



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**38850 TRACE PO 37552 [38850]**

Machine Id  
**PAOTS0002-06112024TS2C**

Component  
**Hydraulic System**

Fluid  
**0001748229 CASTROL BRAYCO MICRONIC 889 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

NAS 1638 Class: 5, Discrete particle counts [100 ml] 5-15µm = 3635, 15-25µm = 269, 25-50µm = 250, 50-100µm = 0, >100µm = 0. 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.

### 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>WC06209079</b>	---	---
Sample Date	Client Info	<b>11 Jun 2024</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>&lt;1</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>2</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185m		<b>0</b>	---	---
Barium ppm ASTM D5185m		<b>0</b>	---	---
Molybdenum ppm ASTM D5185m		<b>0</b>	---	---
Manganese ppm ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium ppm ASTM D5185m		<b>&lt;1</b>	---	---
Calcium ppm ASTM D5185m		<b>0</b>	---	---
Phosphorus ppm ASTM D5185m		<b>0</b>	---	---
Zinc ppm ASTM D5185m		<b>&lt;1</b>	---	---
Sulfur ppm ASTM D5185m		<b>0</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m	>15	<b>1</b>	---	---
Sodium ppm ASTM D5185m		<b>3</b>	---	---
Potassium ppm ASTM D5185m	>20	<b>2</b>	---	---
Water % ASTM D6304	>0.05	<b>0.001</b>	---	---
ppm Water ppm ASTM D6304	>500	<b>15</b>	---	---

## FLUID CLEANLINESS

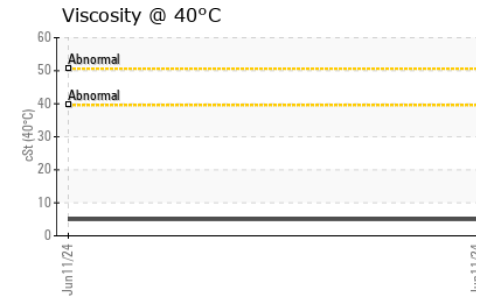
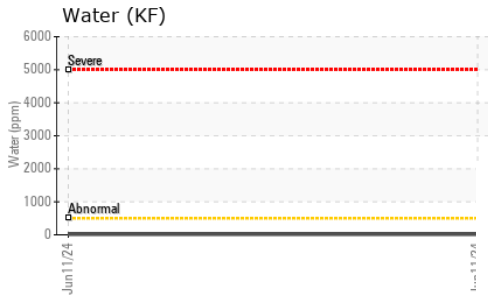
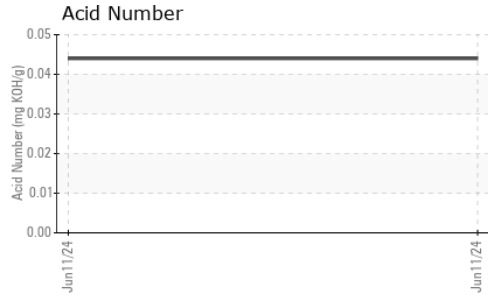
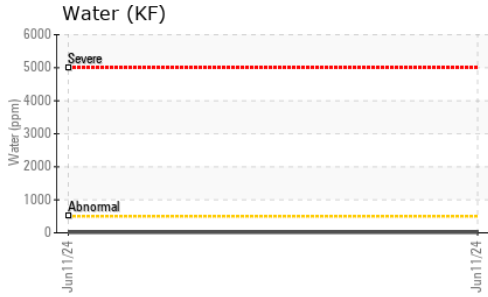
method	limit/base	current	history1	history2
Particles 5-15µm count *NAS 1638	>8000	<b>3635</b>	---	---
Particles 15-25µm count *NAS 1638	>1425	<b>269</b>	---	---
Particles 25-50µm count *NAS 1638	>253	<b>250</b>	---	---
Particles 50-100µm count *NAS 1638	>45	<b>0</b>	---	---
Particles >100µm count *NAS 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>0.044</b>	---	---



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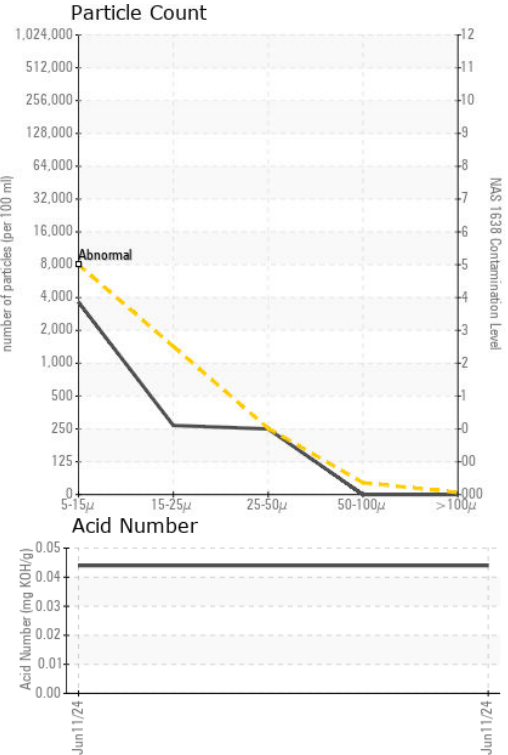
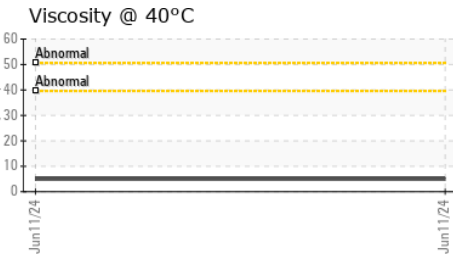
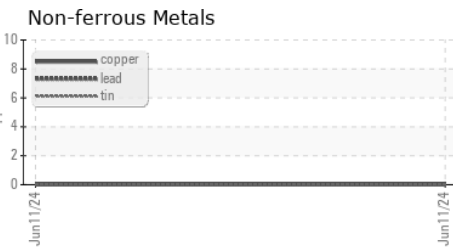
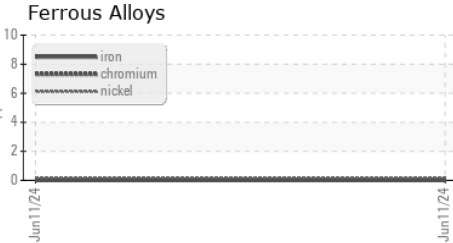
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	4.98	---	---

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.** : WC06209079      **Received** : 13 Jun 2024  
**Lab Number** : 06209079      **Tested** : 19 Jun 2024  
**Unique Number** : 11076540      **Diagnosed** : 19 Jun 2024 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCountNAS )

**RIDGE ENGINEERING**  
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 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)