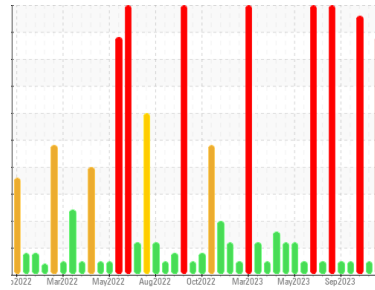




PROBLEM SUMMARY

Sample Rating Trend



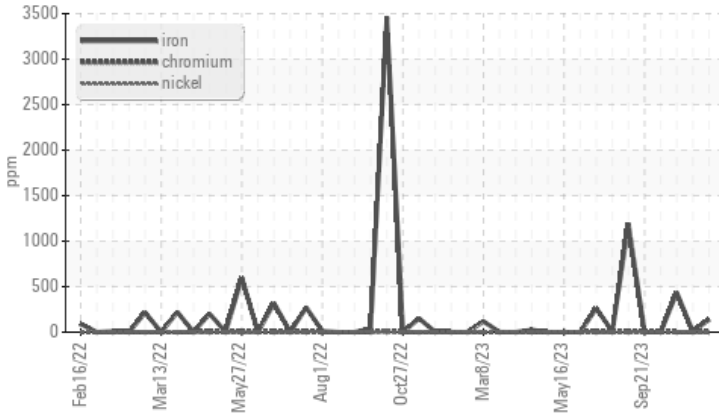
WEAR



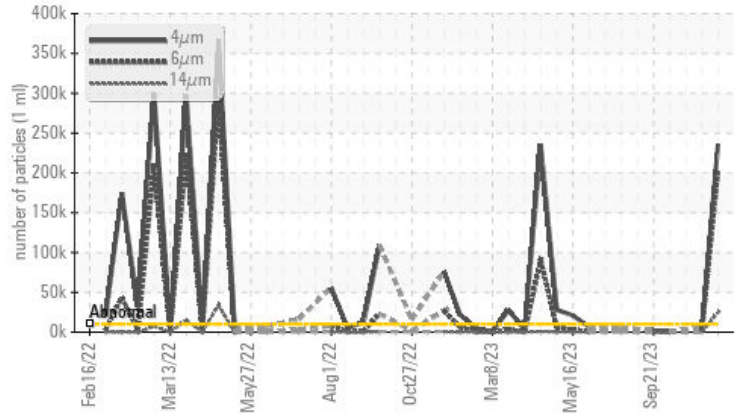
Machine Id
RECYCLED NH3 OIL (S/N MOX1000161U19205)
Component
Refrigeration Compressor
Fluid
USPI ALT-68 SC (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



▲ Particle Trend



RECOMMENDATION

This is a baseline read-out on the submitted sample. BEFORE

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	NORMAL	SEVERE
Iron	ppm	ASTM D5185m >8	▲ 139	5	▲ 435
Particles >4µm		ASTM D7647 >10000	▲ 235739	5325	---
Particles >6µm		ASTM D7647 >2500	▲ 203318	540	---
Particles >14µm		ASTM D7647 >320	▲ 24429	19	---
Particles >21µm		ASTM D7647 >80	▲ 90	5	---
Oil Cleanliness		ISO 4406 (c) >20/18/15	▲ 25/25/22	20/16/11	---

Customer Id: CARCOLNE
Sample No.: USP0012506
Lab Number: 06202814
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

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

NORMAL



10 Apr 2024 Diag: Doug Bogart

This is a baseline read-out on the submitted sample. AFTER 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



09 Apr 2024 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. BEFOREThe iron level is severe. There is a high amount of visible silt present in the sample. There is a light concentration of water present in the oil. An increase in the AN level is noted. Confirmed.

[view report](#)



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.

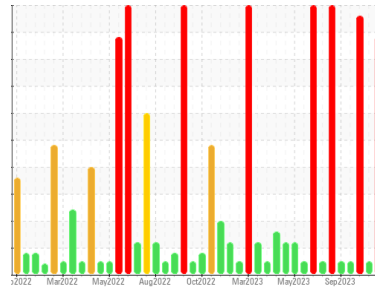
[view report](#)





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. BEFORE

▲ Wear

The iron level is severe.

▲ Contamination

There is a high amount of particulates present in the oil. There is a trace of moisture present in the oil.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		USP0012506	USP0007837	USP0007838
Sample Date	Client Info		05 Jun 2024	10 Apr 2024	09 Apr 2024
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	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >8	▲ 139	5	▲ 435
Chromium	ppm	ASTM D5185m >2	<1	0	0
Nickel	ppm	ASTM D5185m	<1	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >3	0	0	0
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	<1	0	0
Magnesium	ppm	ASTM D5185m	<1	0	0
Calcium	ppm	ASTM D5185m	0	0	1
Phosphorus	ppm	ASTM D5185m	0	0	0
Zinc	ppm	ASTM D5185m	<1	0	0
Sulfur	ppm	ASTM D5185m 50	0	7	24

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	3	3	5
Sodium	ppm	ASTM D5185m	0	0	0
Potassium	ppm	ASTM D5185m >20	0	0	0
Water	%	ASTM D6304 >0.01	0.012	0.003	▲ 0.197
ppm Water	ppm	ASTM D6304 >100	124	37	▲ 1970

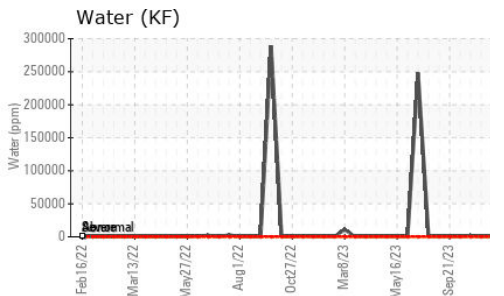
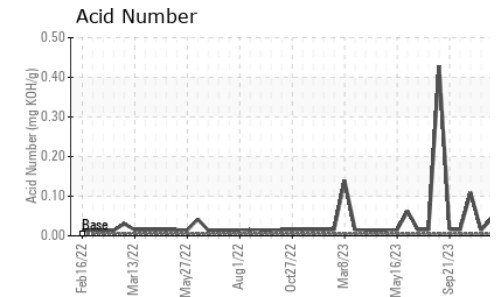
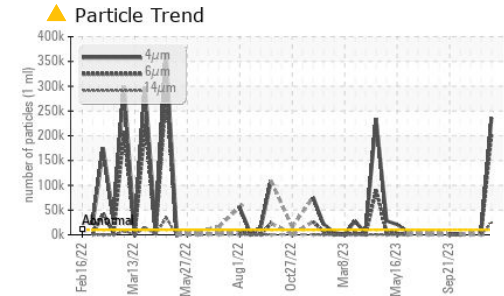
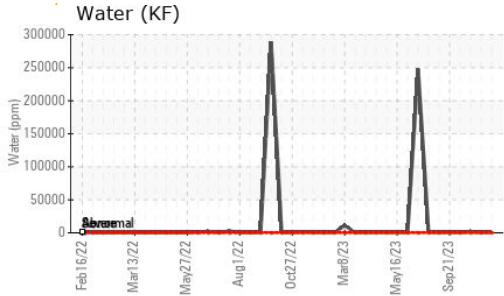
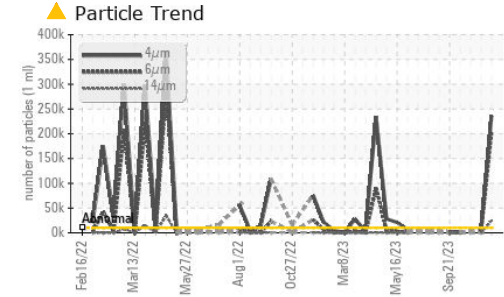
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 235739	5325	---
Particles >6µm	ASTM D7647	>2500	▲ 203318	540	---
Particles >14µm	ASTM D7647	>320	▲ 24429	19	---
Particles >21µm	ASTM D7647	>80	▲ 90	5	---
Particles >38µm	ASTM D7647	>20	0	0	---
Particles >71µm	ASTM D7647	>4	0	0	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 25/25/22	20/16/11	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974 0.005	0.043	0.014	● 0.109

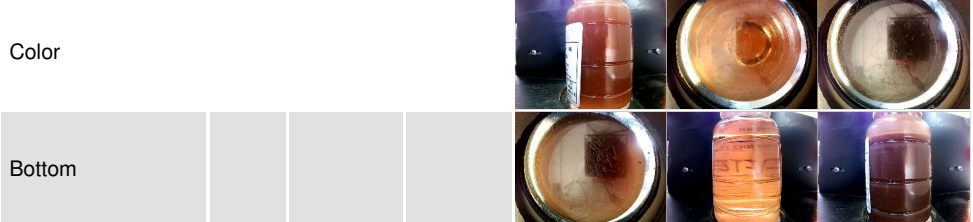
OIL ANALYSIS REPORT



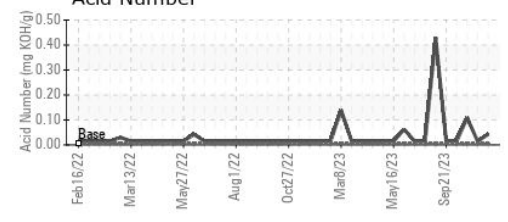
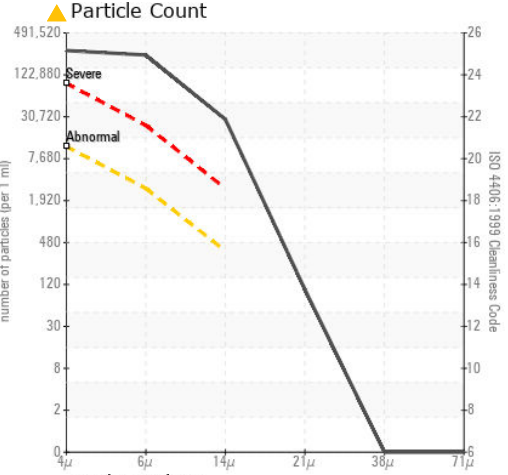
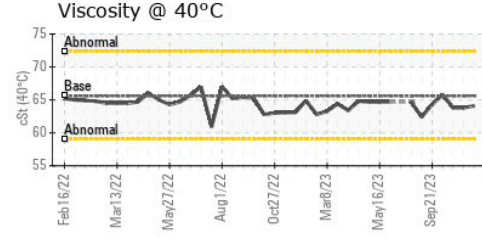
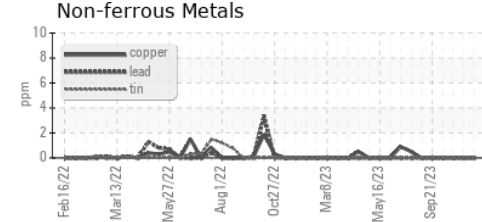
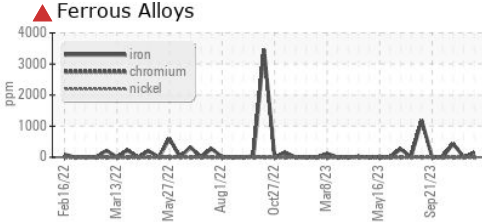
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	▲ HEAVY
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	● HAZY	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	NEG	▲ 0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65.6	64.1	63.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0012506 **Received** : 07 Jun 2024
Lab Number : 06202814 **Tested** : 11 Jun 2024
Unique Number : 11070275 **Diagnosed** : 11 Jun 2024 - Doug Bogart
Test Package : IND 2

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)