



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
EPIROC T35 JPS22SED2703
Component
Hydraulic System
Fluid
HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Oil and 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		JR0197604	JR0190861	JR0181614
Sample Date		Client Info		15 Jan 2024	30 Oct 2023	27 Jul 2023
Machine Age	hrs	Client Info		2047	1732	1151
Oil Age	hrs	Client Info		1461	500	1151
Filter Age	hrs	Client Info		1461	500	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				ABNORMAL	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	<1	<1	2
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	1	<1	<1
Lead	ppm	ASTM D5185m	>10	0	<1	<1
Copper	ppm	ASTM D5185m	>75	38	43	17
Tin	ppm	ASTM D5185m	>10	<1	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

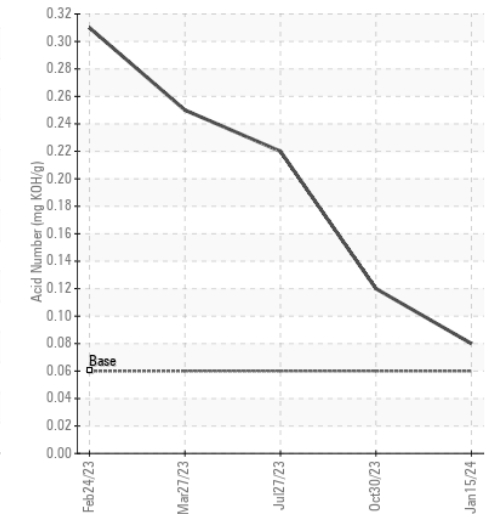
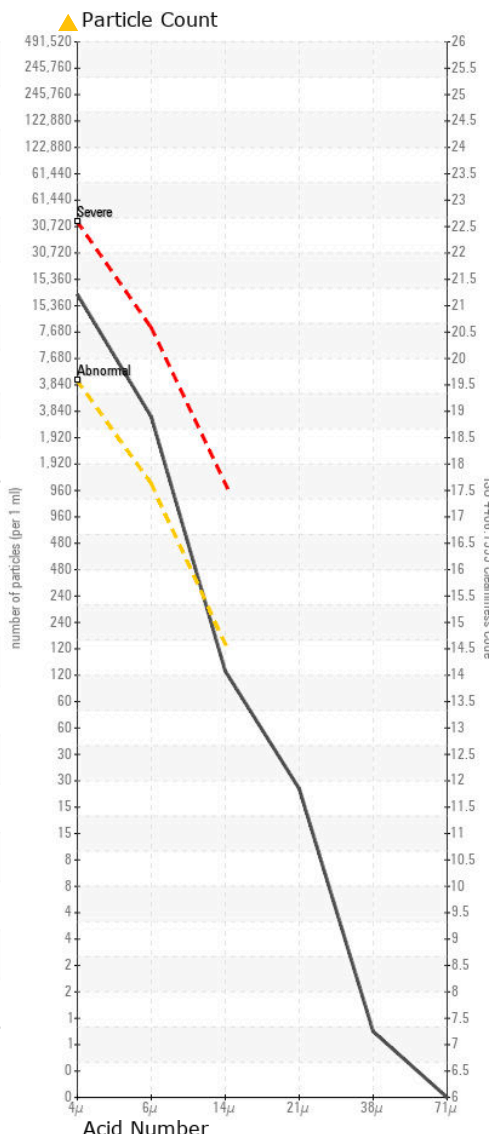
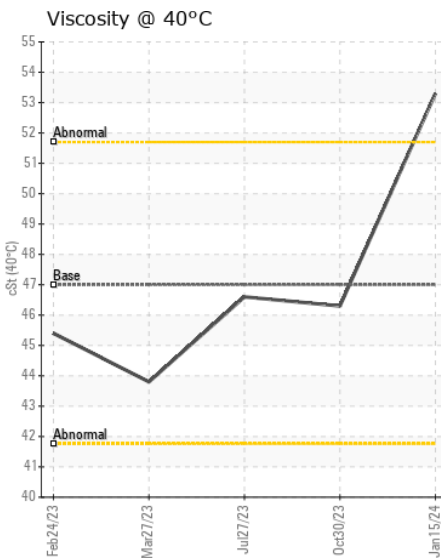
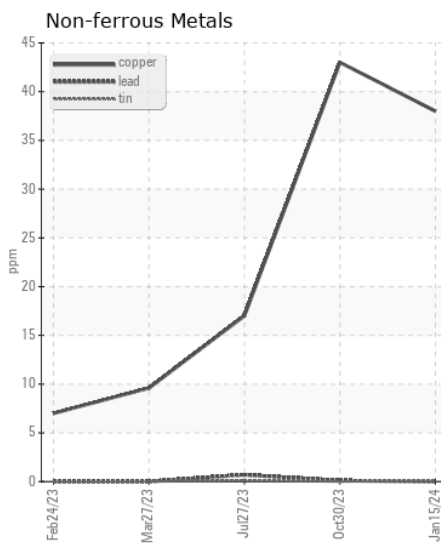
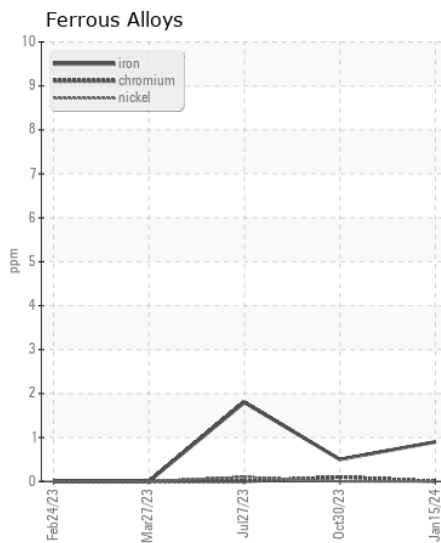
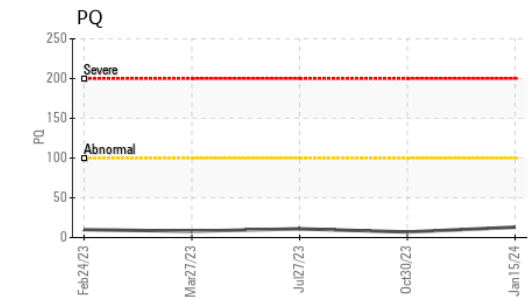
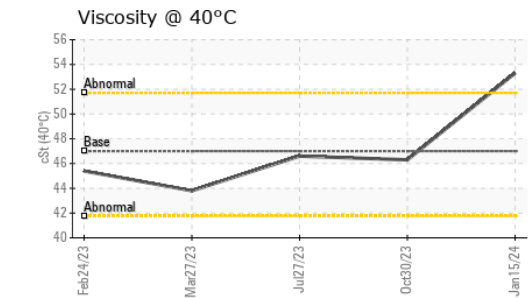
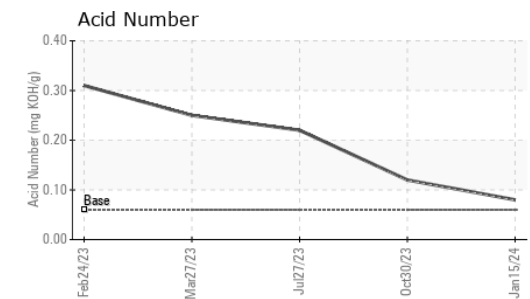
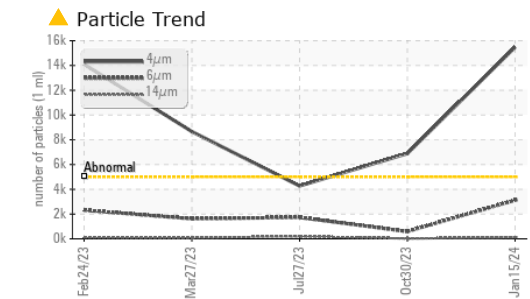
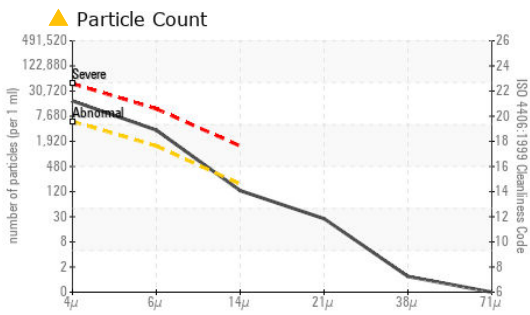
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<1	<1	<1
Potassium	ppm	ASTM D5185m	>20	<1	1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 15477	▲ 6890	4269
Particles >6µm		ASTM D7647	>1300	▲ 3118	591	▲ 1731
Particles >14µm		ASTM D7647	>160	112	23	▲ 195
Particles >21µm		ASTM D7647	>40	24	5	▲ 47
Particles >38µm		ASTM D7647	>10	1	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 21/19/14	▲ 20/16/12	▲ 19/18/15
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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	0
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		4	<1	<1
Calcium	ppm	ASTM D5185m		8	2	1
Phosphorus	ppm	ASTM D5185m	827	363	334	213
Zinc	ppm	ASTM D5185m	0	61	60	158
Sulfur	ppm	ASTM D5185m	13	232	201	661
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.08	0.12	0.22
Visc @ 40°C	cSt	ASTM D445	47	53.3	46.3	46.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : JR0197604 Recieved : 17 Jan 2024
 Lab Number : 06062559 Diagnosed : 18 Jan 2024
 Unique Number : 10833941 Diagnostician : Don Baldrige
 Test Package : CONST (Additional Tests: PQ)

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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