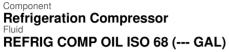
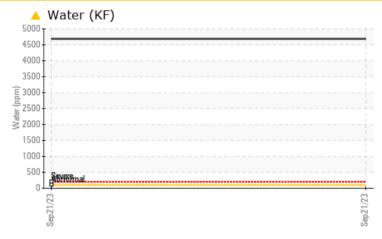


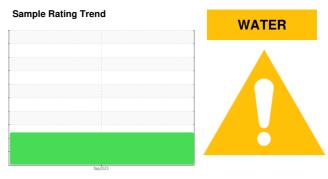
PROBLEM SUMMARY

ARTICO B3



COMPONENT CONDITION SUMMARY





Ferrous Alloys

RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	
Iron	ppm	ASTM D5185m	>8	<u> </u>	
Water	%	ASTM D6304	>0.01	6 0.469	
ppm Water	ppm	ASTM D6304	>100	<u> </u>	
Emulsified Water	scalar	*Visual	>0.01	6.2%	

Customer Id: DHRHOM Sample No.: WC0854644 Lab Number: 05962258 Test Package: IND 2



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 <u>customerservice@wearcheck.com</u>

RECOMMENDED AC	ECOMMENDED ACTIONS					
Action	Status	Date	Done By	Description		
Resample			?	We recommend an early resample to monitor this condition.		

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

WATER

ARTICO B3 Component

Refrigeration Compressor Fluid REFRIG COMP OIL ISO 68 (--- GAL)

DIAGNOSIS

A Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

🔺 Wear

The iron level is abnormal. All other component wear rates are normal.

Contamination

There is a high concentration of water present in the oil.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0854644		
Sample Date		Client Info		21 Sep 2023		
Machine Age	hrs	Client Info		794201		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	<u> </u>		
Chromium	ppm	ASTM D5185m	>2	<1		
Nickel	ppm	ASTM D5185m		0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>3	0		
Lead	ppm	ASTM D5185m	>2	0		
Copper	ppm	ASTM D5185m	>8	<1		
Tin	ppm	ASTM D5185m	>4	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		2		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1	history2
	ppm ppm					
Boron		ASTM D5185m	5	0		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	5 5	0 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	5 5	0 0 0		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5	0 0 0 <1		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 5	0 0 0 <1 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 5 12	0 0 <1 <1 5	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 5 12 12	0 0 <1 <1 5 0	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 5 12 12 12 12	0 0 <1 <1 5 0 <1	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 12 12 12 12 12 12 12	0 0 <1 <1 5 0 <1 31		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 12 12 12 12 12 1000	0 0 <1 <1 5 0 <1 31 current	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	5 5 5 12 12 12 12 12 1000	0 0 <1 <1 5 0 <1 31 31 current <1	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	5 5 5 12 12 12 12 12 120 12 1000 limit/base	0 0 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	5 5 5 12 12 12 12 12 12 1000 limit/base >15	0 0 2 3 3 3 3 3	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	5 5 5 12 12 12 12 12 12 1000 <i>limit/base</i> >15 >20 >0.01	0 0 (1 (1 5 0 (1 31 Current (1 3 3 3 () 0.469	 history1	 history2



OIL ANALYSIS REPORT

scalar

scalar

scalar

scalar

scalar

scalar

scalar

scalar

cSt

method

*Visual

*Visual

*Visual

*Visual

*Visual

*Visual

*Visual

*Visual

method

ASTM D445

method

scalar *Visual

scalar *Visual

limit/base

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

limit/base

limit/base

Sep21

Sep21/23 -

: Jonathan Hester

(B/HO) 0.20

Ê 0.15

- ² 0.10

0.00

Sep21

Acid Ni 0.05 Acid Number

>0.01

68

current

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

current

current

0.2%

NEG

69.4

history1

history

history1

no image

no image

history2

historv2

history2

no imade

no image

VISUAL

White Metal

Yellow Metal

Precipitate

Silt

Debris

Odor

Color

Sand/Dirt

Appearance

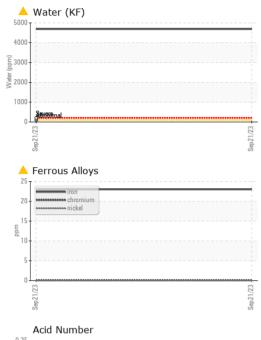
Free Water

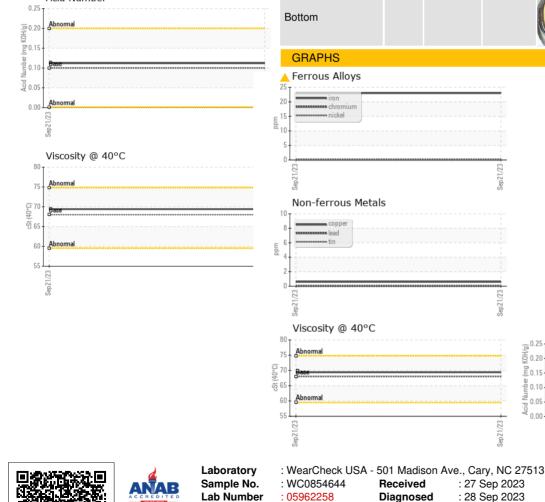
Visc @ 40°C

Emulsified Water

FLUID PROPERTIES

SAMPLE IMAGES





Unique Number

: 10668809

D&H REFRIGERATION 15811 ANNICO DRIVE UNITS 2&3 HOMER GLEN, IL US 60491 Contact: JOE HANKINS jhankins@dandhrefrigeration.com T: (708)205-5693 F: x:



Test Package : IND 2 Certificate L2367 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)

Diagnostician

Sep21/23