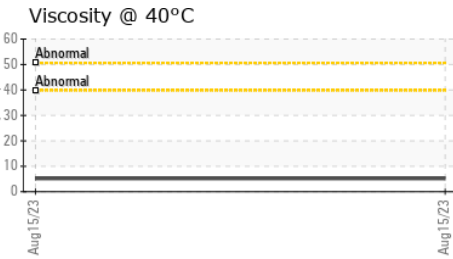
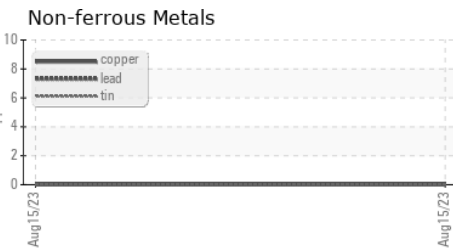
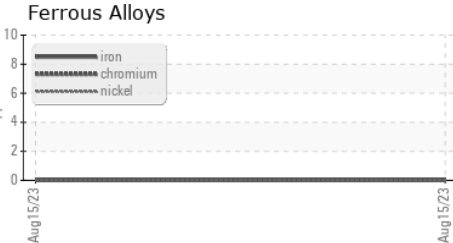
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	5.18	---	---

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC05926943 **Received** : 16 Aug 2023  
**Lab Number** : 05926943 **Diagnosed** : 21 Aug 2023  
**Unique Number** : 10606890 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCountNAS )

**RIDGE ENGINEERING**  
 3987 HAMPSTEAD-MEXICO RD  
 HAMPSTEAD, MD  
 US 21074  
 Contact: BETHANY HUGHES\*  
 bethany@ridgeeng.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)