



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**HITACHI 470LC HCMJAG60J00061632**

Component  
**Swing Drive Gear Case**

Fluid  
**GEAR OIL LS 80W90 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0198396</b>	JR0188767	JR0171639
Sample Date		Client Info		<b>11 Jan 2024</b>	02 Oct 2023	12 Jun 2023
Machine Age	hrs	Client Info		<b>2491</b>	2491	1976
Oil Age	hrs	Client Info		<b>1456</b>	1971	1000
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	N/A
Filter Changed		Client Info		<b>N/A</b>	Not Changd	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184		<b>16</b>	12	13
Iron	ppm	ASTM D5185m	>200	<b>11</b>	<1	56
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m		<b>&lt;1</b>	0	3
Lead	ppm	ASTM D5185m		<b>0</b>	0	0
Copper	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m		<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

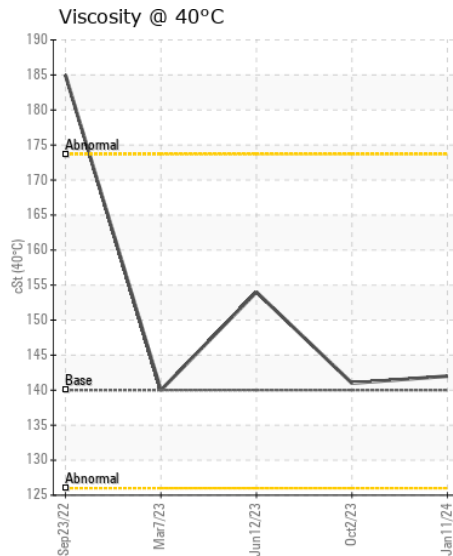
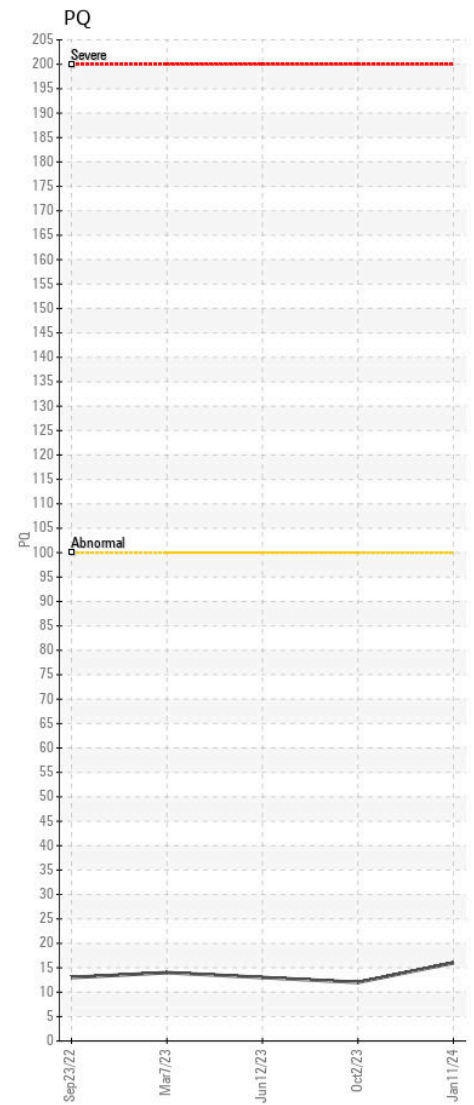
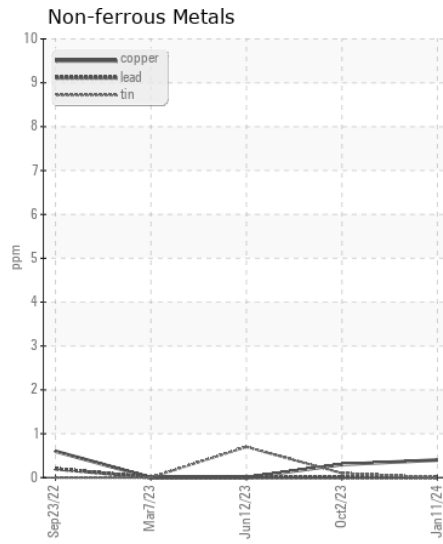
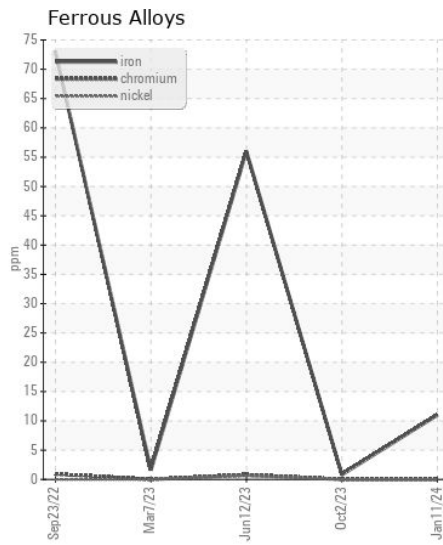
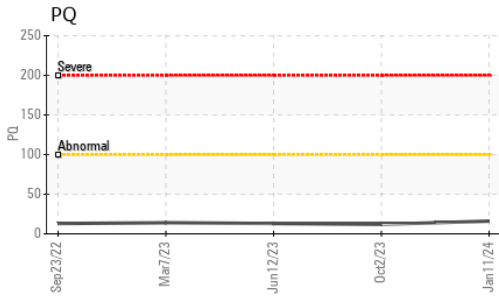
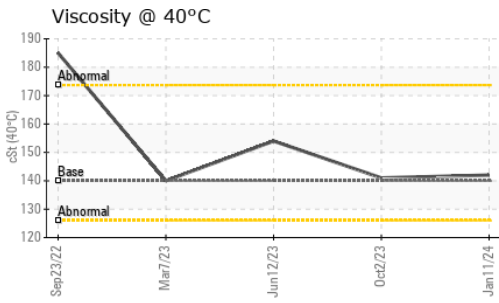
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m		<b>2</b>	1	9
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	2
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Boron	ppm	ASTM D5185m	150	<b>2</b>	6	157
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	1
Magnesium	ppm	ASTM D5185m	10	<b>&lt;1</b>	1	<1
Calcium	ppm	ASTM D5185m	70	<b>8</b>	39	7
Phosphorus	ppm	ASTM D5185m	2000	<b>348</b>	388	849
Zinc	ppm	ASTM D5185m	50	<b>0</b>	0	9
Sulfur	ppm	ASTM D5185m	20000	<b>19493</b>	19509	21941
Visc @ 40°C	cSt	ASTM D445	140	<b>142</b>	141	154



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0198396 **Received** : 17 Jan 2024  
**Lab Number** : 06063040 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10834422 **Diagnostician** : Sean Felton  
**Test Package** : CONST ( Additional Tests: PQ )

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)

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