

# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**


Machine Id  
**SENNEBOGEN 830M 830.0.3509**  
 Component  
**Hydraulic System**  
 Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)**

**DIAGNOSIS**
**Recommendation**

Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

The amount and size of particulates present in the system are acceptable. 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>JR0147866</b>	---	---
Sample Date	Client Info			<b>08 Jan 2024</b>	---	---
Machine Age	hrs	Client Info		<b>311</b>	---	---
Oil Age	hrs	Client Info		<b>311</b>	---	---
Oil Changed	Client Info			<b>Not Chngd</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

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

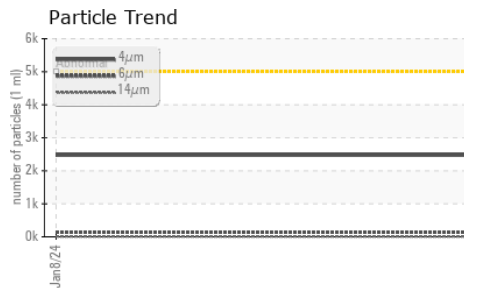
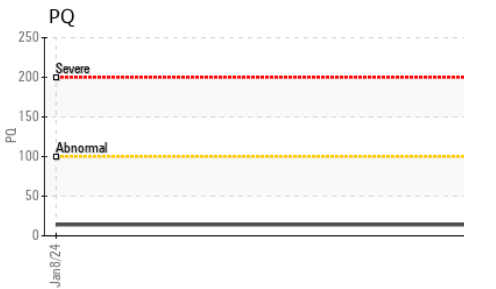
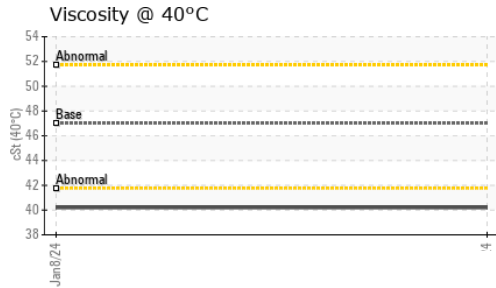
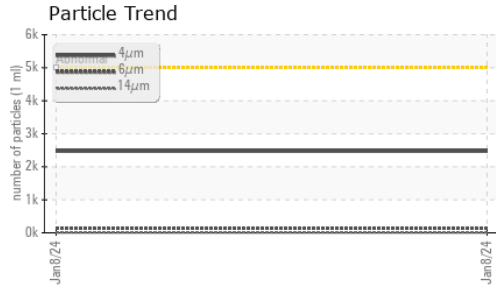
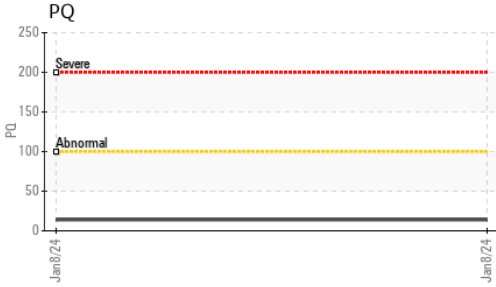
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		<b>14</b>	---	---
Iron	ppm	ASTM D5185m	>20	<b>4</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	---	---
Lead	ppm	ASTM D5185m	>10	<b>1</b>	---	---
Copper	ppm	ASTM D5185m	>75	<b>2</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</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>13</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>4</b>	---	---
Calcium	ppm	ASTM D5185m		<b>1175</b>	---	---
Phosphorus	ppm	ASTM D5185m	827	<b>638</b>	---	---
Zinc	ppm	ASTM D5185m	0	<b>648</b>	---	---
Sulfur	ppm	ASTM D5185m	13	<b>4282</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Sodium	ppm	ASTM D5185m		<b>0</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>2474</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>141</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>10</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>3</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>0</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>18/14/10</b>	---	---

# OIL ANALYSIS REPORT





FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>1.07</b>	---	---

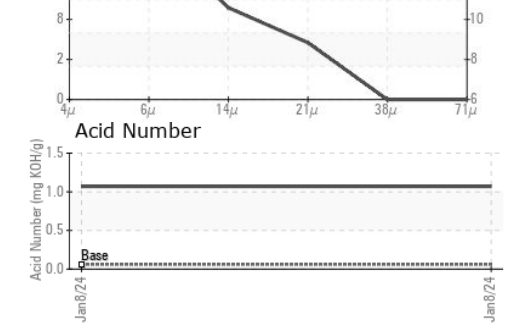
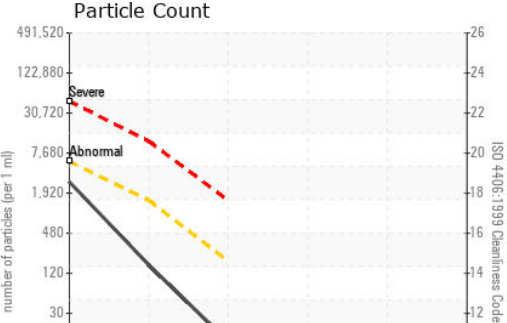
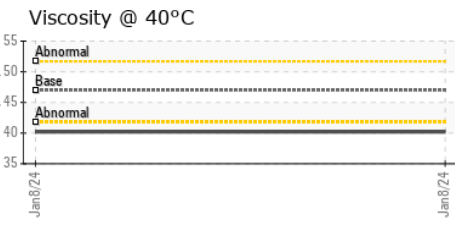
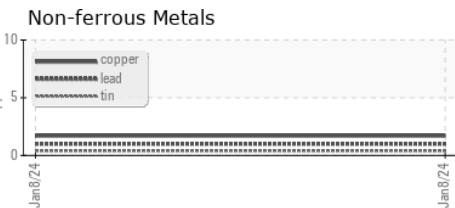
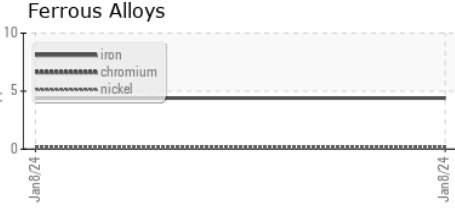
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
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>	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	47	<b>40.2</b>	---	---

### SAMPLE IMAGES

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

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0147866 **Received** : 11 Jan 2024  
**Lab Number** : 06058001 **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10829383 **Diagnostician** : Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - ASHLAND**  
 11047 LEADBETTER RD  
 ASHLAND, VA  
 US 23005  
 Contact: DAVID ZIEG  
 dzieg@jamesriverequipment.com  
 T: (804)798-6001  
 F: (804)798-0292

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)