



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

BLYTHER

Machine Id

HAMM HD110IVT H2090226

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		JR0209721	JR0202223	JR0168214
Sample Date		Client Info		12 Jun 2024	07 Feb 2024	17 May 2023
Machine Age	hrs	Client Info		5126	4864	4350
Oil Age	hrs	Client Info		0	514	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	Not Chngd	Changed
Filter Changed		Client Info		Not Chngd	Not Chngd	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Test	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		24	12	17
Iron	ppm	ASTM D5185m	>20	4	0	7
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	0	<1
Lead	ppm	ASTM D5185m	>10	2	0	0
Copper	ppm	ASTM D5185m	>75	3	0	0
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

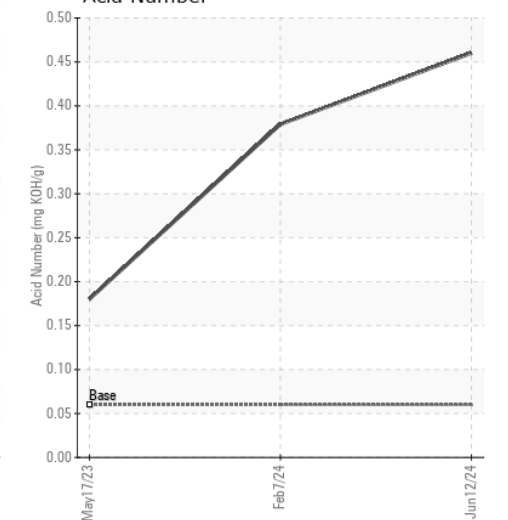
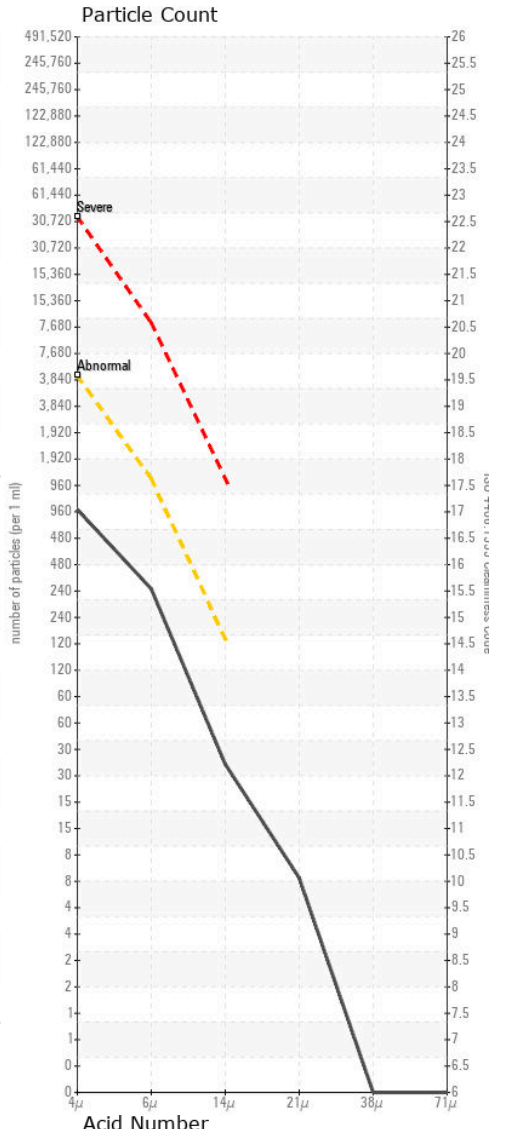
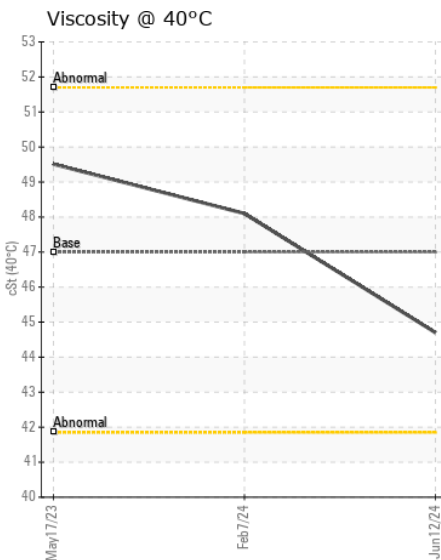
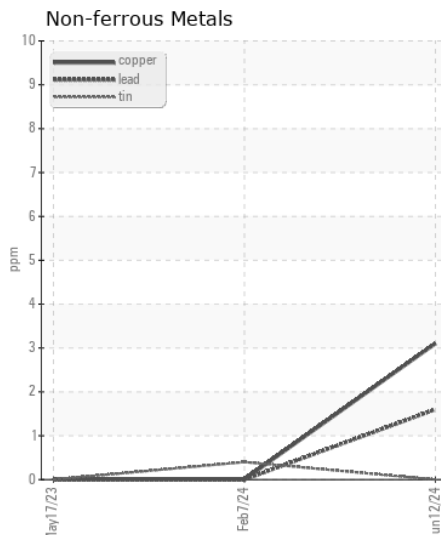
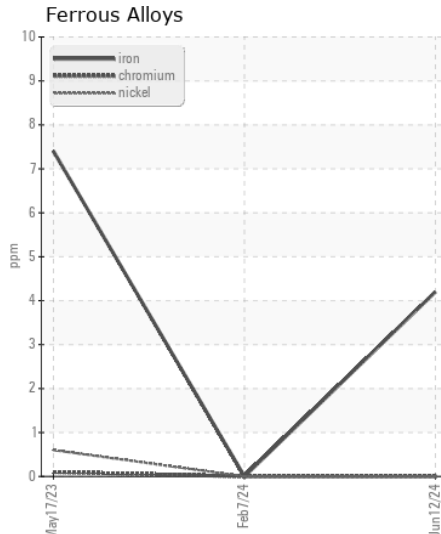
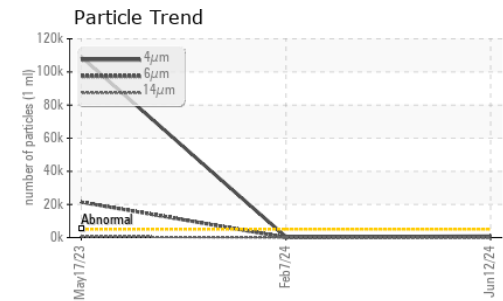
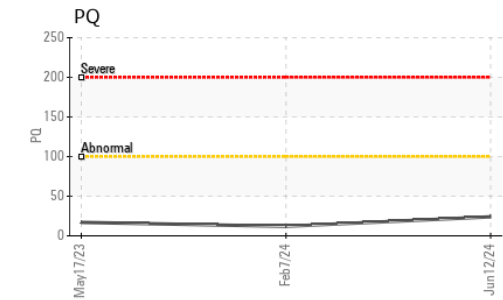
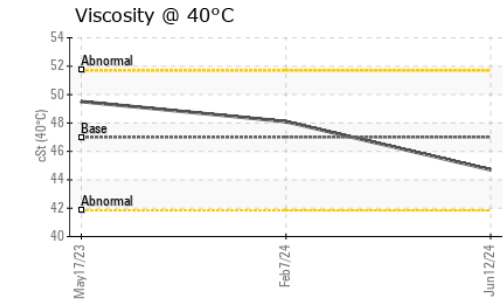
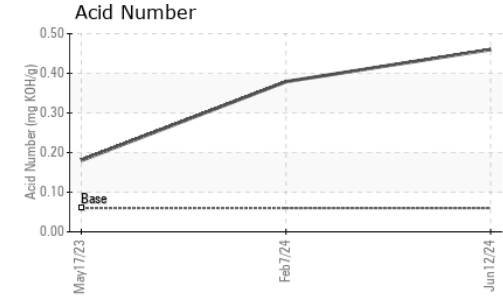
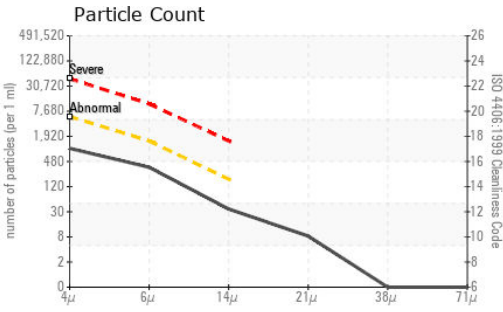
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	1	0	3
Potassium	ppm	ASTM D5185m	>20	1	0	1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	868	390	▲ 109059
Particles >6µm		ASTM D7647	>1300	307	75	▲ 21376
Particles >14µm		ASTM D7647	>160	31	7	▲ 538
Particles >21µm		ASTM D7647	>40	7	3	▲ 82
Particles >38µm		ASTM D7647	>10	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/15/12	16/13/10	▲ 24/22/16
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		<1	<1	<1
Boron	ppm	ASTM D5185m		2	0	0
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		1	0	<1
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		38	0	2
Calcium	ppm	ASTM D5185m		527	5	4
Phosphorus	ppm	ASTM D5185m	827	381	466	695
Zinc	ppm	ASTM D5185m	0	465	36	0
Sulfur	ppm	ASTM D5185m	13	2381	113	22
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.46	0.379	0.18
Visc @ 40°C	cSt	ASTM D445	47	44.7	48.1	49.51



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0209721 **Received** : 14 Jun 2024
Lab Number : 06209989 **Tested** : 17 Jun 2024
Unique Number : 11082853 **Diagnosed** : 17 Jun 2024 - Angela Borella
Test Package : CONST (Additional Tests: PQ)

JRE - GARNER
 4161 AUBURN CHURCH RD
 GARNER, NC
 US 27529
 Contact: RALEIGH SHOP
 sean.betts@jamesriverequipment.com; catherine.anastasio@wearcheck.com
 T: (919)614-2260
 F: (919)779-5432

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)