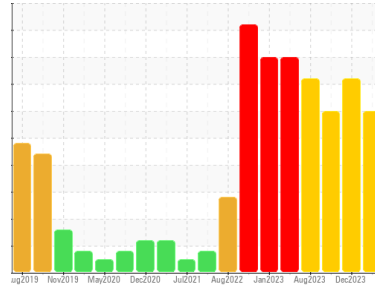




PROBLEM SUMMARY

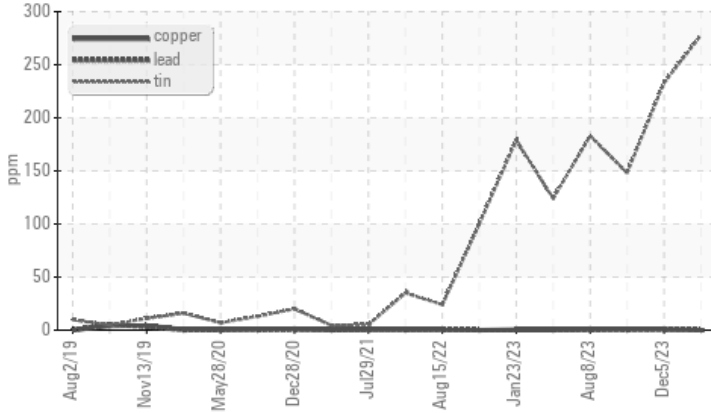
Area
Milliken
 Machine Id
INGERSOLL RAND EE4347U19082 - MILLIKEN
 Component
Compressor
 Fluid
INGERSOLL-RAND SSR ULTRA COOLANT (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



RECOMMENDATION

The oil is near the end of its useful service life, recommend schedule an oil change. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	SEVERE
Tin	ppm	ASTM D5185m	>15	▲ 278	▲ 233	▲ 148

Customer Id: AIRALLPA
 Sample No.: APCI2320834
 Lab Number: 06125661
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Service/change Fluid	---	---	?	The oil is near the end of it's useful service life, recommend schedule an oil change.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

05 Dec 2023 Diag: Jonathan Hester

WEAR



The oil is near the end of it`s useful service life, recommend schedule an oil change. We recommend an early resample to monitor this condition.The tin level is severe. All other component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid.

[view report](#)



18 Sep 2023 Diag: Don Baldrige

WEAR



The oil is near the end of it`s useful service life, recommend schedule an oil change. We recommend an early resample to monitor this condition.The tin level is severe. All other component wear rates are normal. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid.

[view report](#)



08 Aug 2023 Diag: Doug Bogart

WEAR



The oil is near the end of it`s useful service life, recommend schedule an oil change. We recommend an early resample to monitor this condition.The tin level is severe. All other component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid.

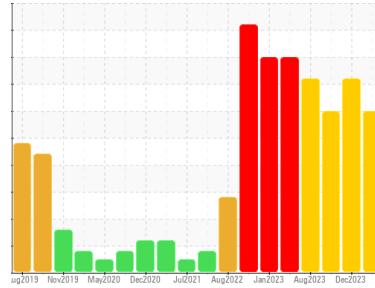
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
Milliken
 Machine Id
INGERSOLL RAND EE4347U19082 - MILLIKEN
 Component
Compressor
 Fluid
INGERSOLL-RAND SSR ULTRA COOLANT (--- GAL)

DIAGNOSIS

▲ Recommendation

The oil is near the end of its useful service life, recommend schedule an oil change. We recommend an early resample to monitor this condition.

▲ Wear

The tin level is severe. All other component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		APCI2320834	APCI2320833	APC0000297
Sample Date	Client Info		05 Mar 2024	05 Dec 2023	18 Sep 2023
Machine Age	hrs	Client Info	37456	33169	33401
Oil Age	hrs	Client Info	2000	4000	0
Oil Changed	Client Info		N/A	Not Changd	Not Changd
Sample Status			SEVERE	SEVERE	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	0	2	0
Chromium	ppm	ASTM D5185m >10	0	<1	0
Nickel	ppm	ASTM D5185m	0	<1	0
Titanium	ppm	ASTM D5185m	0	<1	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	0	2	3
Lead	ppm	ASTM D5185m >25	0	<1	<1
Copper	ppm	ASTM D5185m >50	0	<1	<1
Tin	ppm	ASTM D5185m >15	▲ 278	▲ 233	▲ 148
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0	0
Barium	ppm	ASTM D5185m 500	536	590	580
Molybdenum	ppm	ASTM D5185m 0	0	<1	0
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 0	1	<1	2
Calcium	ppm	ASTM D5185m 0	4	4	4
Phosphorus	ppm	ASTM D5185m 20	0	23	7
Zinc	ppm	ASTM D5185m 0	0	0	<1
Sulfur	ppm	ASTM D5185m 200	324	217	336

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	2	<1
Sodium	ppm	ASTM D5185m	51	52	35
Potassium	ppm	ASTM D5185m >20	6	7	8
Water	%	ASTM D6304 >0.1	0.283	0.222	0.368
ppm Water	ppm	ASTM D6304 >1000	2839	2227	3680.4

FLUID CLEANLINESS

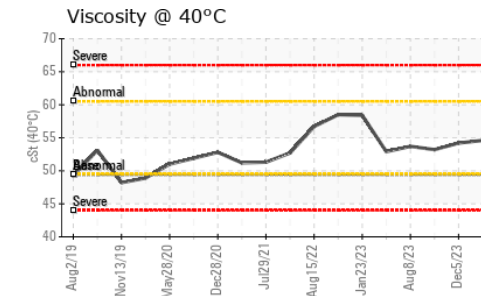
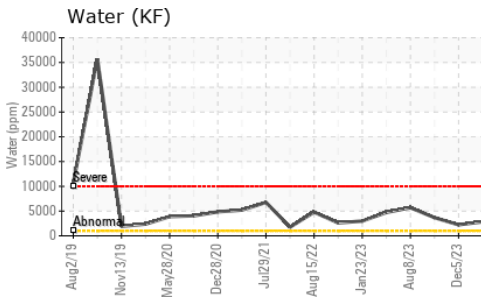
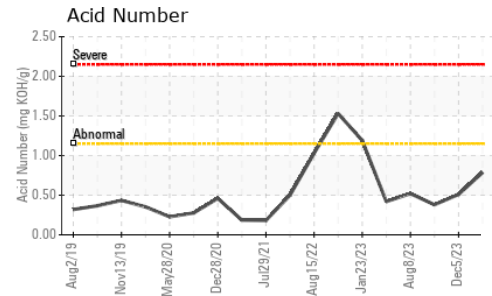
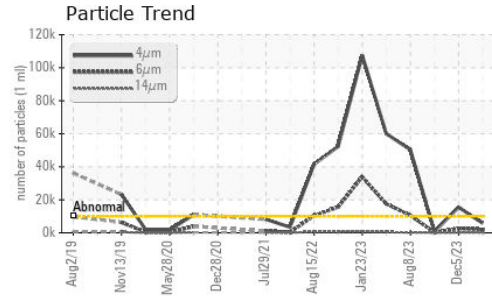
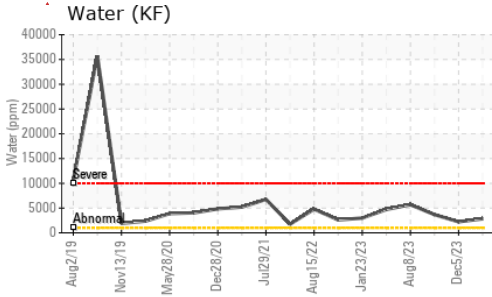
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	5835	● 15505	774
Particles >6µm	ASTM D7647	>2500	2045	● 2628	221
Particles >14µm	ASTM D7647	>320	154	146	23
Particles >21µm	ASTM D7647	>80	36	46	7
Particles >38µm	ASTM D7647	>20	1	4	0
Particles >71µm	ASTM D7647	>4	0	1	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	20/18/14	● 21/19/14	17/15/12

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.787	0.51	0.380



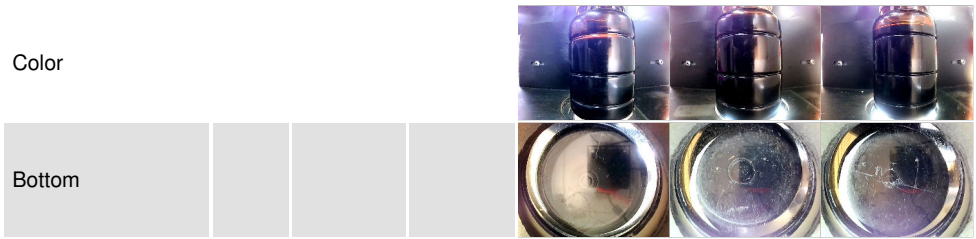
OIL ANALYSIS REPORT



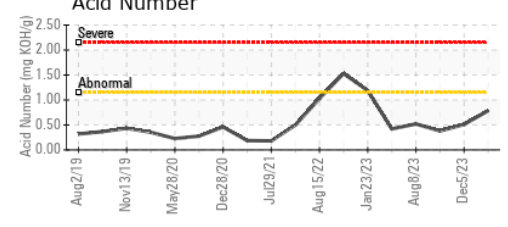
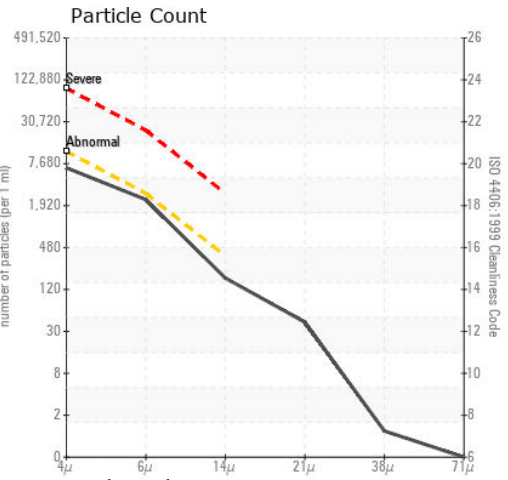
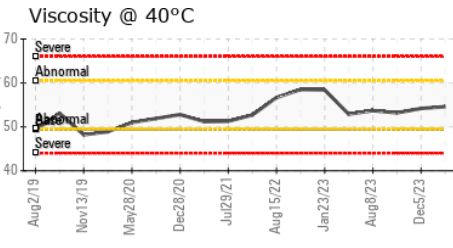
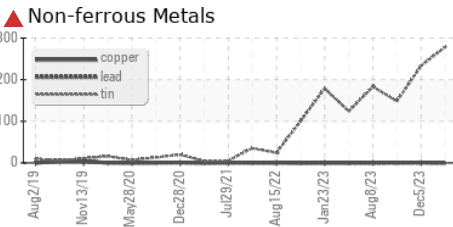
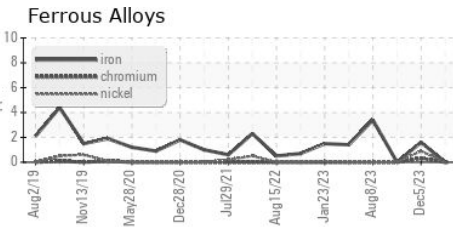
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	49.4	54.6	54.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : APC12320834 **Received** : 21 Mar 2024
Lab Number : 06125661 **Tested** : 25 Mar 2024
Unique Number : 10939812 **Diagnosed** : 25 Mar 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

AIR PRODUCTS AND CHEMICALS INC - ALLENTOWN
 7201 HAMILTON BLVD
 ALLENTOWN, PA
 US 18195
 Contact: MICHAEL PROTZEK
 protzema@airproducts.com

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)