



CHALMERS
Lubrication Service
(704) 660-LUBE(5823)

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HITACHI ZX135 4004 (S/N 100035)
Component
Swing Drive
Fluid
GEAR OIL SAE 80W90 (2 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CL0005568	CL0003950	CL0002295
Sample Date		Client Info		15 Jun 2024	22 Jan 2023	11 Jul 2021
Machine Age	hrs	Client Info		6575	6035	5040
Oil Age	hrs	Client Info		6575	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>400	127	141	109
Chromium	ppm	ASTM D5185m	>10	1	1	1
Nickel	ppm	ASTM D5185m	>10	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>25	3	<1	0
Lead	ppm	ASTM D5185m	>50	<1	0	0
Copper	ppm	ASTM D5185m	>200	1	10	<1
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

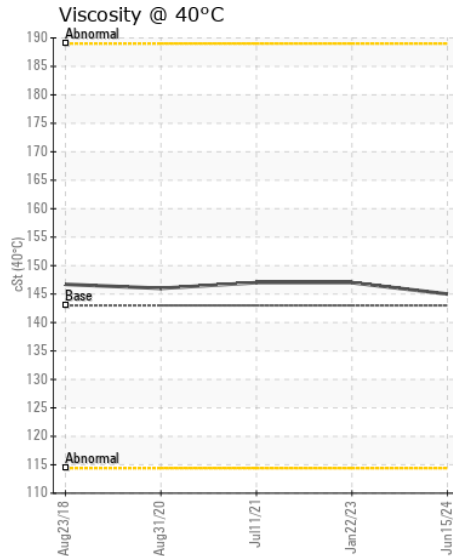
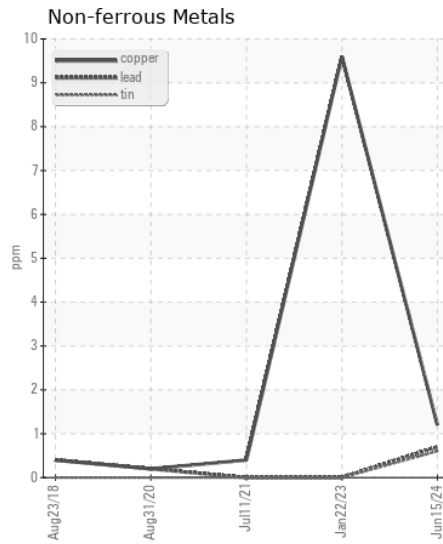
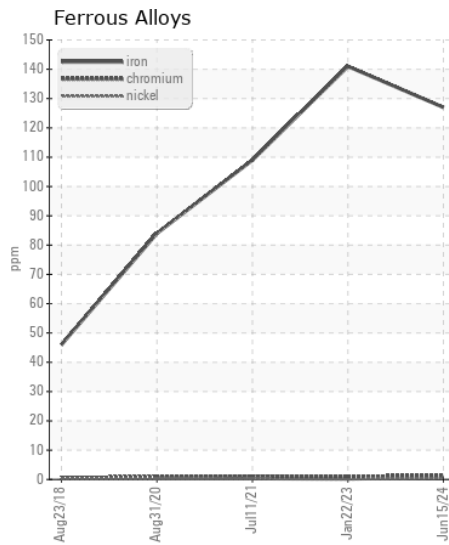
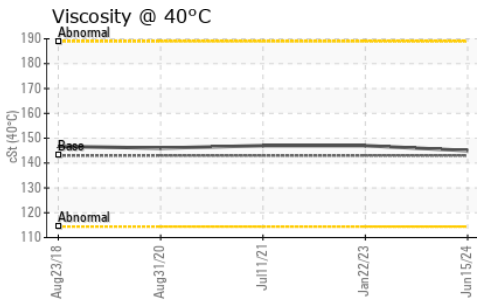
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	11	13	9
Potassium	ppm	ASTM D5185m	>20	2	2	1
Water		WC Method	>0.2	NEG	NEG	NEG
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>170	0	0	2
Boron	ppm	ASTM D5185m	400	250	295	371
Barium	ppm	ASTM D5185m	200	2	1	<1
Molybdenum	ppm	ASTM D5185m	12	1	<1	<1
Manganese	ppm	ASTM D5185m		2	2	2
Magnesium	ppm	ASTM D5185m	12	3	3	3
Calcium	ppm	ASTM D5185m	150	6	81	16
Phosphorus	ppm	ASTM D5185m	1650	1011	1090	961
Zinc	ppm	ASTM D5185m	125	14	40	4
Sulfur	ppm	ASTM D5185m	22500	19994	21367	17647
Visc @ 40°C	cSt	ASTM D445	143	145	147	147



Certificate L2367

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

Sample No. : CL0005568

Lab Number : 06218612

Unique Number : 11096809

Test Package : CONST

Received : 24 Jun 2024

Tested : 25 Jun 2024

Diagnosed : 25 Jun 2024 - Wes Davis

BAKER AR

8819 COLUMBUS RD

DAVIDSON, NC

US 28036

Contact: Service Manager

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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