



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

Area  
**[W66265]**

Machine Id  
**HITACHI 210LC 1FFDC571EMF341025**

Component  
**Hydraulic System**

Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (20 GAL)**

### RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. ( Customer Sample Comment: W66265 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0205875</b>	JR0188655	JR0142002
Sample Date		Client Info		<b>23 Apr 2024</b>	29 Sep 2023	12 Apr 2023
Machine Age	hrs	Client Info		<b>2014</b>	1533	945
Oil Age	hrs	Client Info		<b>1426</b>	588	500
Filter Age	hrs	Client Info		<b>0</b>	0	500
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	4
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>0</b>	0	2
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

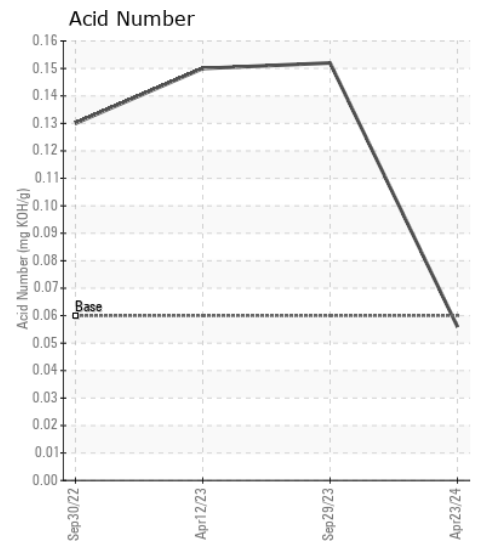
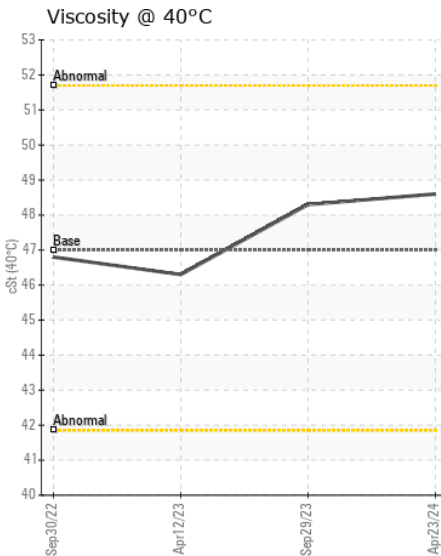
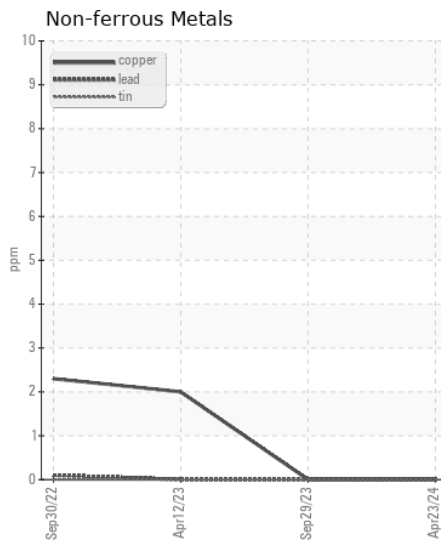
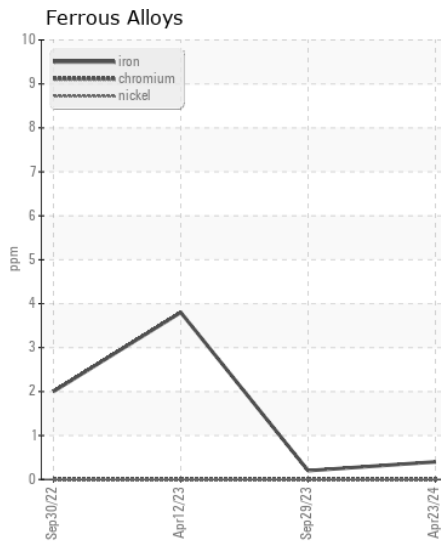
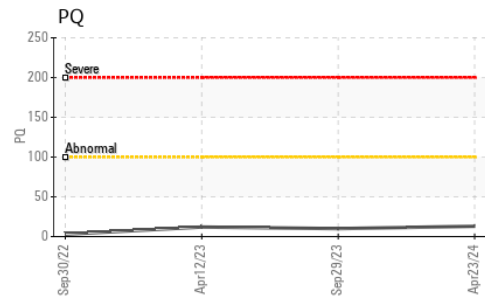
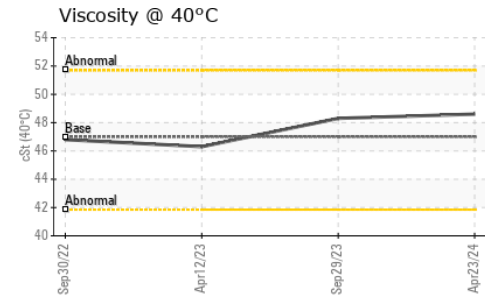
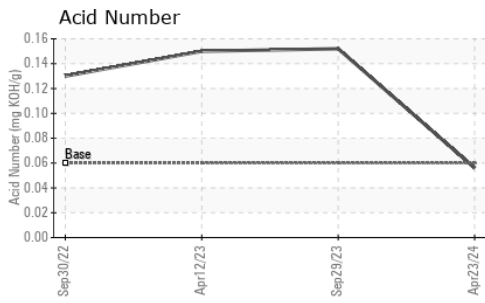
Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>2</b>	1	0
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>---</b>	4712	▲ 11024
Particles >6µm		ASTM D7647	>1300	<b>---</b>	598	▲ 3546
Particles >14µm		ASTM D7647	>160	<b>---</b>	28	150
Particles >21µm		ASTM D7647	>40	<b>---</b>	8	21
Particles >38µm		ASTM D7647	>10	<b>---</b>	0	1
Particles >71µm		ASTM D7647	>3	<b>---</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>---</b>	19/16/12	▲ 21/19/14
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>▲ MODER</b>	NONE	LIGHT
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	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	1	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	4	<1
Calcium	ppm	ASTM D5185m		<b>5</b>	9	2
Phosphorus	ppm	ASTM D5185m	827	<b>626</b>	594	506
Zinc	ppm	ASTM D5185m	0	<b>10</b>	9	26
Sulfur	ppm	ASTM D5185m	13	<b>36</b>	36	145
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.056</b>	0.152	0.15
Visc @ 40°C	cSt	ASTM D445	47	<b>48.6</b>	48.3	46.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0205875  
**Lab Number** : 06160252  
**Unique Number** : 10995675  
**Test Package** : CONST ( Additional Tests: PQ )

**Received** : 25 Apr 2024  
**Tested** : 26 Apr 2024  
**Diagnosed** : 26 Apr 2024 - Don Baldrige

**JRE - CHARLOTTE**  
 9550 STATESVILLE ROAD  
 CHARLOTTE, NC  
 US 28269

Contact: CHARLOTTE SHOP  
 myoung@jamesriverequipment.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)

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