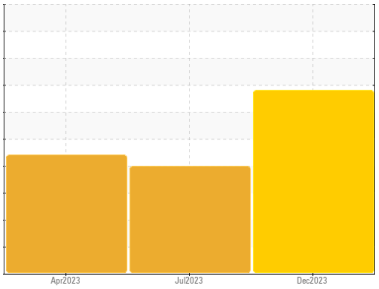
PROBLEM SUMMARY

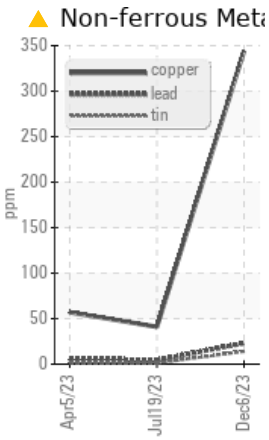
Sample Rating Trend

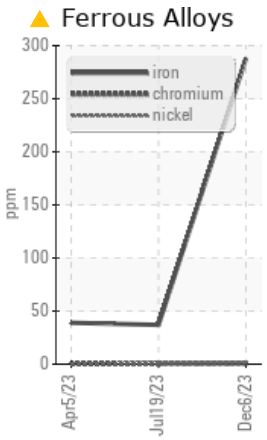


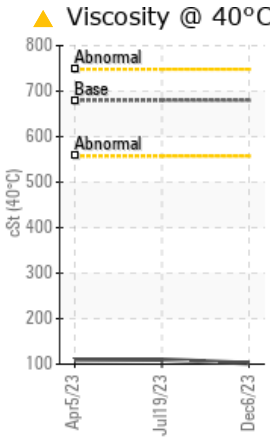
WATER

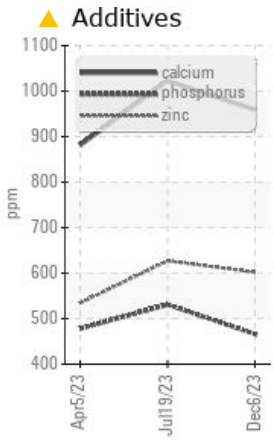
Area
MEK
Machine Id
[MEK] A-Filter
Component
Gearbox
Fluid
GEAR OIL ISO 680 (4 GAL)

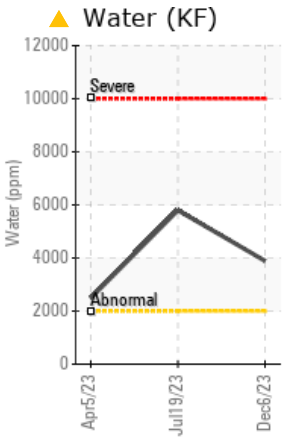
COMPONENT CONDITION SUMMARY











RECOMMENDATION

We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>200	▲ **288**	37	39
Copper	ppm	ASTM D5185m	>200	▲ **344**	41	57
Tin	ppm	ASTM D5185m	>25	▲ **14**	1	1
Boron	ppm	ASTM D5185m	50	▲ **101**	▲ 103	89
Molybdenum	ppm	ASTM D5185m	15	▲ **193**	▲ 184	175
Magnesium	ppm	ASTM D5185m	50	▲ **353**	▲ 374	296
Calcium	ppm	ASTM D5185m	50	▲ **959**	▲ 1023	881
Zinc	ppm	ASTM D5185m	100	▲ **602**	▲ 627	534
Water	%	ASTM D6304	>0.2	▲ **0.389**	▲ 0.580	▲ 0.249
ppm Water	ppm	ASTM D6304	>2000	▲ **3890**	▲ 5800	▲ 2490
Debris	scalar	*Visual	NONE	▲ **HEAVY**	LIGHT	LIGHT
Visc @ 40°C	cSt	ASTM D445	680	▲ **102**	▲ 110	109

Customer Id: CALSHR
Sample No.: RP0038978
Lab Number: 06029475
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

19 Jul 2023 Diag: Doug Bogart

WATER

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate concentration of water present in the oil. The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

view report

05 Apr 2023 Diag: Doug Bogart

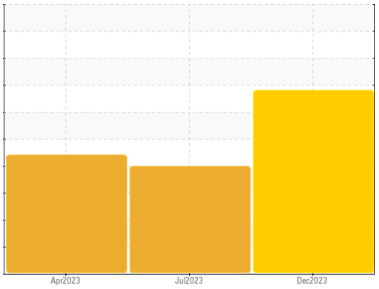
WATER

We advise that you follow the water drain-off procedure for this component. Resample at the next service interval to monitor.Moderate concentration of visible metal present. All component wear rates are normal. Free water present. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
MEK
Machine Id
[MEK] A-Filter
Component
Gearbox
Fluid
GEAR OIL ISO 680 (4 GAL)

DIAGNOSIS

Recommendation
We recommend an early resample to monitor this condition.

Wear
Gear wear is indicated. Bearing and/or bushing wear is indicated.

Contamination
There is a light concentration of water present in the oil. High concentration of visible dirt/debris present in the oil.

Fluid Condition
The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**RP0038978**	RP0034845	RP0031620
Sample Date		Client Info		**06 Dec 2023**	19 Jul 2023	05 Apr 2023
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Not Changd**	Not Changd	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	▲ **288**	37	39
Chromium	ppm	ASTM D5185m	>15	**<1**	<1	0
Nickel	ppm	ASTM D5185m	>15	**2**	1	0
Titanium	ppm	ASTM D5185m		**<1**	<1	0
Silver	ppm	ASTM D5185m		**2**	0	0
Aluminum	ppm	ASTM D5185m	>25	**4**	<1	0
Lead	ppm	ASTM D5185m	>100	**23**	4	6
Copper	ppm	ASTM D5185m	>200	▲ **344**	41	57
Tin	ppm	ASTM D5185m	>25	▲ **14**	1	1
Vanadium	ppm	ASTM D5185m		**0**	<1	0
Cadmium	ppm	ASTM D5185m		**<1**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	▲ **101**	▲ 103	89
Barium	ppm	ASTM D5185m	15	**0**	0	0
Molybdenum	ppm	ASTM D5185m	15	▲ **193**	▲ 184	175
Manganese	ppm	ASTM D5185m		**2**	<1	<1
Magnesium	ppm	ASTM D5185m	50	▲ **353**	▲ 374	296
Calcium	ppm	ASTM D5185m	50	▲ **959**	▲ 1023	881
Phosphorus	ppm	ASTM D5185m	350	**466**	531	478
Zinc	ppm	ASTM D5185m	100	▲ **602**	▲ 627	534

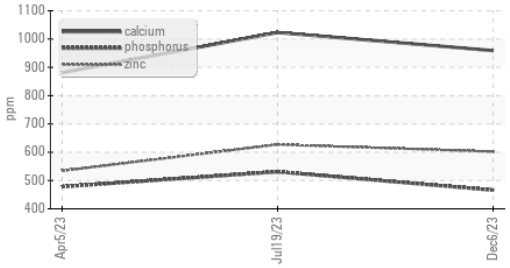
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**16**	5	7
Sodium	ppm	ASTM D5185m		**19**	<1	0
Potassium	ppm	ASTM D5185m	>20	**8**	<1	2
Water	%	ASTM D6304	>0.2	▲ **0.389**	▲ 0.580	▲ 0.249
ppm Water	ppm	ASTM D6304	>2000	▲ **3890**	▲ 5800	▲ 2490

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	**1.04**	1.25	0.58

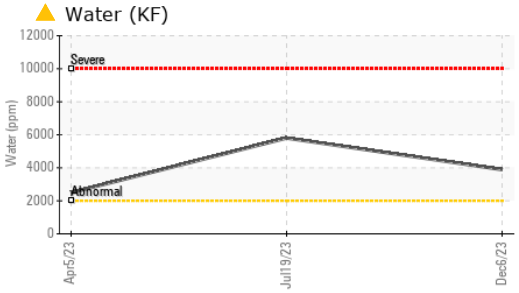
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	▲ MODER
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	▲ **HEAVY**	LIGHT	LIGHT
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	**0.2%**	0.2%	0.2%
Free Water	scalar	*Visual		**NEG**	NEG	▲ 0.2%

OIL ANALYSIS REPORT

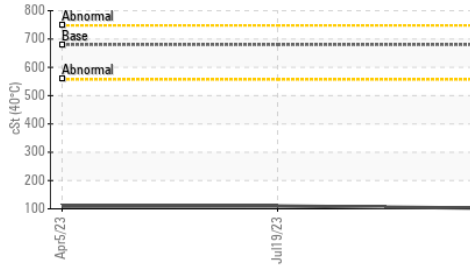
Additives



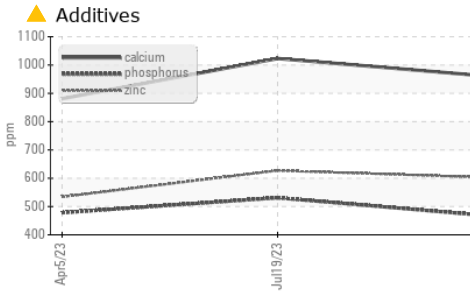
Water (KF)



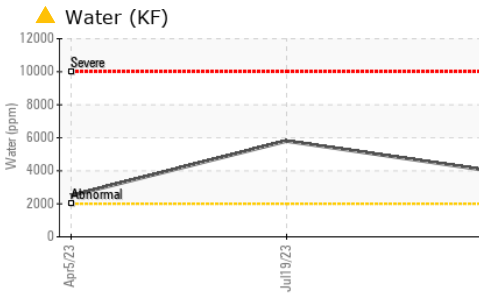
Viscosity @ 40°C



Additives



Water (KF)

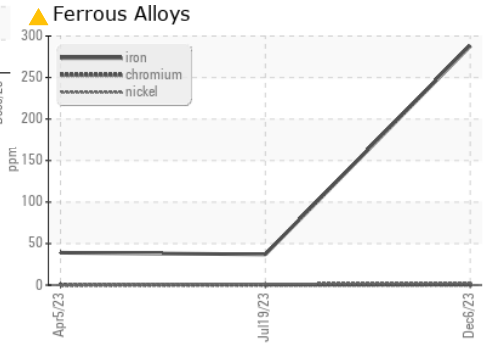


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	680	▲ **102**	▲ 110	109

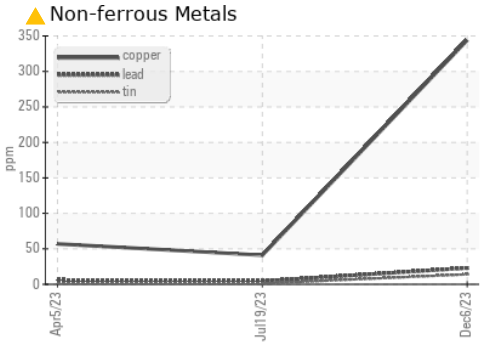
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

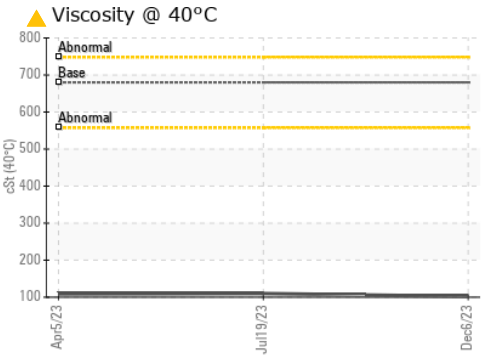
Ferrous Alloys



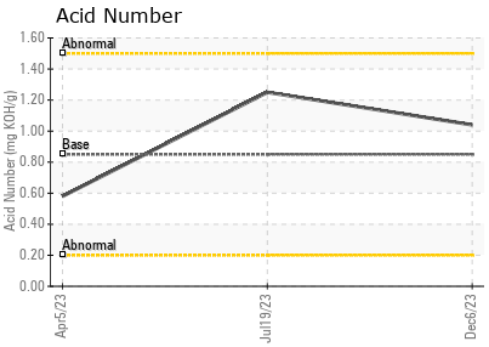
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0038978
Lab Number : 06029475
Unique Number : 10779266
Test Package : IND 2

Received : 08 Dec 2023
Diagnosed : 12 Dec 2023
Diagnostician : Don Baldridge

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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