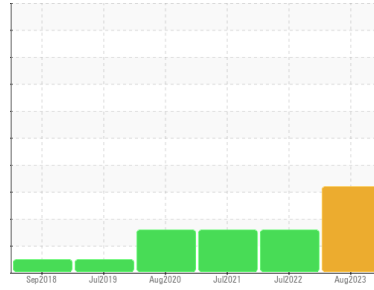




# PROBLEM SUMMARY

Sample Rating Trend



**WATER**

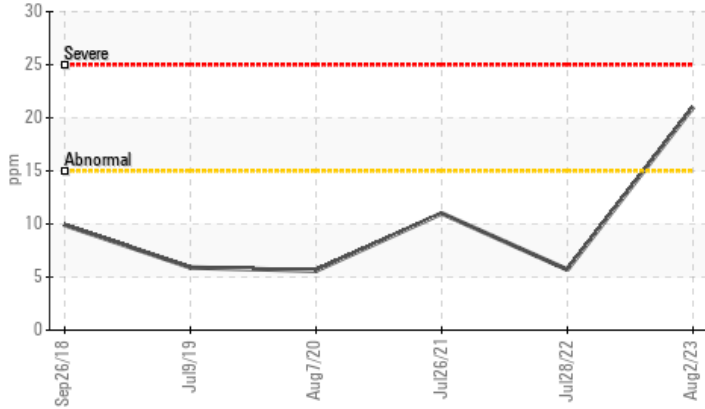


Machine Id  
**CARRIER LCOR REMSEN C1 (S/N 3802Q67328)**

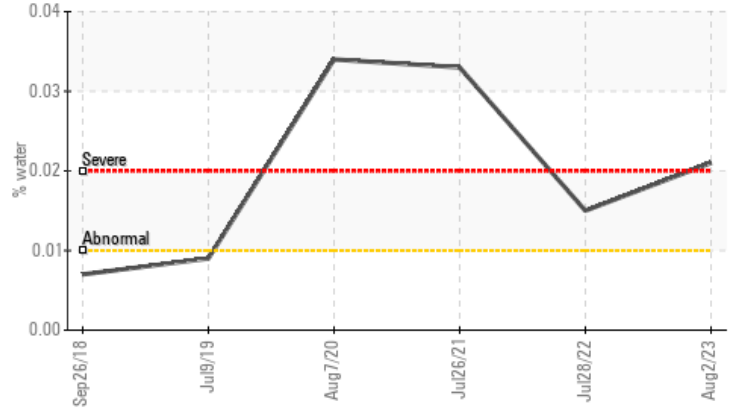
Component  
**Refrigeration Compressor**  
Fluid  
**CARRIER 68 (--- Oz)**

## COMPONENT CONDITION SUMMARY

▲ Silicon (ppm)



▲ Water



## RECOMMENDATION

No corrective action is recommended at this time.  
Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	MARGINAL	MARGINAL
Silicon	ppm	ASTM D5185m	>15	▲ 21	6	11
Water	%	ASTM D6304	>0.01	▲ 0.021	▲ 0.015	▲ 0.033
ppm Water	ppm	ASTM D6304	>100	▲ 210.1	▲ 155.8	▲ 337.7

Customer Id: CDSCRO  
Sample No.: WC0713934  
Lab Number: 05924364  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Angela Borella +1 800-237-1369  
[angela.borella@wearcheckusa.com](mailto:angela.borella@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 28 Jul 2022 Diag: Don Baldrige

WATER



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a trace of moisture present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 26 Jul 2021 Diag: Don Baldrige

WATER



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a trace of moisture present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 07 Aug 2020 Diag: Don Baldrige

WATER



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a trace of moisture present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

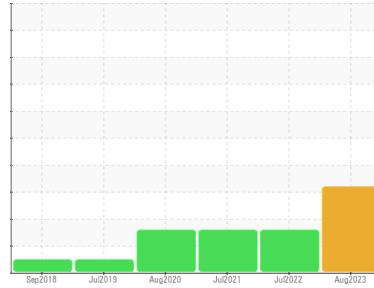
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**CARRIER LCOR REMSEN C1 (S/N 3802Q67328)**

Component  
**Refrigeration Compressor**  
Fluid  
**CARRIER 68 (--- Oz)**

## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a trace of moisture present in the oil. Elemental level of silicon (Si) above normal.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0713934</b>	WC0714108	WC0596987
Sample Date	Client Info		<b>02 Aug 2023</b>	28 Jul 2022	26 Jul 2021
Machine Age	hrs	Client Info	<b>31940</b>	31204	29436
Oil Age	hrs	Client Info	<b>31940</b>	31204	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	MARGINAL	MARGINAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >8	<b>0</b>	<1	<1
Chromium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	<b>0</b>	1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >3	<b>&lt;1</b>	2	0
Lead	ppm	ASTM D5185m >2	<b>0</b>	<1	4
Copper	ppm	ASTM D5185m >8	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	3	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	5
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	<1	2
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Calcium	ppm	ASTM D5185m	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>2080</b>	584	369
Zinc	ppm	ASTM D5185m	<b>0</b>	0	3
Sulfur	ppm	ASTM D5185m	<b>0</b>	6	6

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>▲ 21</b>	6	11
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Potassium	ppm	ASTM D5185m >20	<b>2</b>	0	0
Water	%	ASTM D6304 >0.01	<b>▲ 0.021</b>	▲ 0.015	▲ 0.033
ppm Water	ppm	ASTM D6304 >100	<b>▲ 210.1</b>	▲ 155.8	▲ 337.7

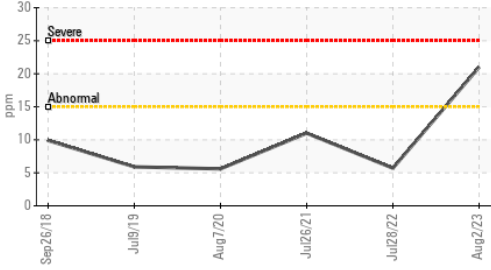
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	<b>0.014</b>	0.024	0.029

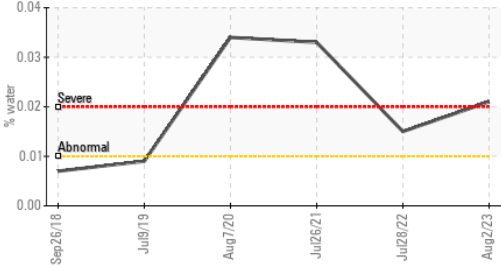


# OIL ANALYSIS REPORT

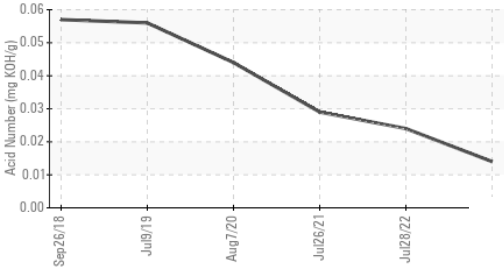
▲ Silicon (ppm)



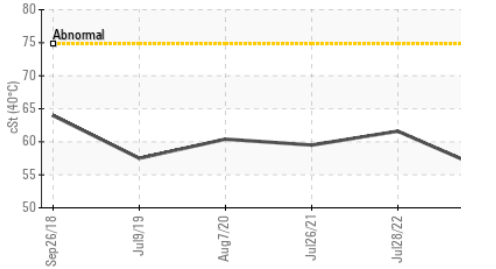
▲ Water



Acid Number



Viscosity @ 40°C

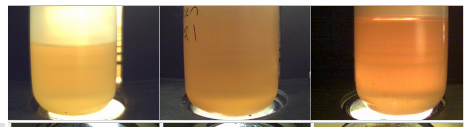


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

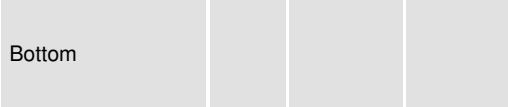
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	55.9	61.6	59.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

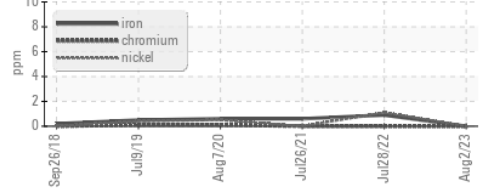


Bottom

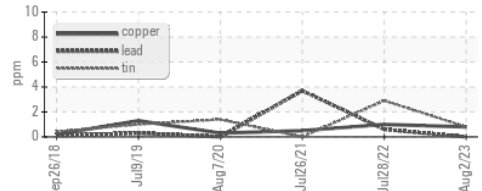


## GRAPHS

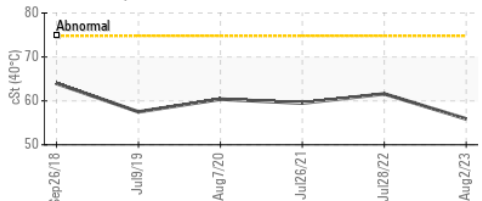
Ferrous Alloys



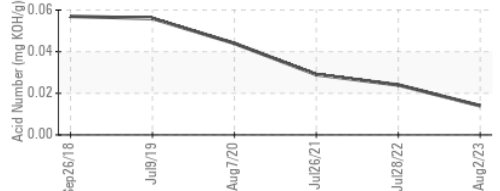
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0713934 **Received** : 14 Aug 2023  
**Lab Number** : 05924364 **Diagnosed** : 16 Aug 2023  
**Unique Number** : 10604311 **Diagnostician** : Angela Borella  
**Test Package** : IND 2

**CDS MECHANICAL SERVICES INC**  
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 US 21114  
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 kcomba@cdsmechanical.net  
 T: (410)451-7157  
 F:

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)