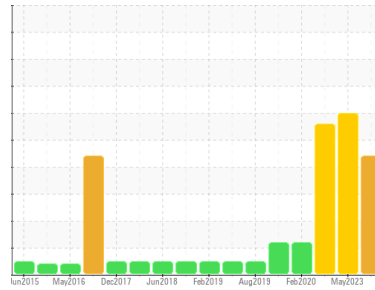




PROBLEM SUMMARY

Sample Rating Trend



WATER



Machine Id **BAC SAW STRAIGHTENER**

Component

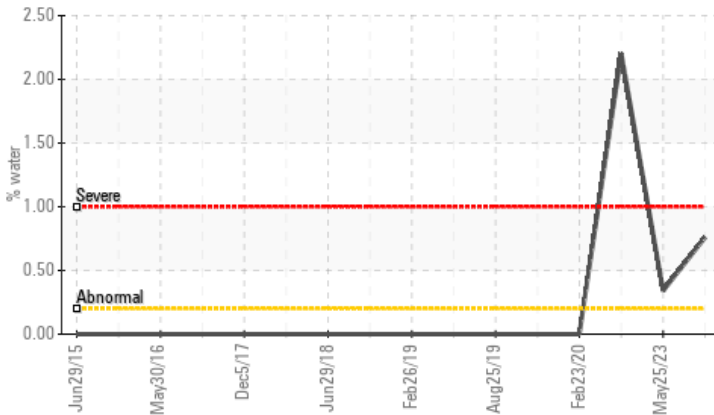
Gearbox

Fluid

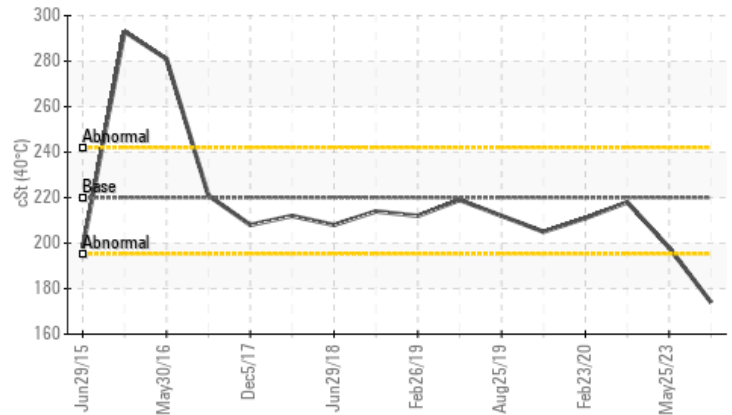
GEAR OIL (PAO) ISO 220 (20 LTR)

COMPONENT CONDITION SUMMARY

▲ Water



▲ Viscosity @ 40°C



RECOMMENDATION

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	SEVERE
Water	%	ASTM D6304*	>0.2	▲ 0.760	▲ 0.341	● 2.203
ppm Water	ppm	ASTM D6304*	>2000	▲ 7605.3	▲ 3416.4	● 22036.6
Appearance	scalar	Visual*	NORML	▲ WGOIL	NORML	▲ MILKY
Emulsified Water	scalar	Visual*	>0.2	▲ .5%	▲ .5%	▲ .5%
Free Water	scalar	Visual*		▲ 1%	▲ 5%	▲ 5%
Visc @ 40°C	cSt	ASTM D7279(m)	220	▲ 174	198	218

Customer Id: WEL191WEL

Sample No.: WC0851644

Lab Number: 02577606

Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:

Kevin Marson +1 (289)291-4644 x4644

Kevin.Marson@wearcheck.com

To change component or sample information:

Gloria Gonzalez +1 (289)291-4643 x4643

gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
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.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Water Access	---	---	?	We advise that you check for the source of water entry.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.

HISTORICAL DIAGNOSIS

25 May 2023 Diag: Kevin Marson

WATER



We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. We advise that you check for visible metal particles in the oil. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Moderate concentration of visible metal present. Gear wear is indicated. There is a moderate concentration of water present in the oil. Free water present. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

[view report](#)



08 Jan 2023 Diag: Kevin Marson

WATER



We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is a high concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

[view report](#)



23 Feb 2020 Diag: Kevin Marson

VISUAL METAL



We advise that you check for visible metal particles in the oil. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. Light concentration of visible metal present. Gear wear is indicated. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

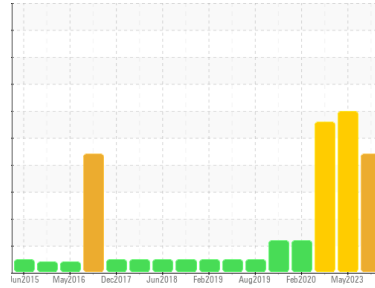
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id **BAC SAW STRAIGHTENER**

Component
Gearbox
Fluid
GEAR OIL (PAO) ISO 220 (20 LTR)

DIAGNOSIS

▲ Recommendation

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

▲ Contamination

There is a moderate concentration of water present in the oil. Free water present.

▲ Fluid Condition

Viscosity of sample indicates oil is within ISO 150 range, advise investigate. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0851644	WC0822509	WC0777249
Sample Date	Client Info		21 Aug 2023	25 May 2023	08 Jan 2023
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		66	122	63
Iron	ppm	ASTM D5185(m) >200	144	148	86
Chromium	ppm	ASTM D5185(m) >15	4	4	2
Nickel	ppm	ASTM D5185(m) >15	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	<1	<1	<1
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >25	2	5	2
Lead	ppm	ASTM D5185(m) >100	<1	<1	<1
Copper	ppm	ASTM D5185(m) >200	11	10	11
Tin	ppm	ASTM D5185(m) >25	<1	1	1
Antimony	ppm	ASTM D5185(m) >5	0	0	<1
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 25	4	6	4
Barium	ppm	ASTM D5185(m) 12	2	1	2
Molybdenum	ppm	ASTM D5185(m) 5	0	0	0
Manganese	ppm	ASTM D5185(m)	1	2	<1
Magnesium	ppm	ASTM D5185(m) 25	1	1	<1
Calcium	ppm	ASTM D5185(m) 25	65	47	6
Phosphorus	ppm	ASTM D5185(m) 375	302	355	307
Zinc	ppm	ASTM D5185(m) 25	10	4	12
Sulfur	ppm	ASTM D5185(m) 4900	7840	7950	8194
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

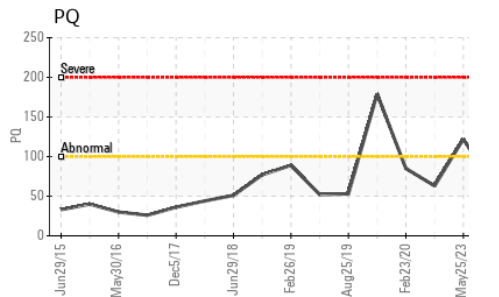
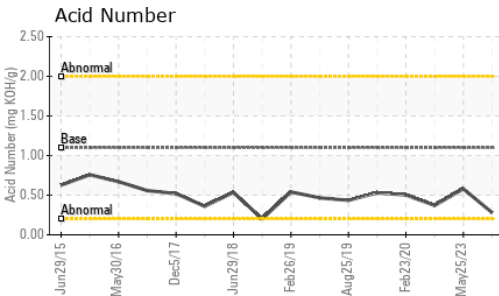
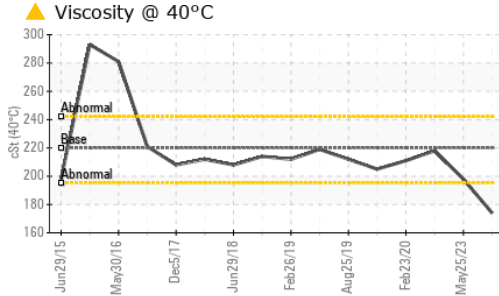
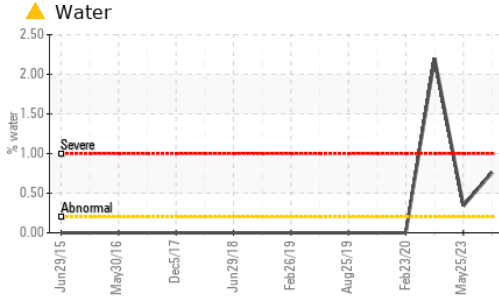
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	6	10	5
Sodium	ppm	ASTM D5185(m)	1	3	2
Potassium	ppm	ASTM D5185(m) >20	<1	2	<1
Water	%	ASTM D6304* >0.2	▲ 0.760	▲ 0.341	● 2.203
ppm Water	ppm	ASTM D6304* >2000	▲ 7605.3	▲ 3416.4	● 22036.6

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 1.10	0.28	0.58	0.37



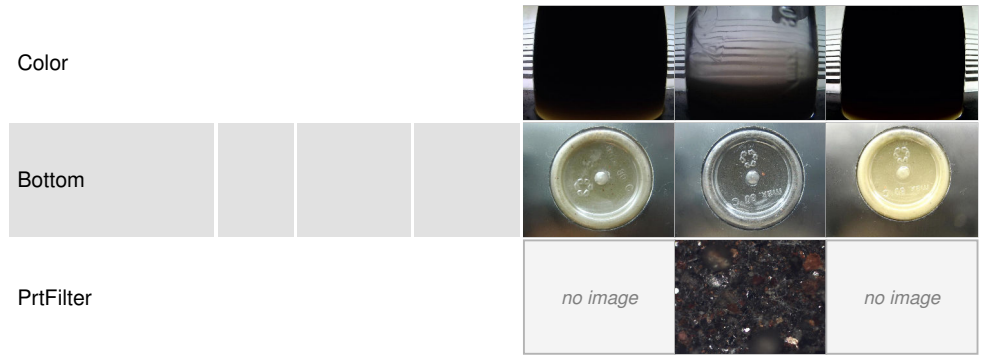
OIL ANALYSIS REPORT



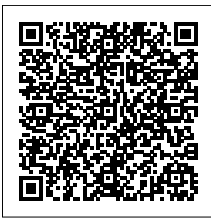
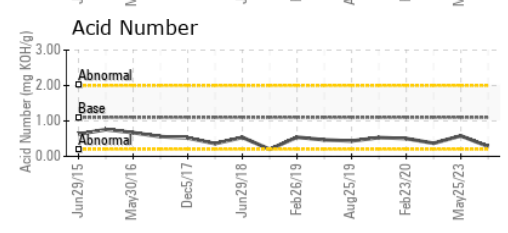
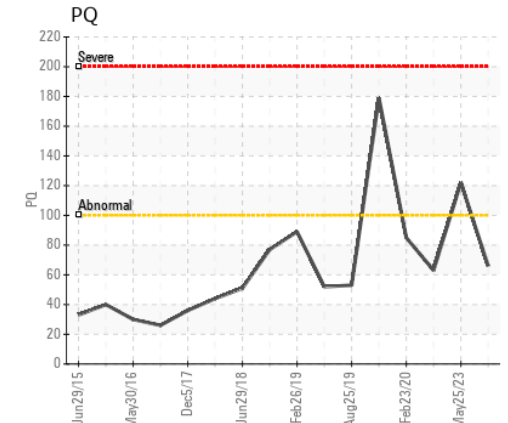
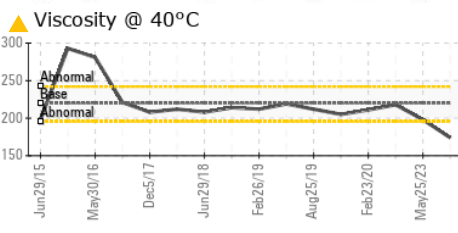
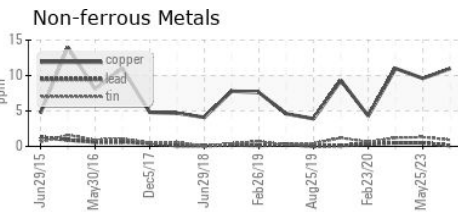
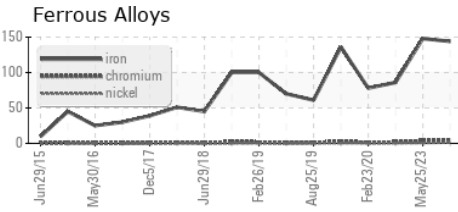
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	▲ LIGHT
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	VLITE	NONE
Debris	scalar	Visual*	NONE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	▲ LIGHT
Appearance	scalar	Visual*	NORML	▲ WGOIL	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	▲ .5%	▲ .5%
Free Water	scalar	Visual*		▲ 1%	▲ 5%

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220	▲ 174	198

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0851644 **Received** : 22 Aug 2023
Lab Number : 02577606 **Diagnosed** : 25 Aug 2023
Unique Number : 5630666 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: KF)

Welded Tube of Canada
 191 Ridge Road
 Welland, ON
 CA L3B 5N7
 Contact: Steve Holjak
 sholjak@weldedtube.com
 T: (905)669-1111
 F: (905)695-1504

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.