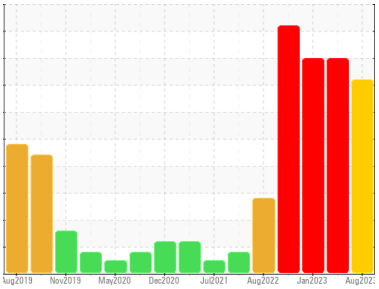
PROBLEM SUMMARY

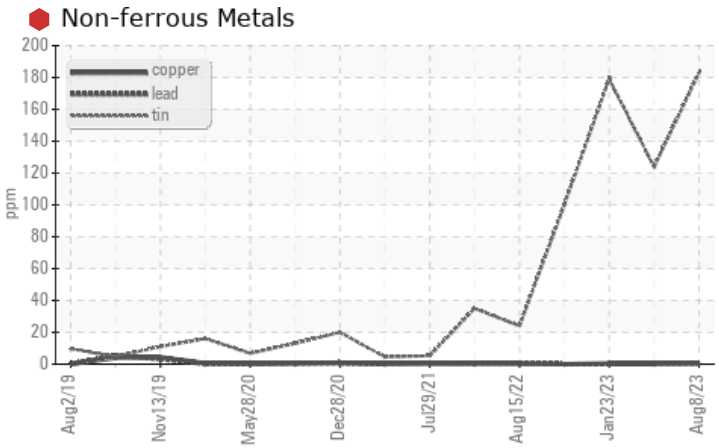
Sample Rating Trend

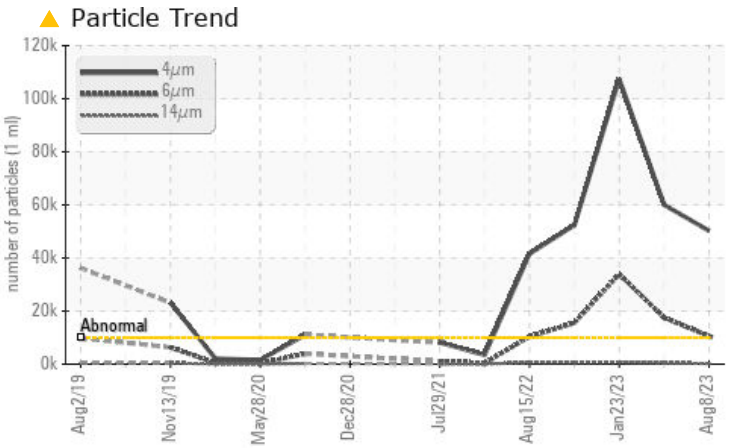


WEAR

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

COMPONENT CONDITION SUMMARY





RECOMMENDATION

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.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	SEVERE	SEVERE
Tin	ppm	ASTM D5185m	>15	**183**	124	179
Particles >4µm		ASTM D7647	>10000	**50248**	60017	107455
Particles >6µm		ASTM D7647	>2500	**10570**	17534	33912
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**23/21/15**	23/21/16	24/22/17

Customer Id: AIRALLPA
Sample No.: APCI2320835
Lab Number: 05922854
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
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

30 May 2023 Diag: Don Baldridge

WEAR

The oil is near the end of it`s useful service life, recommend schedule an oil change. The filter change at the time of sampling has been noted. 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 particulates present in the oil. The AN level is acceptable for this fluid.

view report

23 Jan 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 high amount of particulates present in the oil. The AN level is acceptable for this fluid.

view report

02 Dec 2022 Diag: Doug Bogart

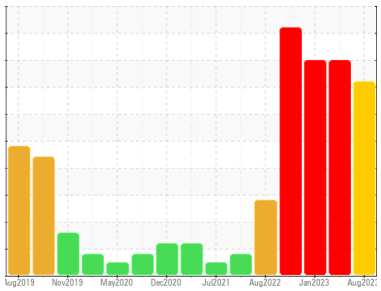
WEAR

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 particulates present in the oil. The AN level is at the top-end of the recommended limit.

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 it`s 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
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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**APCI2320835**	APC0000298	APC0000296
Sample Date		Client Info		**08 Aug 2023**	30 May 2023	23 Jan 2023
Machine Age	hrs	Client Info		**32420**	30747	0
Oil Age	hrs	Client Info		**6000**	1000	0
Oil Changed		Client Info		**N/A**	Not Changd	N/A
Sample Status				**SEVERE**	SEVERE	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**3**	1	2
Chromium	ppm	ASTM D5185m	>10	**0**	0	0
Nickel	ppm	ASTM D5185m		**0**	0	<1
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**1**	0	0
Lead	ppm	ASTM D5185m	>25	**<1**	0	0
Copper	ppm	ASTM D5185m	>50	**<1**	<1	<1
Tin	ppm	ASTM D5185m	>15	**183**	124	179
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	0	<1

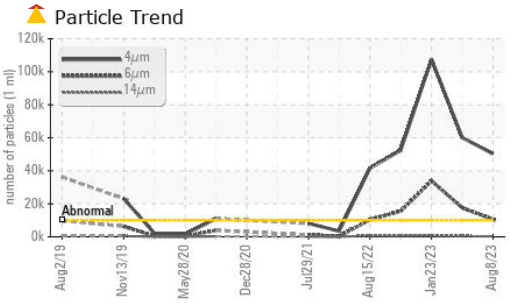
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**0**	0	<1
Barium	ppm	ASTM D5185m	500	**480**	691	318
Molybdenum	ppm	ASTM D5185m	0	**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	0	0
Magnesium	ppm	ASTM D5185m	0	**<1**	0	2
Calcium	ppm	ASTM D5185m	0	**2**	1	5
Phosphorus	ppm	ASTM D5185m	20	**7**	0	13
Zinc	ppm	ASTM D5185m	0	**14**	<1	7
Sulfur	ppm	ASTM D5185m	200	**348**	310	350

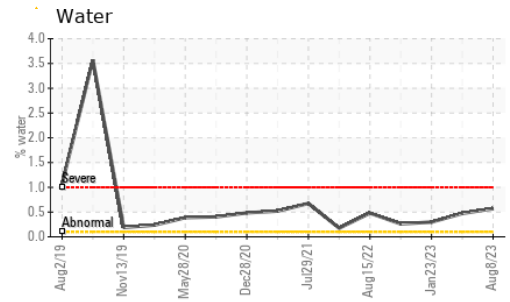
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**2**	1	2
Sodium	ppm	ASTM D5185m		**33**	33	68
Potassium	ppm	ASTM D5185m	>20	**9**	5	11
Water	%	ASTM D6304	>0.1	**0.568**	0.472	0.298
ppm Water	ppm	ASTM D6304	>1000	**5682.9**	4720.7	2986.6

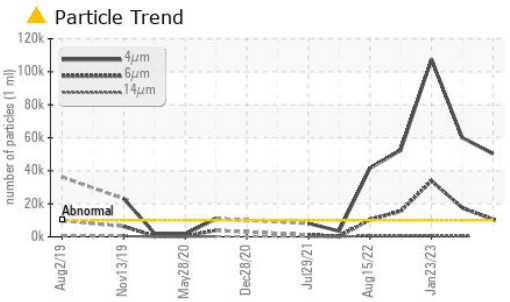
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**50248**	60017	107455
Particles >6µm		ASTM D7647	>2500	**10570**	17534	33912
Particles >14µm		ASTM D7647	>320	**189**	450	689
Particles >21µm		ASTM D7647	>80	**43**	94	96
Particles >38µm		ASTM D7647	>20	**2**	4	8
Particles >71µm		ASTM D7647	>4	**0**	0	1
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**23/21/15**	23/21/16	24/22/17

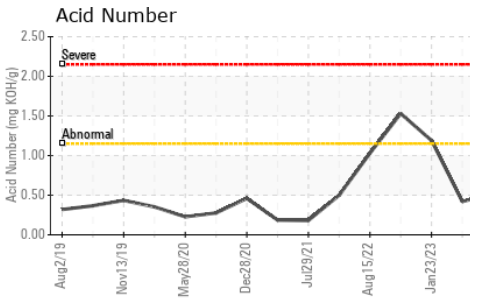
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.52**	0.42	1.19

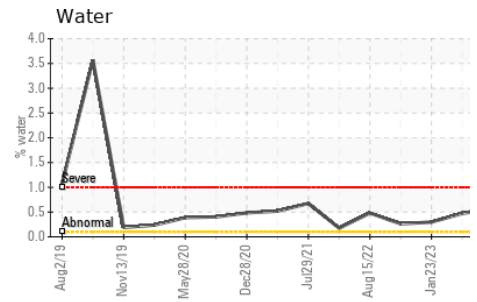
OIL ANALYSIS REPORT







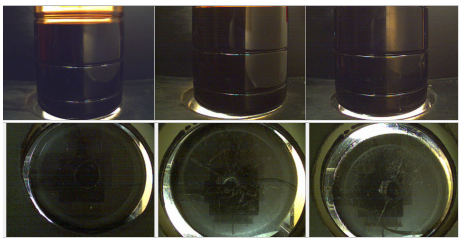




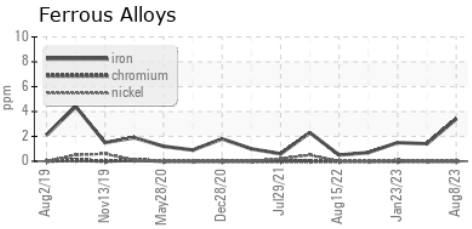
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

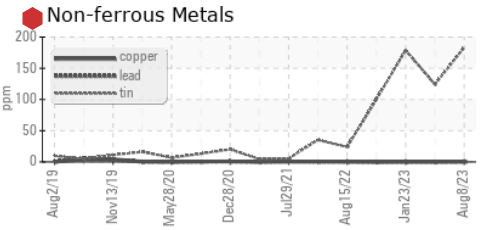
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	49.4	**53.7**	52.9	58.4

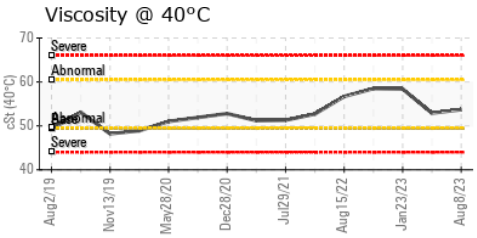
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

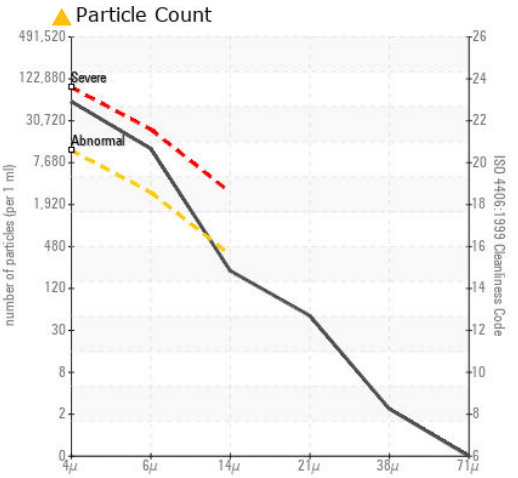


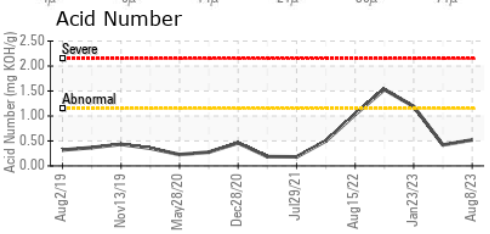
GRAPHS











Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : APCI2320835 **Received** : 11 Aug 2023
Lab Number : 05922854 **Diagnosed** : 14 Aug 2023
Unique Number : 10602801 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

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)

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