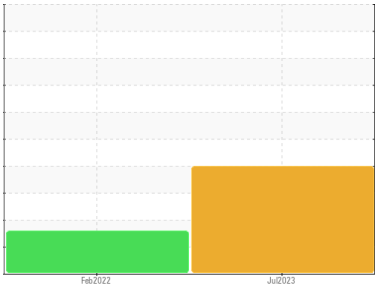
PROBLEM SUMMARY

Machine Id
40-62
Component
Hydraulic System
Fluid
NOT GIVEN (--- GAL)

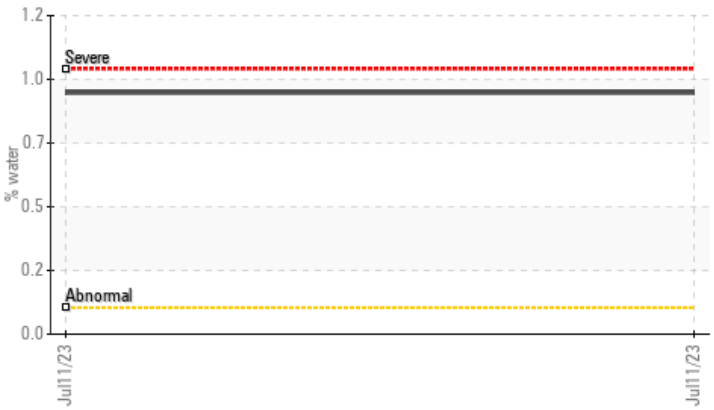
Sample Rating Trend



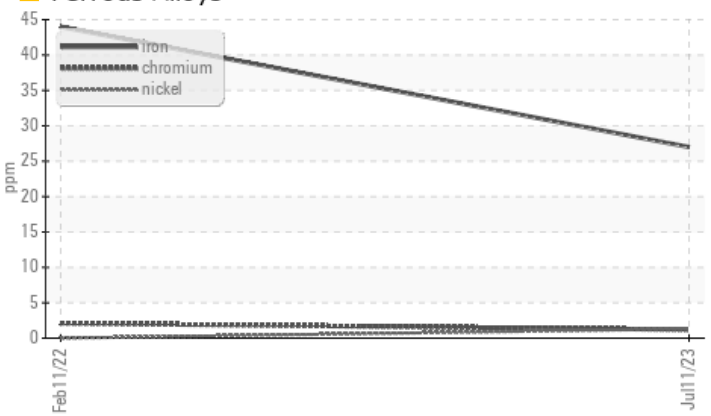
WATER

COMPONENT CONDITION SUMMARY

Water



Ferrous Alloys



RECOMMENDATION

We advise that you check for the source of water entry. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	---
Iron	ppm	ASTM D5185m	>20	▲ **27**	▲ 44	---
Water	%	ASTM D6304	>0.1	▲ **0.910**	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ **9100**	---	---
Silt	scalar	*Visual	NONE	▲ **HEAVY**	NONE	---
Appearance	scalar	*Visual	NORML	▲ **HAZY**	NORML	---

Customer Id: MANTUL
Sample No.: WC0750187
Lab Number: 05899845
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@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
Change Filter	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.
Check Water Access	---	---	?	We advise that you check for the source of water entry.
Filter Fluid	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

HISTORICAL DIAGNOSIS

11 Feb 2022 Diag: Don Baldridge

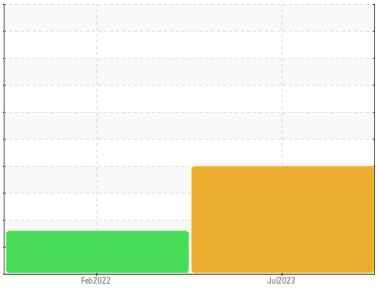
WEAR

We recommend you service the filters on this component. Resample at the next service interval to monitor.The iron level is abnormal. All other component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
40-62
Component
Hydraulic System
Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

The iron level is abnormal.

Contamination

Appearance is hazy. There is a high concentration of water present in the oil. There is a moderate amount of visible silt present in the sample.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0750187**	WC0619977	---
Sample Date		Client Info		**11 Jul 2023**	11 Feb 2022	---
Machine Age	hrs	Client Info		**8949**	8333	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**Changed**	Not Changd	---
Sample Status				**ABNORMAL**	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	▲ **27**	▲ 44	---
Chromium	ppm	ASTM D5185m	>10	**1**	2	---
Nickel	ppm	ASTM D5185m	>10	**1**	0	---
Titanium	ppm	ASTM D5185m		**<1**	<1	---
Silver	ppm	ASTM D5185m		**<1**	0	---
Aluminum	ppm	ASTM D5185m	>10	**3**	4	---
Lead	ppm	ASTM D5185m	>10	**4**	2	---
Copper	ppm	ASTM D5185m	>75	**14**	13	---
Tin	ppm	ASTM D5185m	>10	**<1**	0	---
Antimony	ppm	ASTM D5185m		**---**	<1	---
Vanadium	ppm	ASTM D5185m		**<1**	0	---
Cadmium	ppm	ASTM D5185m		**<1**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**5**	10	---
Barium	ppm	ASTM D5185m		**0**	0	---
Molybdenum	ppm	ASTM D5185m		**<1**	2	---
Manganese	ppm	ASTM D5185m		**<1**	<1	---
Magnesium	ppm	ASTM D5185m		**8**	11	---
Calcium	ppm	ASTM D5185m		**819**	2008	---
Phosphorus	ppm	ASTM D5185m		**456**	818	---
Zinc	ppm	ASTM D5185m		**597**	919	---
Sulfur	ppm	ASTM D5185m		**2207**	2692	---

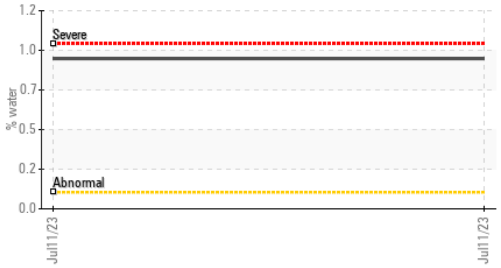
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**8**	16	---
Sodium	ppm	ASTM D5185m		**0**	3	---
Potassium	ppm	ASTM D5185m	>20	**5**	0	---
Water	%	ASTM D6304	>0.1	▲ **0.910**	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ **9100**	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**---**	▲ 222483	---
Particles >6µm		ASTM D7647	>1300	**---**	▲ 48094	---
Particles >14µm		ASTM D7647	>160	**---**	61	---
Particles >21µm		ASTM D7647	>40	**---**	9	---
Particles >38µm		ASTM D7647	>10	**---**	0	---
Particles >71µm		ASTM D7647	>3	**---**	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**---**	▲ 25/23/13	---

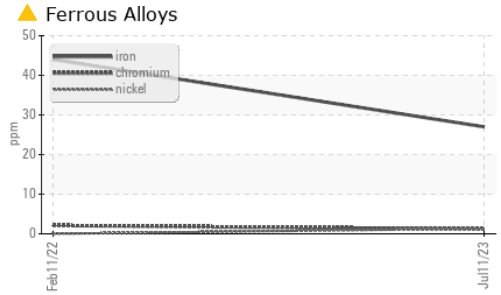
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.96**	1.19	---

OIL ANALYSIS REPORT

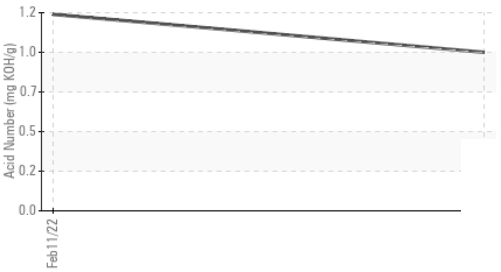
Water



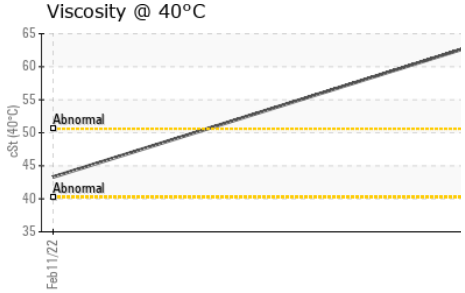
Ferrous Alloys



Acid Number

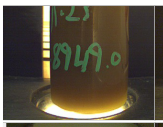
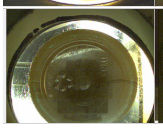
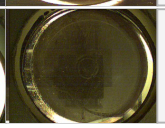


Viscosity @ 40°C



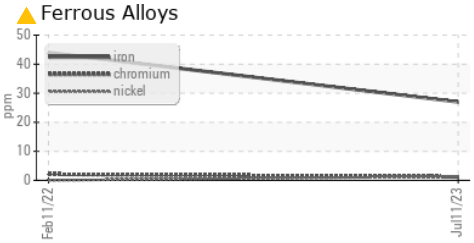
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	▲ **HEAVY**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	▲ **HAZY**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.1	**0.2%**	NEG	---
Free Water	scalar	*Visual		**NEG**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**63.7**	43.3	---

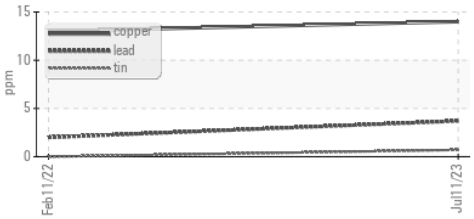
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

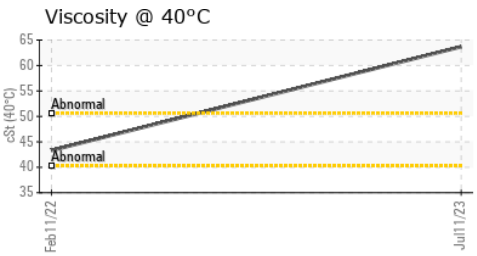
Ferrous Alloys



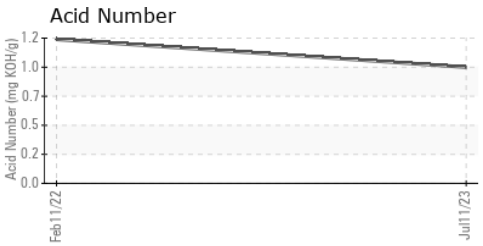
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0750187 **Received** : 17 Jul 2023
Lab Number : 05899845 **Diagnosed** : 21 Jul 2023
Unique Number : 10561201 **Diagnostician** : Jonathan Hester
Test Package : CONST (Additional Tests: KF)

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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