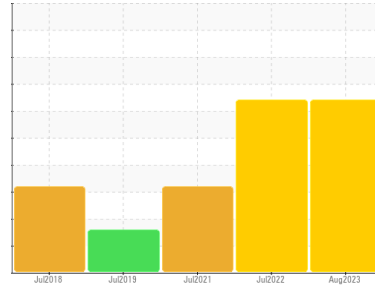




PROBLEM SUMMARY

Sample Rating Trend

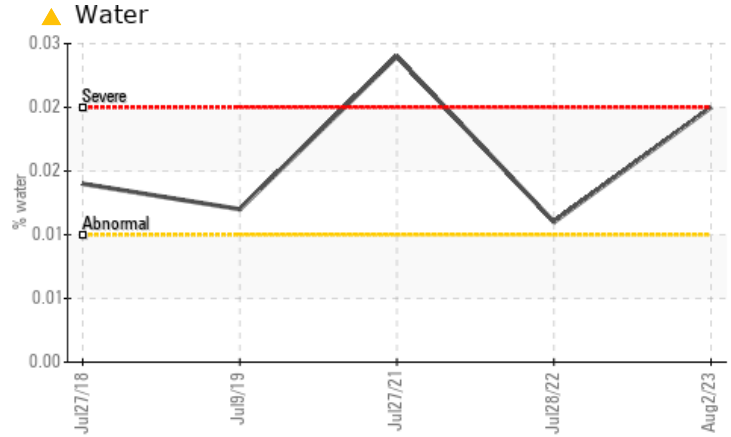
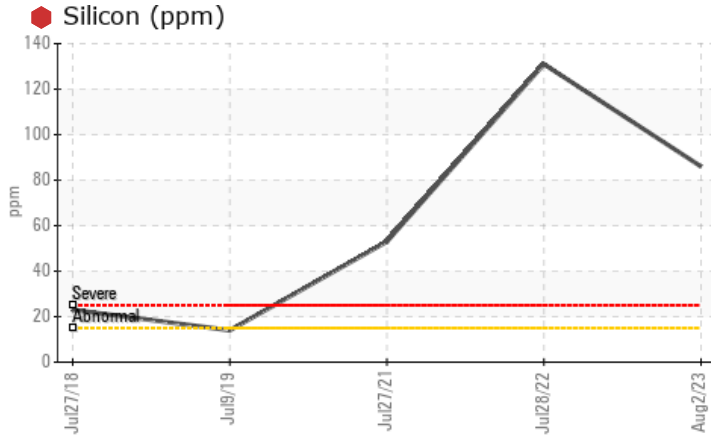


DIRT



Machine Id
CARRIER LCOR KNOX C-1 (S/N 5102Q67316)
 Component
Refrigeration Compressor
 Fluid
CARRIER 68 (10 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	ABNORMAL
Silicon	ppm	ASTM D5185m	>15	86	131	53
Water	%	ASTM D6304	>0.01	0.020	0.011	0.024
ppm Water	ppm	ASTM D6304	>100	202.6	116.6	240.9

Customer Id: CDSCRO
 Sample No.: WC0714050
 Lab Number: 05924366
 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

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.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

28 Jul 2022 Diag: Don Baldrige

DIRT



We advise that you check all areas where dirt can enter the system. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a trace of moisture present in the oil. Elemental level of silicon (Si) above normal. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

[view report](#)



27 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. Elemental level of silicon (Si) above normal. The AN level is at the top-end of the recommended limit. The condition of the oil is suitable for further service.

[view report](#)



09 Jul 2019 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.

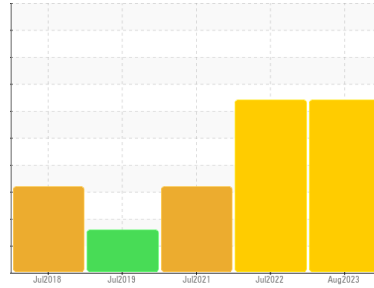
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id
CARRIER LCOR KNOX C-1 (S/N 5102Q67316)

Component
Refrigeration Compressor
Fluid
CARRIER 68 (10 GAL)

DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. We recommend an early resample to monitor this condition.

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 acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0714050	WC0597019	WC0484523
Sample Date	Client Info		02 Aug 2023	28 Jul 2022	27 Jul 2021
Machine Age	hrs	Client Info	21750	19105	17161
Oil Age	hrs	Client Info	21750	19105	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			SEVERE	SEVERE	ABNORMAL

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	1	<1
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m	<1	<1	0
Calcium	ppm	ASTM D5185m	0	0	0
Phosphorus	ppm	ASTM D5185m	1889	3280	1020
Zinc	ppm	ASTM D5185m	0	6	0
Sulfur	ppm	ASTM D5185m	10	373	0

CONTAMINANTS

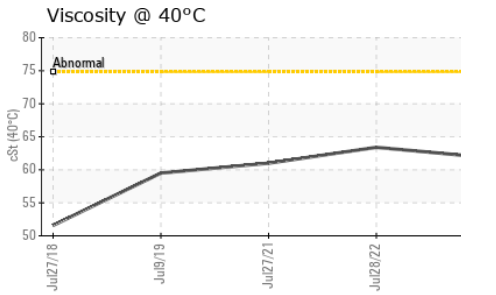
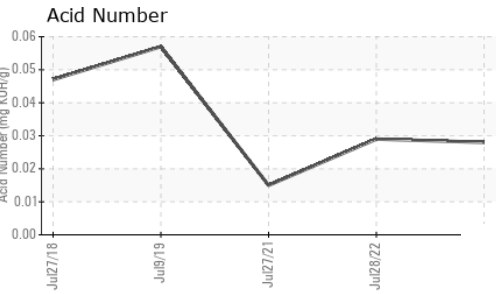
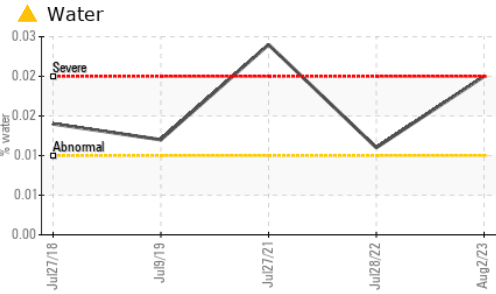
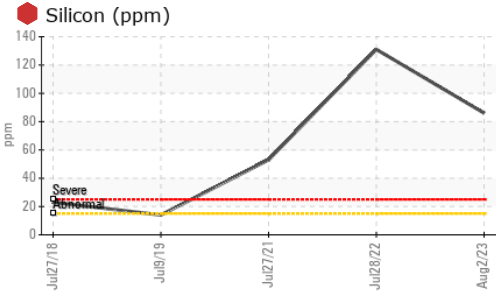
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	86	131	53
Sodium	ppm	ASTM D5185m	<1	0	0
Potassium	ppm	ASTM D5185m >20	2	0	0
Water	%	ASTM D6304 >0.01	0.020	0.011	0.024
ppm Water	ppm	ASTM D6304 >100	202.6	116.6	240.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.028	0.029	0.015



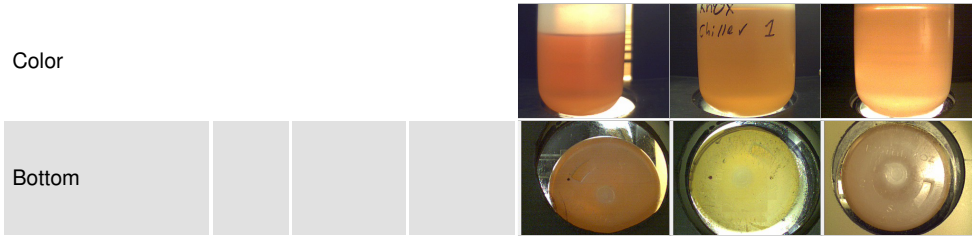
OIL ANALYSIS REPORT



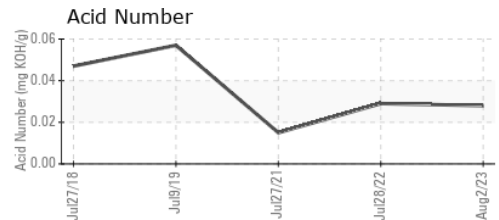
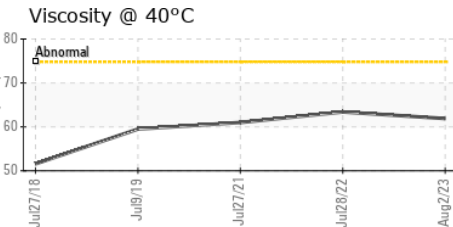
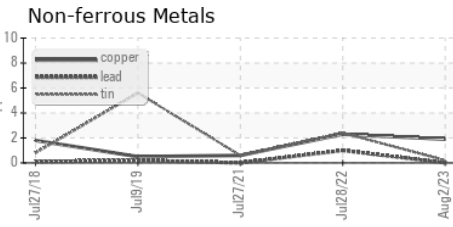
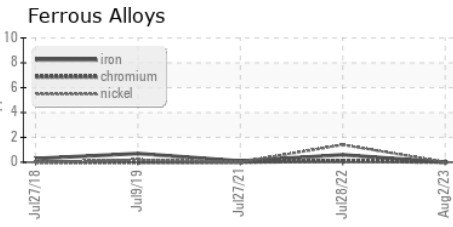
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	61.9	63.4	61.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0714050 **Received** : 14 Aug 2023
Lab Number : 05924366 **Diagnosed** : 16 Aug 2023
Unique Number : 10604313 **Diagnostician** : Angela Borella
Test Package : IND 2

CDS MECHANICAL SERVICES INC
 1654 CROFTON BLVD, SUITE 9
 CROFTON, MD
 US 21114
 Contact: DAVID BEALE
 DBEALE@CDSMECHANICAL.NET

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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F: