



WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area
[W66017]

Machine Id
HITACHI 210LC 1FFDC571KJF340541

Component
Hydraulic System

Fluid
HITACHI HYDRAULIC SUPER EX 46HN (20 GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: W66017)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0206304	JR0161839	JR0129116
Sample Date		Client Info		11 Apr 2024	18 Apr 2023	18 Apr 2022
Machine Age	hrs	Client Info		2671	2212	1517
Oil Age	hrs	Client Info		2671	0	0
Filter Age	hrs	Client Info		2671	0	0
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Changed	Not Chngd
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	5	6	<1
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	1	<1	<1
Lead	ppm	ASTM D5185m	>10	1	0	0
Copper	ppm	ASTM D5185m	>75	1	<1	0
Tin	ppm	ASTM D5185m	>10	1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

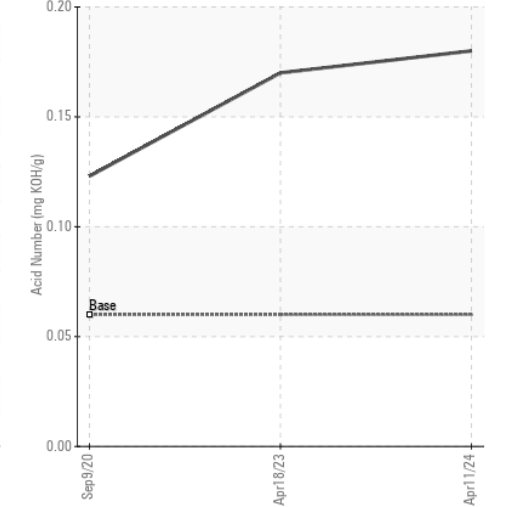
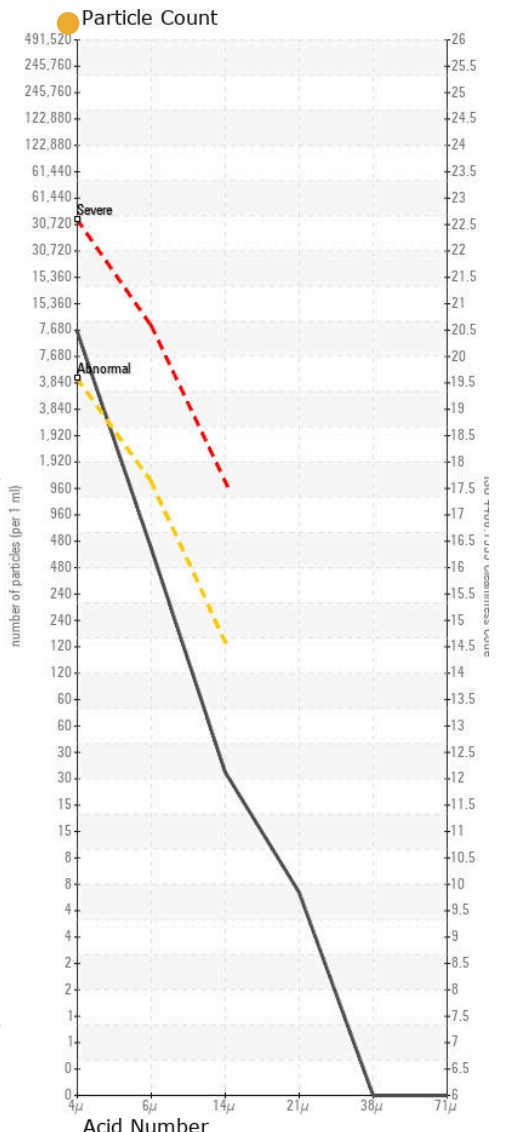
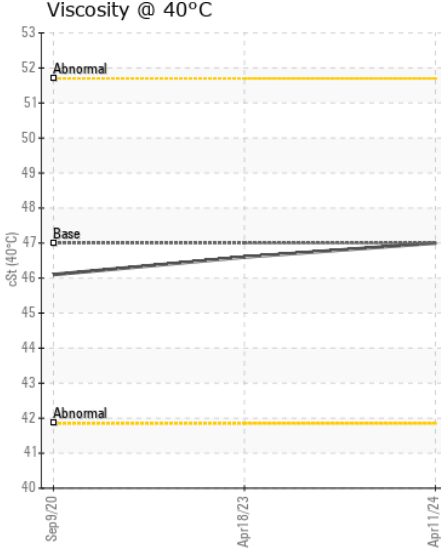
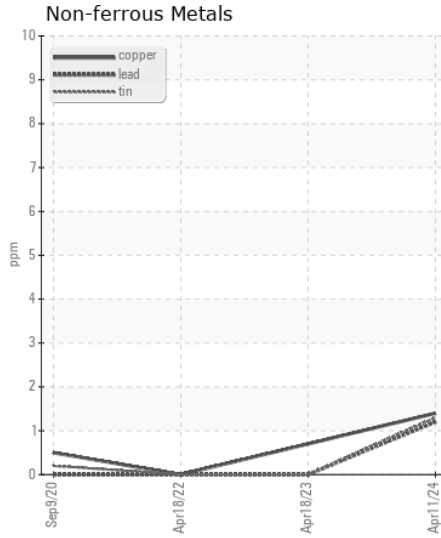
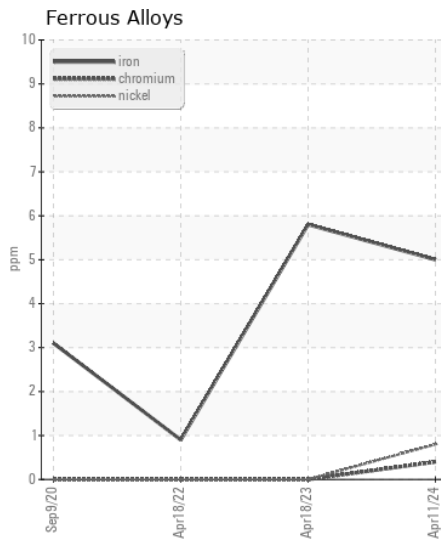
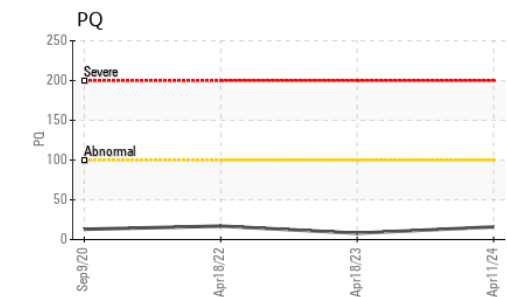
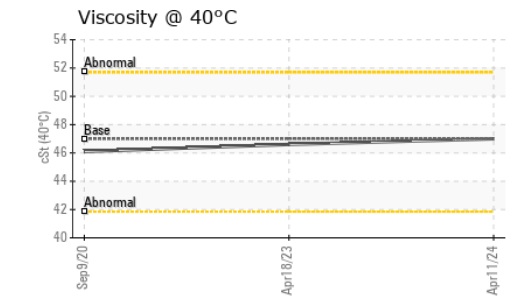
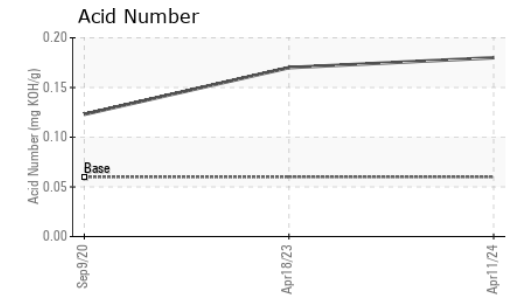
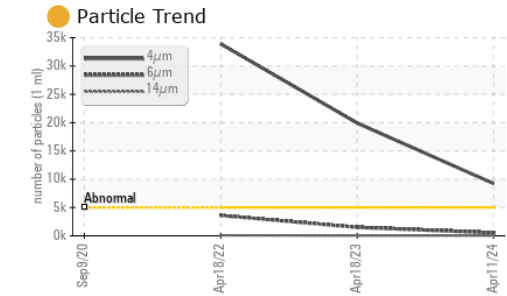
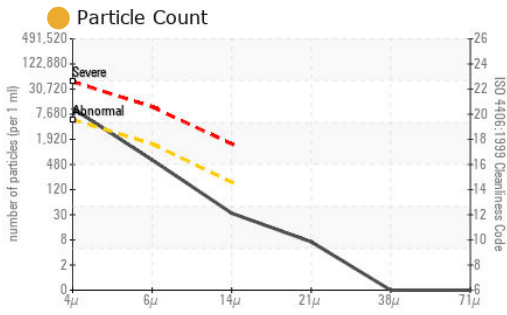
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<1	0	2
Potassium	ppm	ASTM D5185m	>20	1	0	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	9240	▲ 19913	▲ 33914
Particles >6µm		ASTM D7647	>1300	542	● 1501	▲ 3587
Particles >14µm		ASTM D7647	>160	29	27	78
Particles >21µm		ASTM D7647	>40	6	7	10
Particles >38µm		ASTM D7647	>10	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	20/16/12	▲ 21/18/12	▲ 22/19/13
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	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		0	0	0
Boron	ppm	ASTM D5185m		0	0	3
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		1	0	2
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		2	2	8
Calcium	ppm	ASTM D5185m		6	<1	19
Phosphorus	ppm	ASTM D5185m	827	522	472	721
Zinc	ppm	ASTM D5185m	0	15	11	27
Sulfur	ppm	ASTM D5185m	13	39	111	85
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.18	0.17	---
Visc @ 40°C	cSt	ASTM D445	47	47.0	46.6	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0206304 **Received** : 12 Apr 2024
Lab Number : 06147218 **Tested** : 16 Apr 2024
Unique Number : 10977296 **Diagnosed** : 16 Apr 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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Certificate L2367
 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)