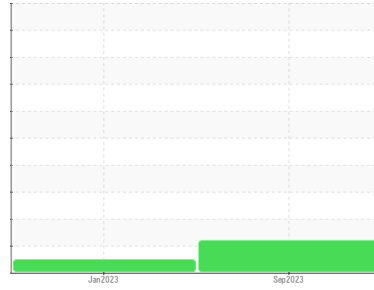




PROBLEM SUMMARY

Sample Rating Trend



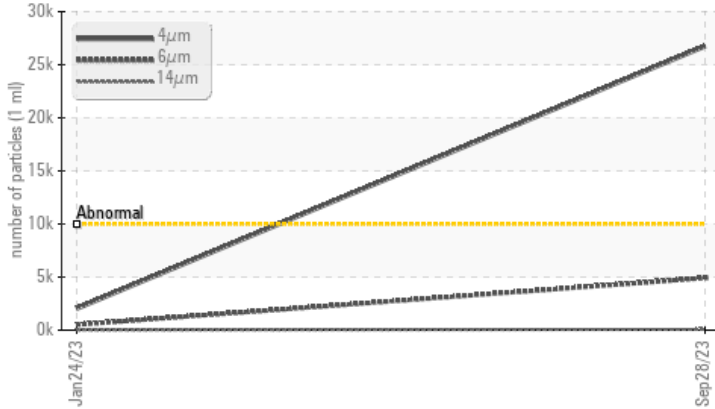
ISO



Machine Id
BOOSTER 3 - 920466
 Component
Refrigeration Compressor
 Fluid
REFRIG COMP OIL ISO 68 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	NORMAL	---
Particles >4µm	ASTM D7647	>10000	▲ 26742	2016	---
Particles >6µm	ASTM D7647	>2500	▲ 4912	518	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 22/19/13	18/16/12	---

Customer Id: AMEEAS_USP
 Sample No.: USP0001819
 Lab Number: 05964225
 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

24 Jan 2023 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. 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.

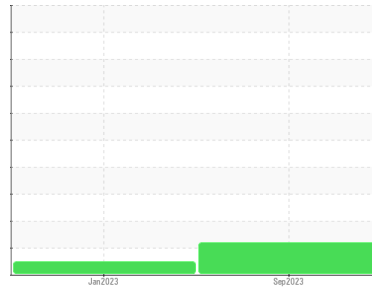
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
BOOSTER 3 - 920466
 Component
Refrigeration Compressor
 Fluid
REFRIG COMP OIL ISO 68 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

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		USP0001819	USP246512	---
Sample Date	Client Info		28 Sep 2023	24 Jan 2023	---
Machine Age	hrs	Client Info	0	92518	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			ABNORMAL	NORMAL	---

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 5	0	0	---
Barium	ppm	ASTM D5185m 5	0	0	---
Molybdenum	ppm	ASTM D5185m 5	0	0	---
Manganese	ppm	ASTM D5185m	<1	0	---
Magnesium	ppm	ASTM D5185m 5	0	0	---
Calcium	ppm	ASTM D5185m 12	0	0	---
Phosphorus	ppm	ASTM D5185m 12	<1	0	---
Zinc	ppm	ASTM D5185m 12	0	0	---
Sulfur	ppm	ASTM D5185m 1000	16	0	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<1	<1	---
Sodium	ppm	ASTM D5185m	0	0	---
Potassium	ppm	ASTM D5185m >20	1	<1	---
Water	%	ASTM D6304 >0.01	0.001	0.003	---
ppm Water	ppm	ASTM D6304 >100	0.00	32.3	---

FLUID CLEANLINESS

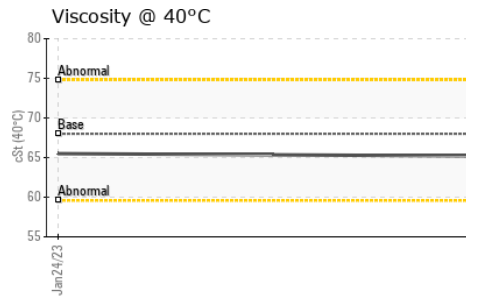
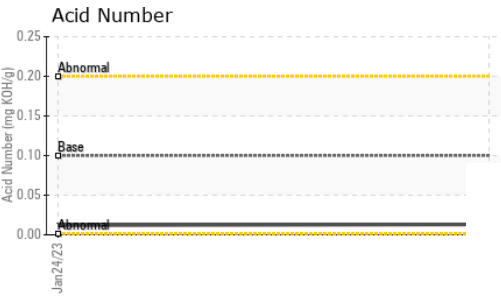
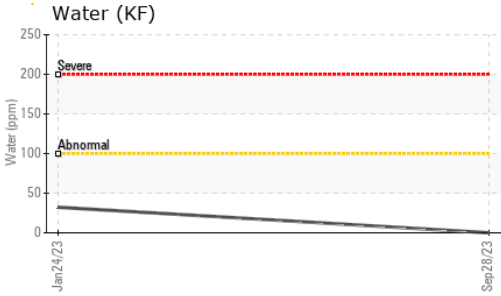
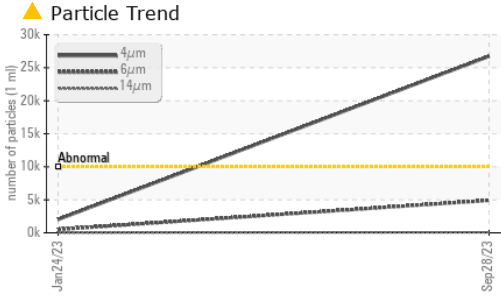
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 26742	2016	---
Particles >6µm	ASTM D7647	>2500	▲ 4912	518	---
Particles >14µm	ASTM D7647	>320	72	25	---
Particles >21µm	ASTM D7647	>80	10	3	---
Particles >38µm	ASTM D7647	>20	0	0	---
Particles >71µm	ASTM D7647	>4	0	0	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 22/19/13	18/16/12	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974 0.10	0.013	0.012	---



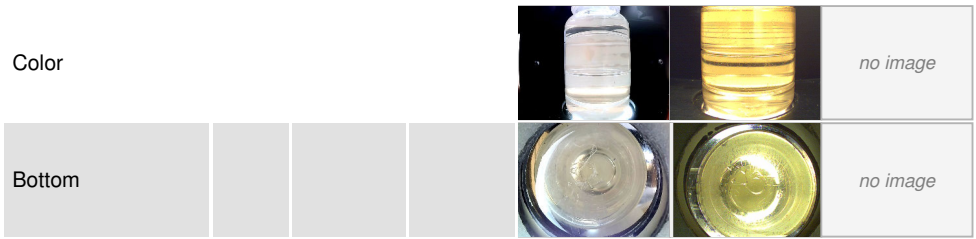
OIL ANALYSIS REPORT



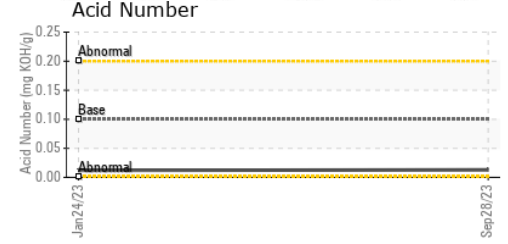
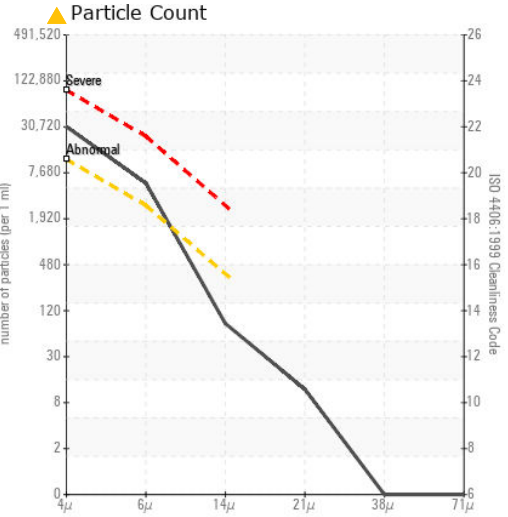
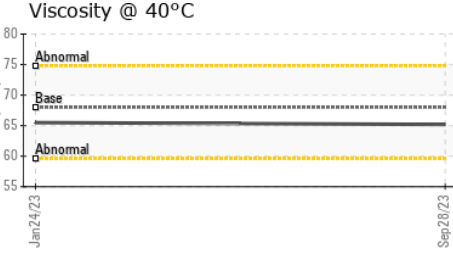
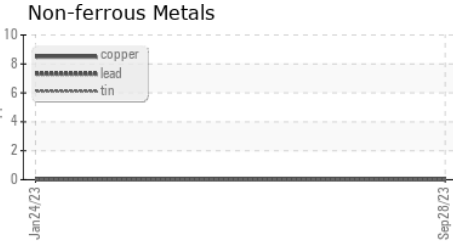
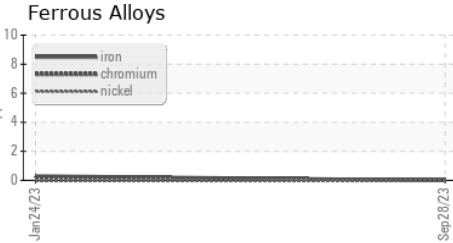
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 68	65.2	65.5	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0001819 **Received** : 28 Sep 2023
Lab Number : 05964225 **Diagnosed** : 29 Sep 2023
Unique Number : 10670776 **Diagnostician** : Doug Bogart
Test Package : IND 2

AMERICOLD
 18531 US HWY 20 W
 EAST DUBUQUE, IL
 US 61025
 Contact: Service Manager

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)

T:
F: