



WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Machine Id
WIRTGEN 14201619

Component
Hydraulic System

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

RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0211639	JR0179796	JR0165543
Sample Date		Client Info		19 Jun 2024	06 Nov 2023	17 Jun 2023
Machine Age	hrs	Client Info		3986	3509	3000
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	0	4	4
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	2	<1
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>75	6	6	4
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

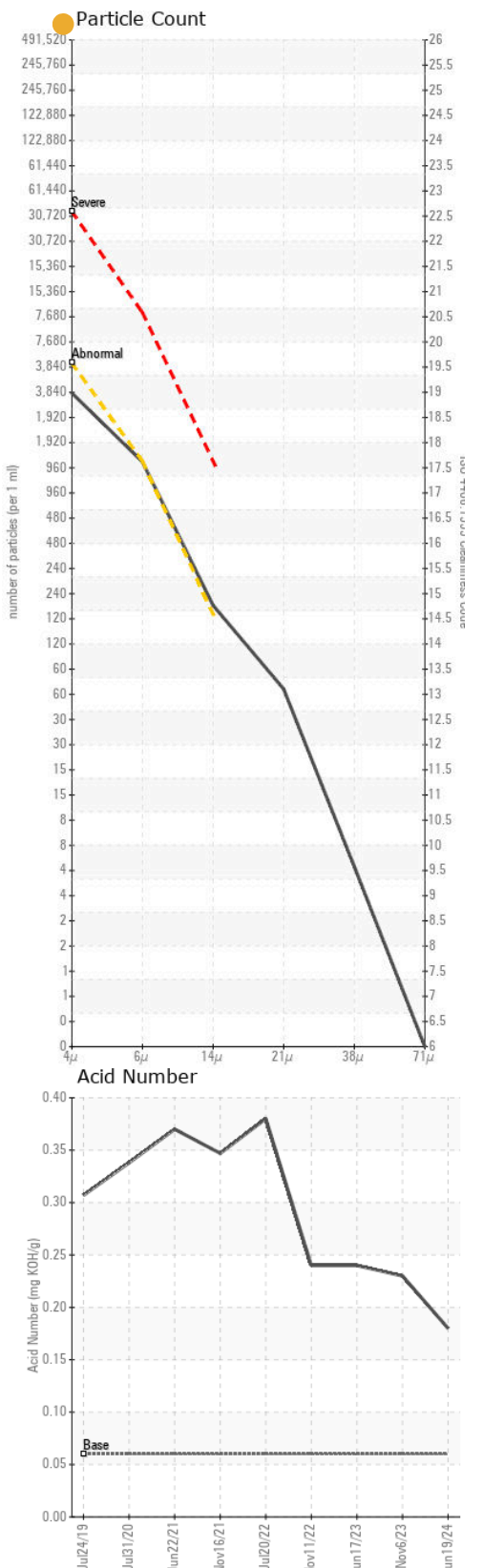
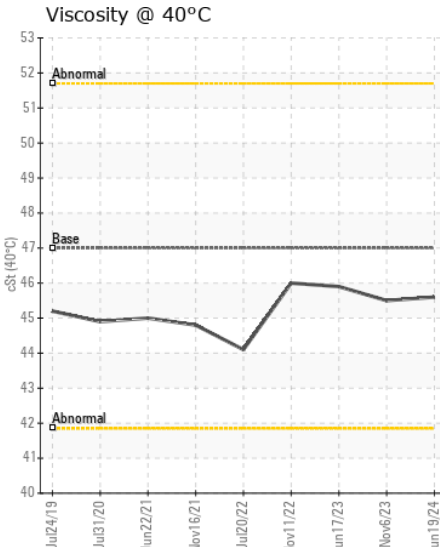
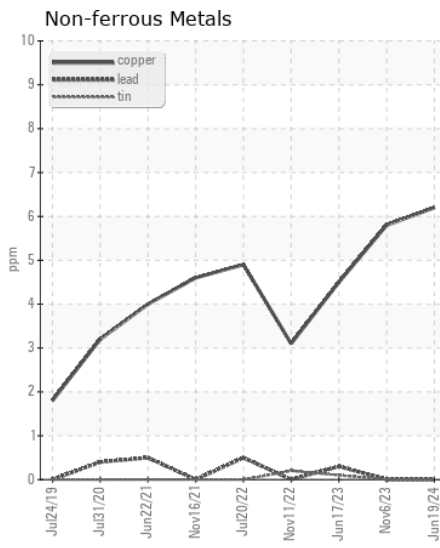
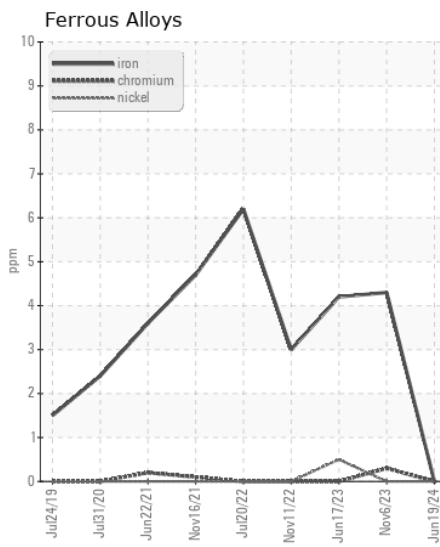
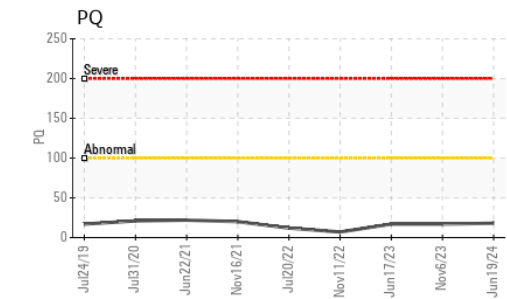
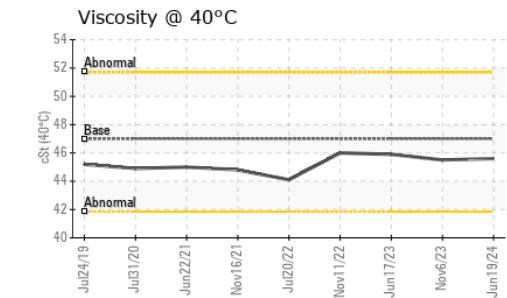
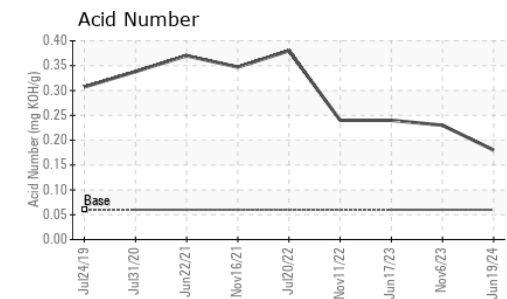
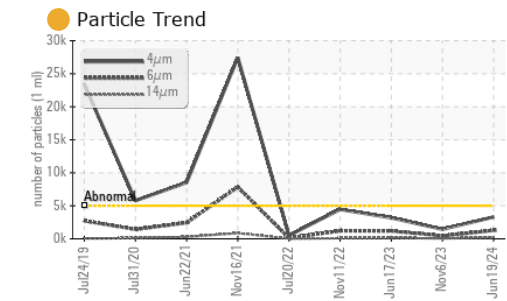
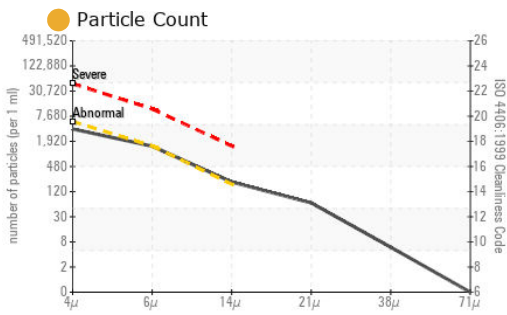
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<1	<1	<1
Potassium	ppm	ASTM D5185m	>20	0	1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	3314	1447	3181
Particles >6µm		ASTM D7647	>1300	1288	446	1180
Particles >14µm		ASTM D7647	>160	180	49	132
Particles >21µm		ASTM D7647	>40	57	14	36
Particles >38µm		ASTM D7647	>10	5	1	2
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/17/15	18/16/13	19/17/14
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		2	0	0
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		<1	3	2
Calcium	ppm	ASTM D5185m		19	17	15
Phosphorus	ppm	ASTM D5185m	827	328	311	346
Zinc	ppm	ASTM D5185m	0	152	157	169
Sulfur	ppm	ASTM D5185m	13	500	418	511
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.18	0.23	0.24
Visc @ 40°C	cSt	ASTM D445	47	45.6	45.5	45.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0211639

Lab Number : 06219587

Unique Number : 11097784

Test Package : CONST (Additional Tests: PQ)

Received : 25 Jun 2024

Tested : 26 Jun 2024

Diagnosed : 26 Jun 2024 - Wes Davis

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)