



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HAMM H12iP H2352105

Component
Hydraulic System

Fluid
HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0209094	JR0197671	---
Sample Date		Client Info		17 Apr 2024	16 Jan 2024	---
Machine Age	hrs	Client Info		1986	1518	---
Oil Age	hrs	Client Info		1986	0	---
Filter Age	hrs	Client Info		1986	0	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		Changed	Not Changd	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Test	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		13	16	---
Iron	ppm	ASTM D5185m	>20	14	13	---
Chromium	ppm	ASTM D5185m	>10	0	0	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>10	0	1	---
Lead	ppm	ASTM D5185m	>10	<1	<1	---
Copper	ppm	ASTM D5185m	>75	9	8	---
Tin	ppm	ASTM D5185m	>10	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

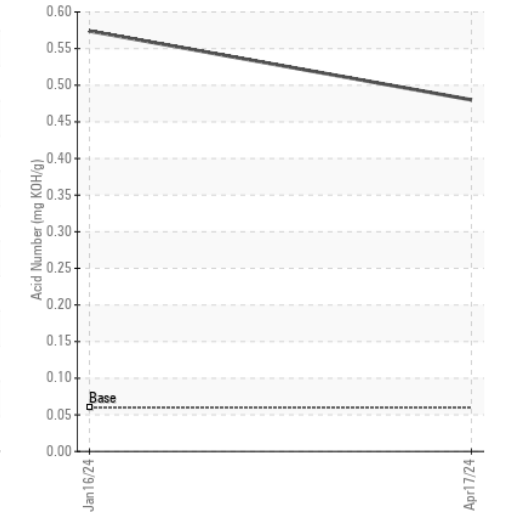
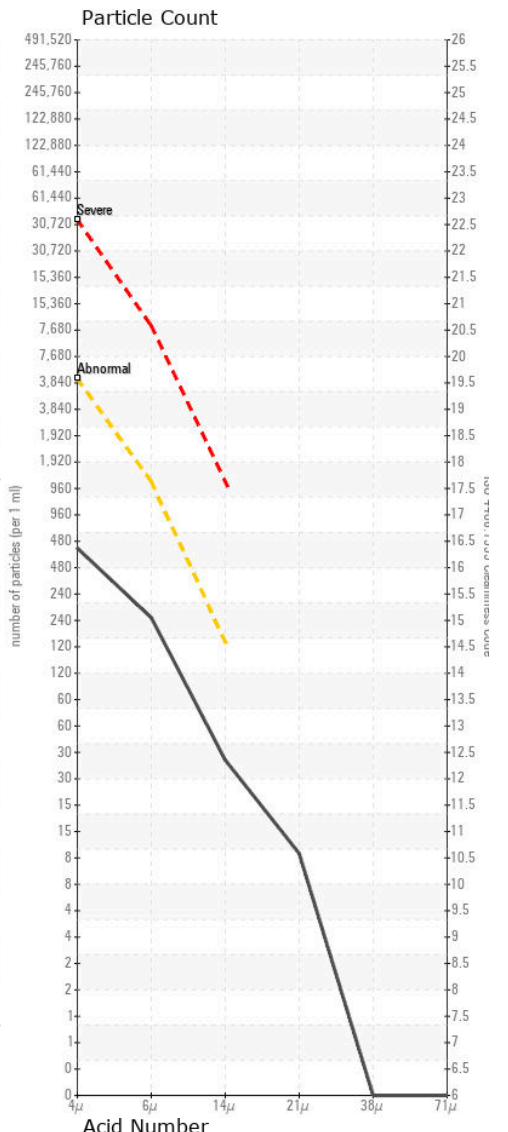
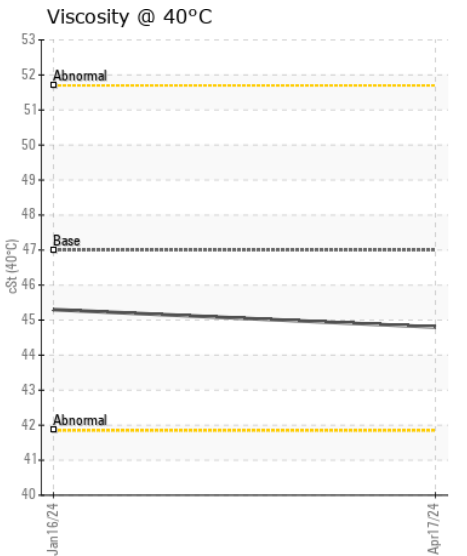
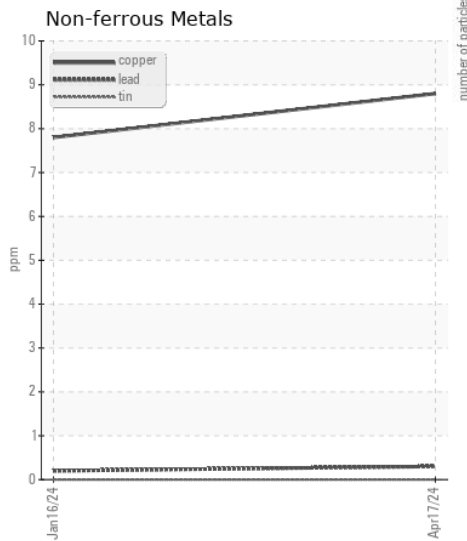
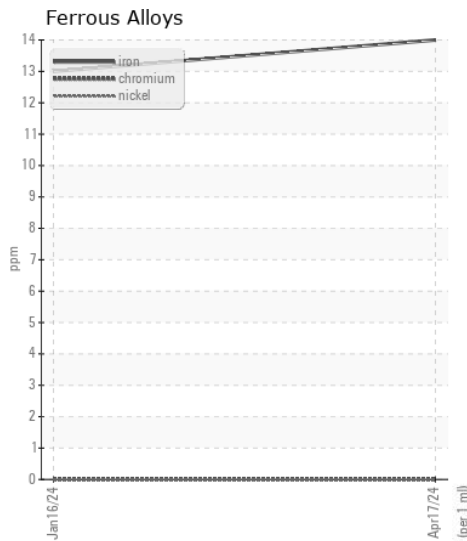
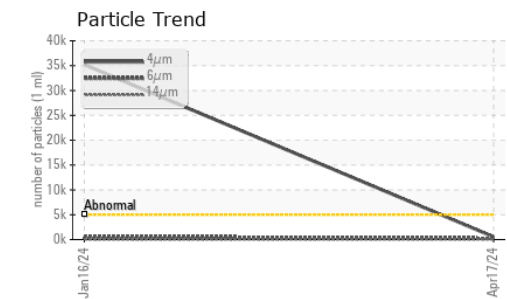
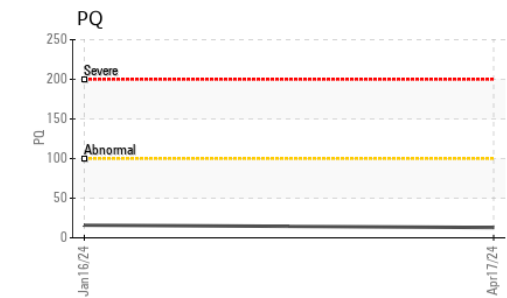
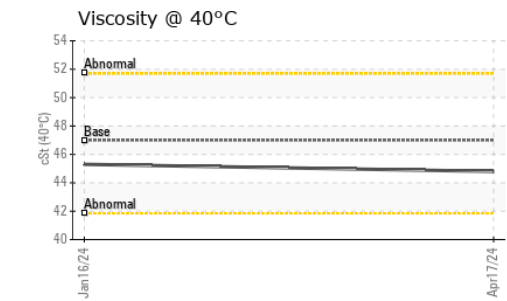
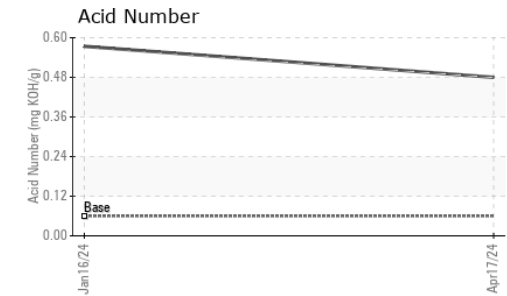
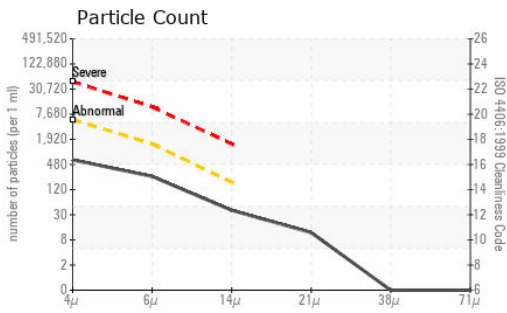
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	5	5	---
Potassium	ppm	ASTM D5185m	>20	0	<1	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>5000	545	▲ 35202	---
Particles >6µm		ASTM D7647	>1300	219	620	---
Particles >14µm		ASTM D7647	>160	34	11	---
Particles >21µm		ASTM D7647	>40	10	1	---
Particles >38µm		ASTM D7647	>10	0	1	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	16/15/12	▲ 22/16/11	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	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		3	<1	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		<1	0	---
Magnesium	ppm	ASTM D5185m		2	2	---
Calcium	ppm	ASTM D5185m		223	250	---
Phosphorus	ppm	ASTM D5185m	827	323	322	---
Zinc	ppm	ASTM D5185m	0	392	381	---
Sulfur	ppm	ASTM D5185m	13	1286	1107	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.48	0.574	---
Visc @ 40°C	cSt	ASTM D445	47	44.8	45.3	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0209094 **Received** : 19 Apr 2024
Lab Number : 06154218 **Tested** : 23 Apr 2024
Unique Number : 10989641 **Diagnosed** : 23 Apr 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

CARLTON'S BACKHOE
 9550 STATESVILLE ROAD
 CHARLOTTE, NC
 US 28269
 Contact: LEO

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)

T: (704)547-0211

F: