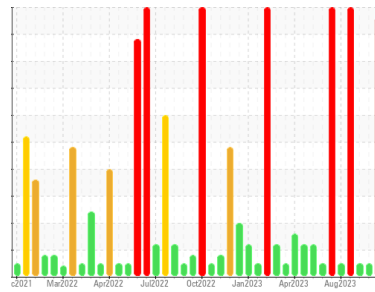




PROBLEM SUMMARY

Sample Rating Trend



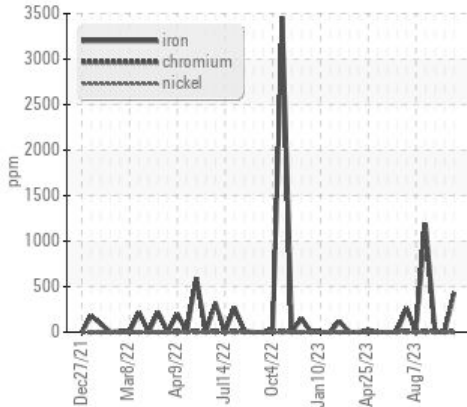
WEAR



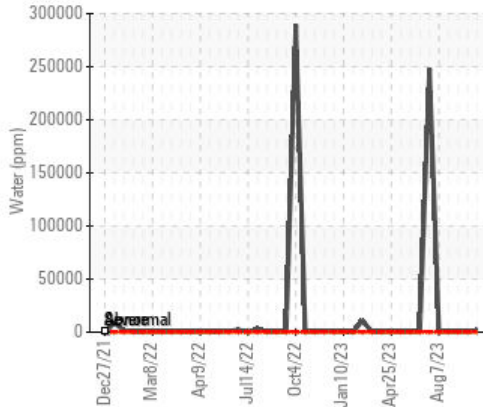
Machine Id
RECYCLED NH3 OIL (S/N MOX1000161U19205)
 Component
Refrigeration Compressor
 Fluid
USPI ALT-68 SC (--- GAL)

COMPONENT CONDITION SUMMARY

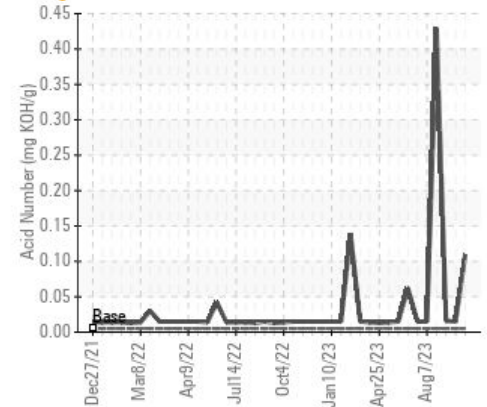
▲ Ferrous Alloys



▲ Water (KF)



● Acid Number



RECOMMENDATION

This is a baseline read-out on the submitted sample. We were unable to perform a particle count due to a high concentration of particles present in this sample. BEFORE

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>8	▲ 435	0	0
Water	%	ASTM D6304	>0.01	▲ 0.197	0.003	0.003
ppm Water	ppm	ASTM D6304	>100	▲ 1970	38.8	30.7
Silt	scalar	*Visual	NONE	▲ HEAVY	NONE	NONE
Emulsified Water	scalar	*Visual	>0.01	▲ 0.2%	NEG	NEG

Customer Id: CARCOLNE
 Sample No.: USP0007838
 Lab Number: 06145900
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Doug Bogart +1 (800)237-1369 x4016
dougb@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
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.


HISTORICAL DIAGNOSIS

NORMAL




07 Nov 2023 Diag: Doug Bogart
 This is a baseline read-out on the submitted sample. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report




NORMAL




21 Sep 2023 Diag: Doug Bogart
 This is a baseline read-out on the submitted sample. BARREL 1 AFTER FILTRATION There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report




WEAR



20 Sep 2023 Diag: Doug Bogart
 This is a baseline read-out on the submitted sample. We were unable to perform a particle count due to a high concentration of particles present in this sample. BARREL 1 BEFORE FILTRATIONThe iron level is severe. Appearance is unacceptable. There is a light concentration of water present in the oil. There is a moderate amount of visible silt present in the sample. The AN level is above the recommended limit.

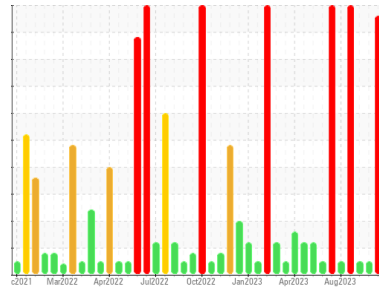
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
RECYCLED NH3 OIL (S/N MOX1000161U19205)
 Component
Refrigeration Compressor
 Fluid
USPI ALT-68 SC (--- GAL)

DIAGNOSIS

▲ Recommendation

This is a baseline read-out on the submitted sample. We were unable to perform a particle count due to a high concentration of particles present in this sample. BEFORE

▲ Wear

The iron level is severe.

▲ Contamination

There is a high amount of visible silt present in the sample. There is a light concentration of water present in the oil.

● Fluid Condition

An increase in the AN level is noted. Confirmed.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		USP0007838	USP0003280	USP243492
Sample Date	Client Info		09 Apr 2024	07 Nov 2023	21 Sep 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			SEVERE	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >8	▲ 435	0	0
Chromium	ppm	ASTM D5185m >2	0	<1	0
Nickel	ppm	ASTM D5185m	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >3	0	0	<1
Lead	ppm	ASTM D5185m >2	0	0	0
Copper	ppm	ASTM D5185m >8	0	0	0
Tin	ppm	ASTM D5185m >4	0	0	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	0	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m	0	<1	0
Calcium	ppm	ASTM D5185m	1	0	0
Phosphorus	ppm	ASTM D5185m	0	0	0
Zinc	ppm	ASTM D5185m	0	0	0
Sulfur	ppm	ASTM D5185m 50	24	0	1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	5	<1	4
Sodium	ppm	ASTM D5185m	0	0	2
Potassium	ppm	ASTM D5185m >20	0	1	2
Water	%	ASTM D6304 >0.01	▲ 0.197	0.003	0.003
ppm Water	ppm	ASTM D6304 >100	▲ 1970	38.8	30.7

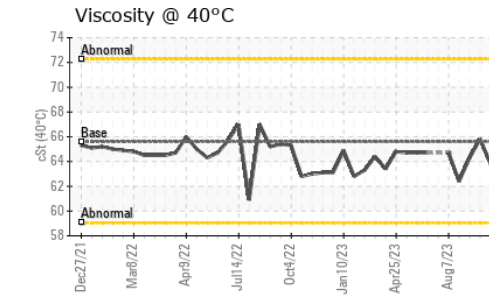
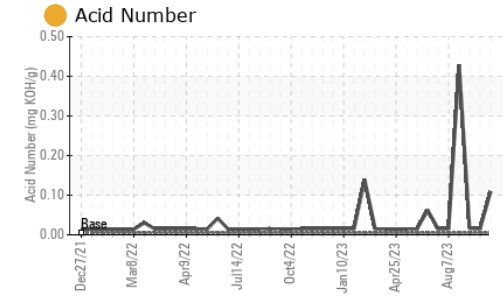
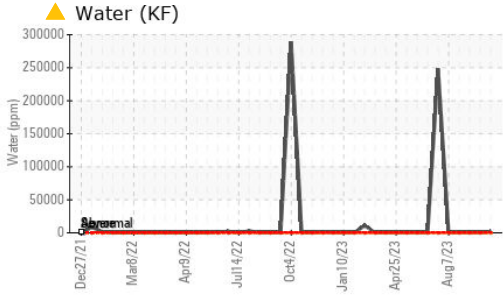
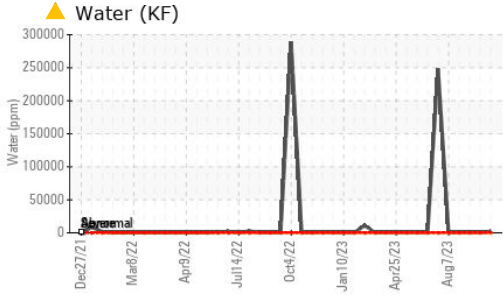
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	---	663	1916
Particles >6µm	ASTM D7647	>2500	---	185	375
Particles >14µm	ASTM D7647	>320	---	13	20
Particles >21µm	ASTM D7647	>80	---	4	5
Particles >38µm	ASTM D7647	>20	---	1	0
Particles >71µm	ASTM D7647	>4	---	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	---	17/15/11	18/16/11

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974 0.005	● 0.109	0.015	0.016

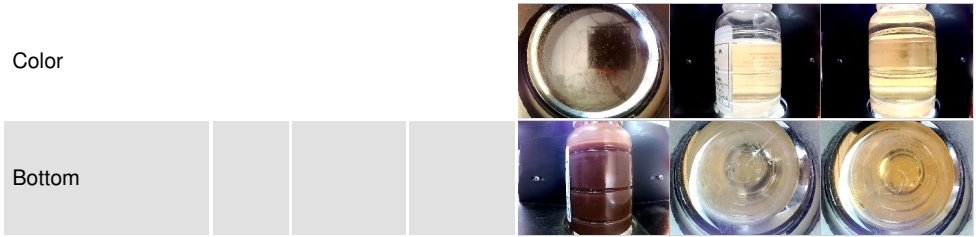
OIL ANALYSIS REPORT



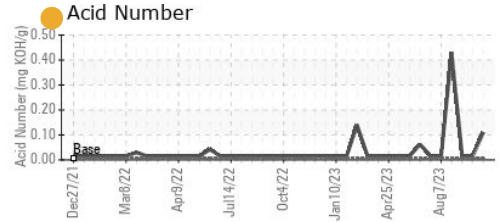
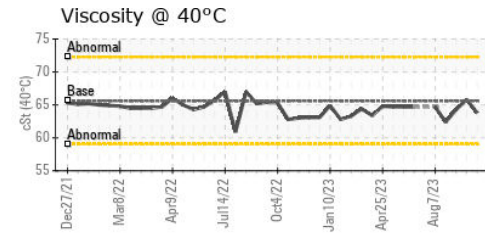
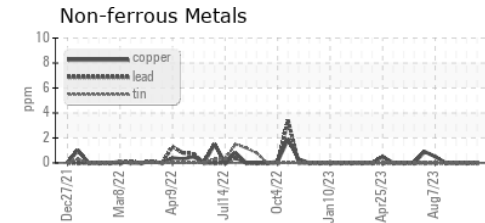
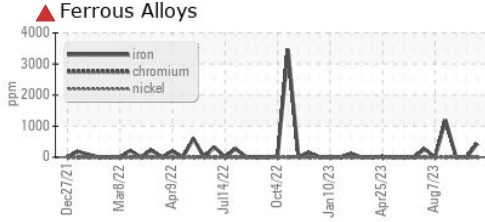
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65.6	63.8	65.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0007838
Lab Number : 06145900
Unique Number : 10975978
Test Package : IND 2
Received : 11 Apr 2024
Tested : 16 Apr 2024
Diagnosed : 16 Apr 2024 - Doug Bogart

CARGILL FOODS-COLUMBUS
COLUMBUS, NE
US 68601
Contact:

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)