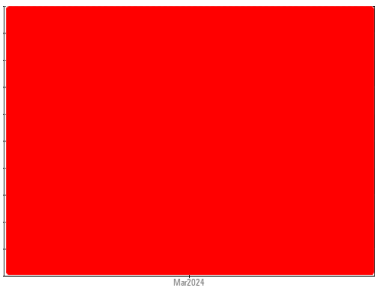
PROBLEM SUMMARY

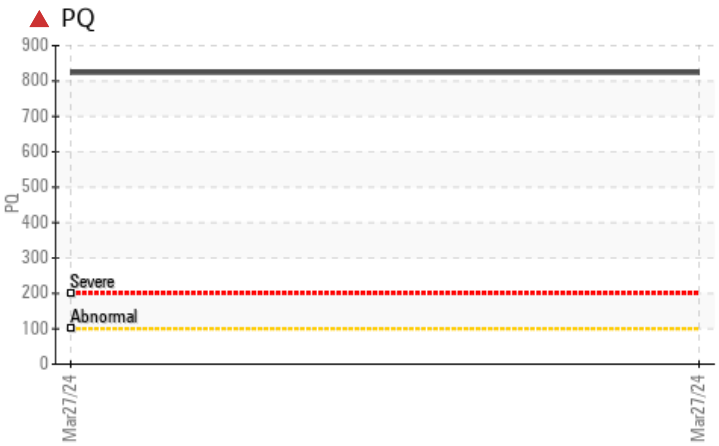
Sample Rating Trend

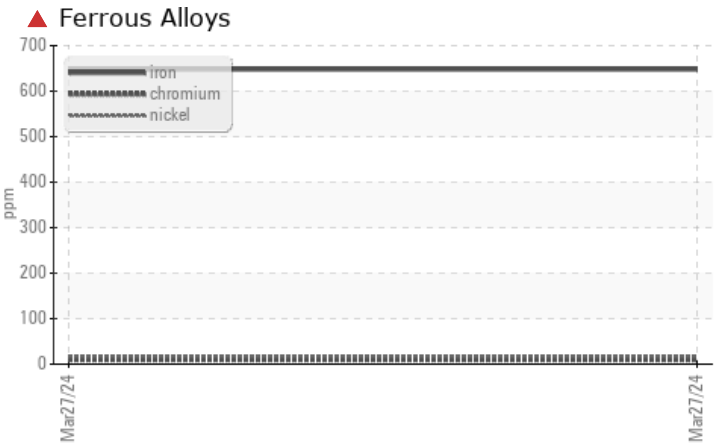


WEAR

Machine Id
HD 5
Component
Gearbox
Fluid
TULCO LUBSOIL INDUSTRIAL GEAR OIL 320 (--- QTS)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	---	---
PQ		ASTM D8184		▲ **824**	---	---
Iron	ppm	ASTM D5185m	>200	▲ **648**	---	---
Nickel	ppm	ASTM D5185m	>15	▲ **17**	---	---

Customer Id: HERROATX
Sample No.: TO50002298
Lab Number: 06140724
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Sean Felton +1 919-379-4092
sfelton@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

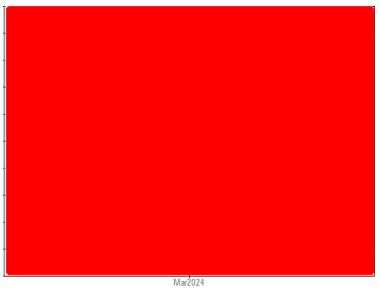
RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
HD 5
Component
Gearbox
Fluid
TULCO LUBSOIL INDUSTRIAL GEAR OIL 320 (--- QTS)

DIAGNOSIS

▲ Recommendation
We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

▲ Wear
Gear wear is indicated.

Contamination
There is no indication of any contamination in the oil.

Fluid Condition
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**TO50002298**	---	---
Sample Date		Client Info		**27 Mar 2024**	---	---
Machine Age	mths	Client Info		**1**	---	---
Oil Age	mths	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**SEVERE**	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	**NEG**	---	---

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		▲ **824**	---	---
Iron	ppm	ASTM D5185m	>200	▲ **648**	---	---
Chromium	ppm	ASTM D5185m	>15	**9**	---	---
Nickel	ppm	ASTM D5185m	>15	▲ **17**	---	---
Titanium	ppm	ASTM D5185m		**<1**	---	---
Silver	ppm	ASTM D5185m		**0**	---	---
Aluminum	ppm	ASTM D5185m	>25	**<1**	---	---
Lead	ppm	ASTM D5185m	>100	**<1**	---	---
Copper	ppm	ASTM D5185m	>200	**37**	---	---
Tin	ppm	ASTM D5185m	>25	**<1**	---	---
Vanadium	ppm	ASTM D5185m		**0**	---	---
Cadmium	ppm	ASTM D5185m		**0**	---	---

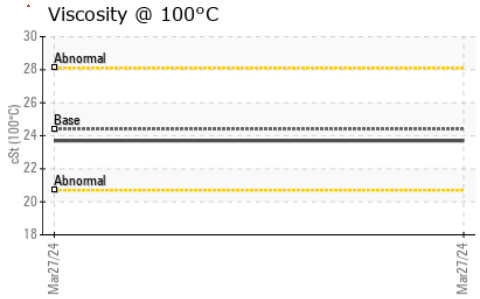
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	10	**0**	---	---
Barium	ppm	ASTM D5185m		**0**	---	---
Molybdenum	ppm	ASTM D5185m		**<1**	---	---
Manganese	ppm	ASTM D5185m		**5**	---	---
Magnesium	ppm	ASTM D5185m		**<1**	---	---
Calcium	ppm	ASTM D5185m		**2**	---	---
Phosphorus	ppm	ASTM D5185m	125	**107**	---	---
Zinc	ppm	ASTM D5185m		**14**	---	---
Sulfur	ppm	ASTM D5185m	5850	**8579**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**6**	---	---
Sodium	ppm	ASTM D5185m		**<1**	---	---
Potassium	ppm	ASTM D5185m	>20	**0**	---	---

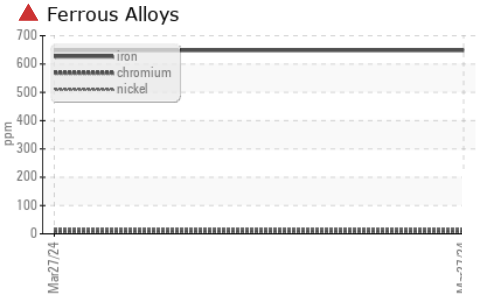
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	---	---
Appearance	scalar	*Visual	NORML	**NORML**	---	---
Odor	scalar	*Visual	NORML	**NORML**	---	---
Emulsified Water	scalar	*Visual	>0.2	**NEG**	---	---
Free Water	scalar	*Visual		**NEG**	---	---

OIL ANALYSIS REPORT

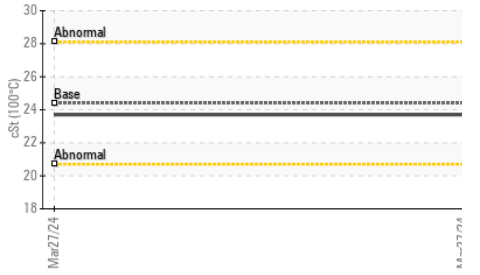
Viscosity @ 100°C



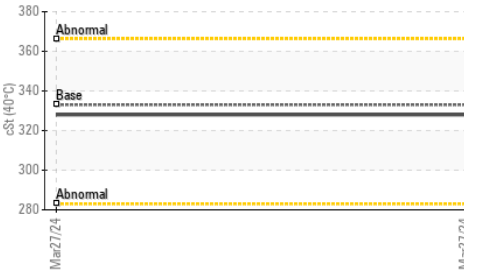
Ferrous Alloys



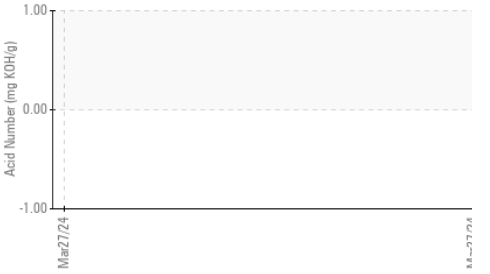
Viscosity @ 100°C



Viscosity @ 40°C



Acid Number

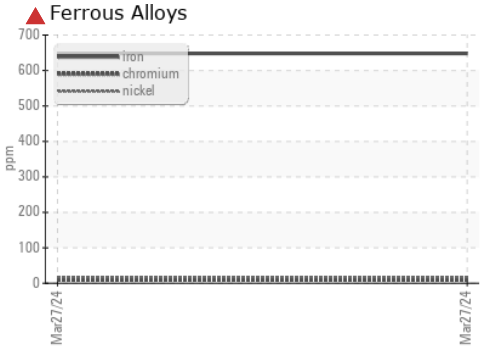


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	333	**328**	---	---
Visc @ 100°C	cSt	ASTM D445	24.4	**23.7**	---	---
Viscosity Index (VI)	Scale	ASTM D2270	94	**91**	---	---

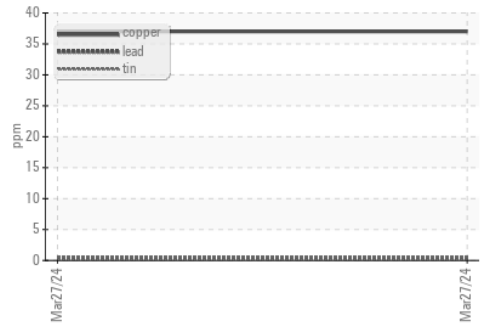
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

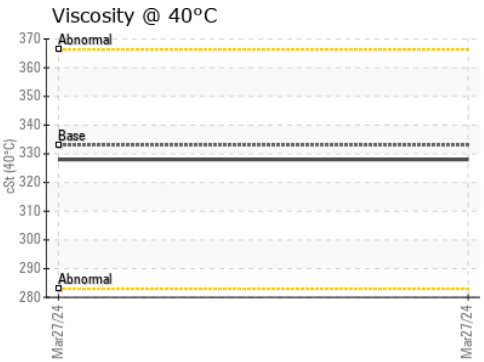
Ferrous Alloys



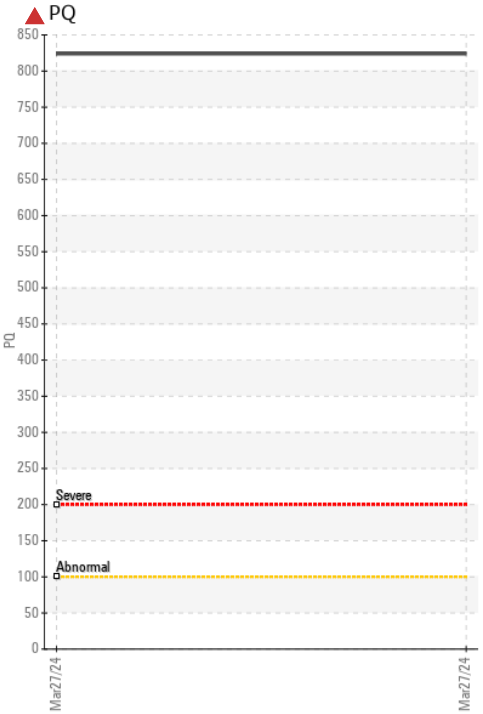
Non-ferrous Metals



Viscosity @ 40°C



PQ



Acid Number

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50002298
Lab Number : 06140724
Unique Number : 10965532
Test Package : IND 2 (Additional Tests: KV100, PQ, VI)

Received : 05 Apr 2024
Tested : 09 Apr 2024
Diagnosed : 09 Apr 2024 - Sean Felton

Certificate L2367

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)

HERITAGE BAG CO
501 GATEWAY PKWY
ROANOKE, TX
US 76262-3481
Contact: BRIAN WALKER
brian.walker@novolex.com
T:
F:

Report Id: HERROATX [WUSCAR] 06140724 (Generated: 04/09/2024 18:57:22) Rev: 1

Contact/Location: BRIAN WALKER - HERROATX