



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**38851 TRACE PO 38138 [33851]**  
 Machine Id  
**JP8TS0001-06112024C**  
 Component  
**Hydraulic System**  
 Fluid  
**832020 JP8 MIL-DTL-83133 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

NAS 1638 Class: 6, Discrete particle counts [100 ml] 5-15µm = 8294, 15-25µm = 789, 25-50µm = 146, 50-100µm = 37, >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>WC06209082</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>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185m	<b>2</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>2</b>	---	---
Water	%	ASTM D6304 >0.05	<b>0.004</b>	---	---
ppm Water	ppm	ASTM D6304 >500	<b>42</b>	---	---

## FLUID CLEANLINESS

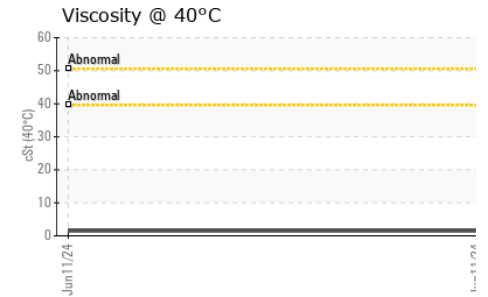
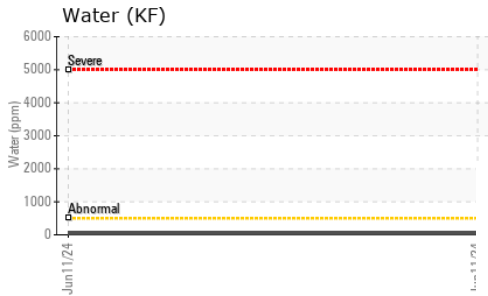
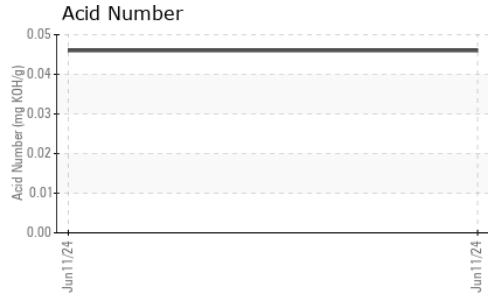
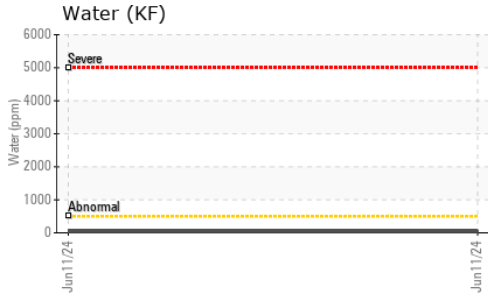
	method	limit/base	current	history1	history2
Particles 5-15µm	count	*NAS 1638 >8000	<b>8294</b>	---	---
Particles 15-25µm	count	*NAS 1638 >1425	<b>789</b>	---	---
Particles 25-50µm	count	*NAS 1638 >253	<b>146</b>	---	---
Particles 50-100µm	count	*NAS 1638 >45	<b>37</b>	---	---
Particles >100µm	count	*NAS 1638 >8	<b>0</b>	---	---
NAS 1638	Class	*NAS 1638 >5	<b>6</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.046</b>	---	---



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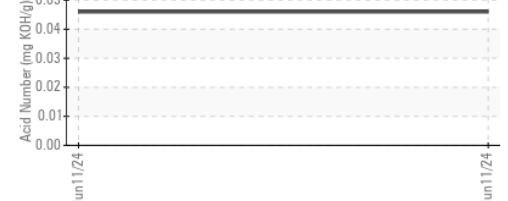
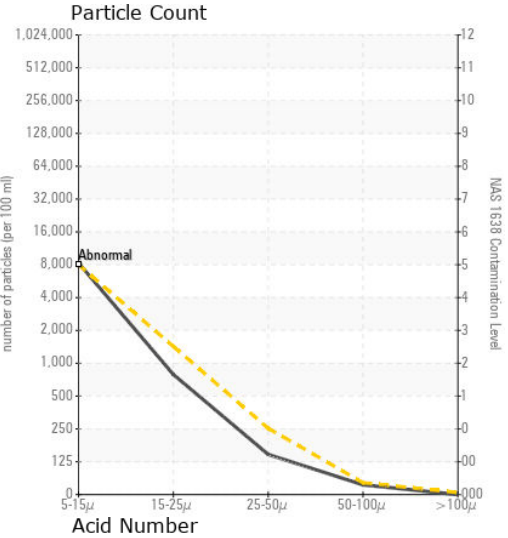
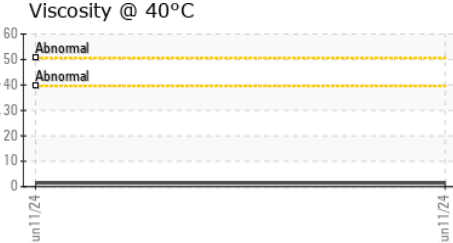
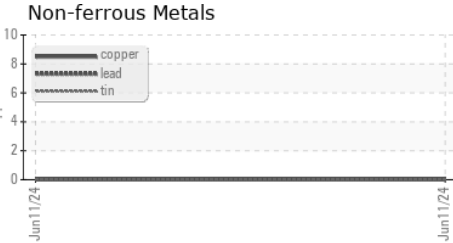
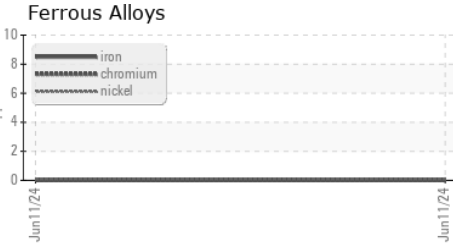
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
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	1.48	---	---

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.** : WC06209082      **Received** : 13 Jun 2024  
**Lab Number** : 06209082      **Tested** : 19 Jun 2024  
**Unique Number** : 11076543      **Diagnosed** : 10 Jul 2024 - 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)