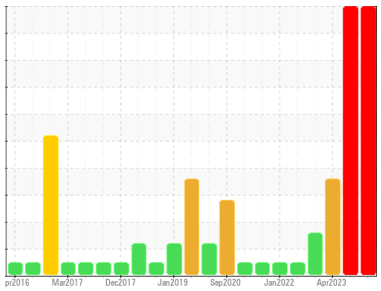
PROBLEM SUMMARY

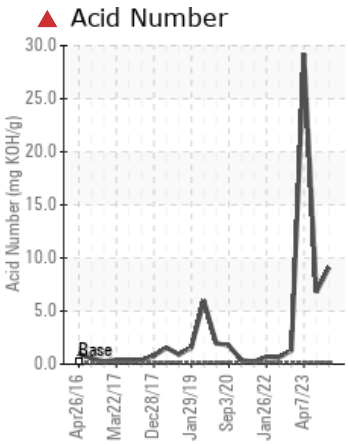
Area
SYNOIL 825 [165859]
Machine Id
SULLAIR 200604220056 - J&M PLATING INC
Component
Compressor

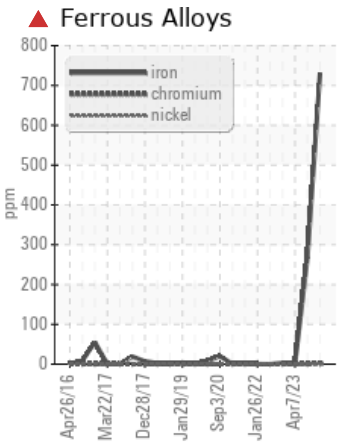
Sample Rating Trend

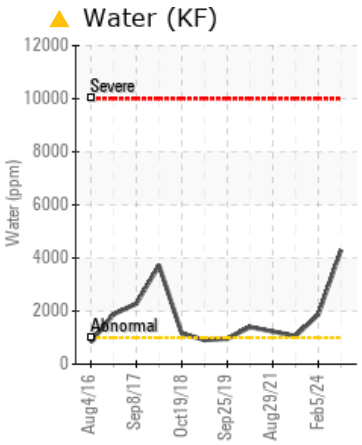


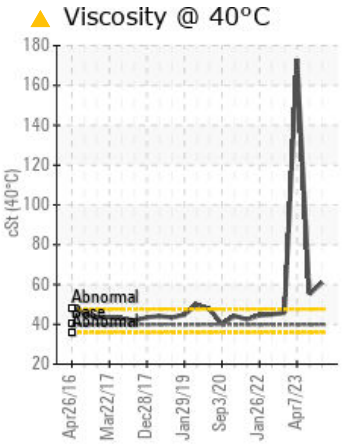
WEAR

COMPONENT CONDITION SUMMARY









RECOMMENDATION

Recommend drain oil if not already done and flush with cleaner before refilling with oil. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>50	▲ **731**	▲ 268	<1
Water	%	ASTM D6304	>0.1	▲ **0.430**	▲ 0.187	---
ppm Water	ppm	ASTM D6304	>1000	▲ **4300**	▲ 1870	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.172	▲ **9.093**	▲ 6.781	▲ 29.19
Silt	scalar	*Visual	NONE	▲ **MODER**	NONE	NONE
Visc @ 40°C	cSt	ASTM D445	39.9	▲ **61.1**	▲ 55.2	▲ 173

Customer Id: UCZORGUR
Sample No.: UCZ06184425
Lab Number: 06184425
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +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
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Change Fluid	---	---	?	Recommend drain oil if not already done and flush with cleaner before refilling with oil.
Flush System	---	---	?	Recommend drain oil if not already done and flush with cleaner before refilling with oil.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

WEAR

05 Feb 2024 Diag: Doug Bogart
Recommend drain oil if not already done and flush with cleaner before refilling with oil. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.The iron level is severe. There is a light concentration of water present in the oil. The AN level is above the recommended limit. The oil viscosity is higher than normal. TAN level indicates possible presence of varnish.

view report

DEGRADATION

07 Apr 2023 Diag: Doug Bogart
Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is higher than normal. The AN level is above the recommended limit. TAN level indicates possible presence of varnish. The oil is no longer serviceable.

view report

WATER

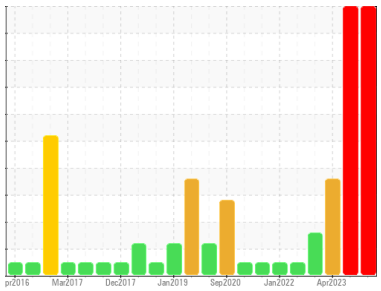
20 Dec 2022 Diag: Doug Bogart
We advise that you follow the water drain-off procedure for this component. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is a light concentration of water present in the oil. Free water present. Moderate concentration of visible dirt/debris present in the oil. An increase in the AN level is noted. The AN level is acceptable for this fluid.

view report

OIL ANALYSIS REPORT

Area
SYNOIL 825 [165859]
Machine Id
SULLAIR 200604220056 - J&M PLATING INC
Component
Compressor

Sample Rating Trend



WEAR

DIAGNOSIS

Recommendation
Recommend drain oil if not already done and flush with cleaner before refilling with oil. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear
The iron level is severe.

Contamination
There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition
The AN level is above the recommended limit. The oil viscosity is higher than normal. TAN level indicates possible presence of varnish.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**UCZ06184425**	UCZ06093125	UCZ05836795
Sample Date		Client Info		**09 May 2024**	05 Feb 2024	07 Apr 2023
Machine Age	hrs	Client Info		**38229**	36010	131611
Oil Age	hrs	Client Info		**2000**	5000	5000
Oil Changed		Client Info		**Not Changd**	Not Changd	Changed
Sample Status				**SEVERE**	SEVERE	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	▲ **731**	▲ 268	<1
Chromium	ppm	ASTM D5185m	>10	**1**	<1	0
Nickel	ppm	ASTM D5185m		**2**	0	0
Titanium	ppm	ASTM D5185m		**<1**	<1	0
Silver	ppm	ASTM D5185m		**<1**	0	0
Aluminum	ppm	ASTM D5185m	>25	**5**	3	0
Lead	ppm	ASTM D5185m	>25	**4**	2	0
Copper	ppm	ASTM D5185m	>50	**26**	11	1
Tin	ppm	ASTM D5185m	>15	**<1**	0	0
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	0	0

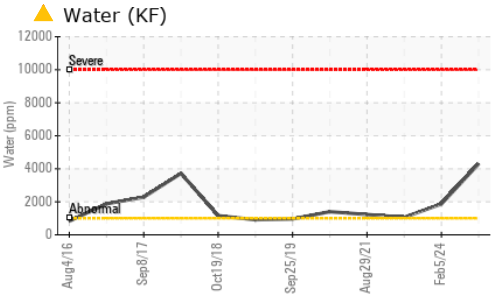
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0.0	**<1**	<1	0
Barium	ppm	ASTM D5185m	0.0	**0**	10	0
Molybdenum	ppm	ASTM D5185m	0	**<1**	0	0
Manganese	ppm	ASTM D5185m	0	**2**	0	0
Magnesium	ppm	ASTM D5185m	0.0	**<1**	<1	2
Calcium	ppm	ASTM D5185m	0.0	**5**	2	0
Phosphorus	ppm	ASTM D5185m	966	**149**	181	65
Zinc	ppm	ASTM D5185m	0	**118**	58	3
Sulfur	ppm	ASTM D5185m	1309	**193**	229	216

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**1**	0	<1
Sodium	ppm	ASTM D5185m		**5**	0	1
Potassium	ppm	ASTM D5185m	>20	**2**	1	<1
Water	%	ASTM D6304	>0.1	▲ **0.430**	▲ 0.187	---
ppm Water	ppm	ASTM D6304	>1000	▲ **4300**	▲ 1870	---

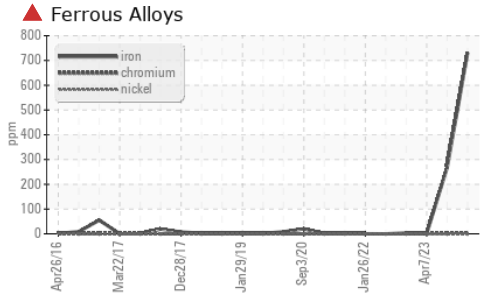
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.172	▲ **9.093**	▲ 6.781	▲ 29.19

OIL ANALYSIS REPORT

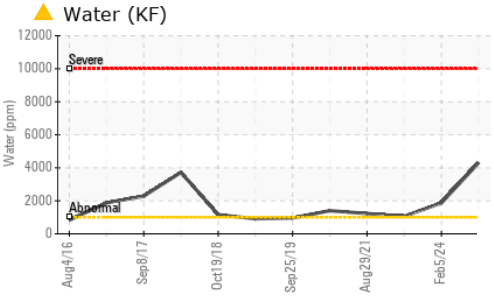
Water (KF)



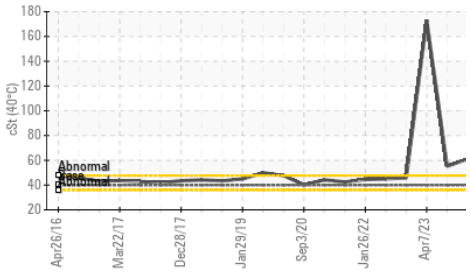
Ferrous Alloys



Water (KF)



Viscosity @ 40°C



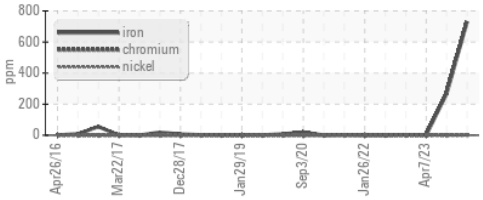
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	▲ **MODER**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Sand/Dirt	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	**0.2%**	0.2%	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	39.9	▲ **61.1**	▲ 55.2	▲ 173

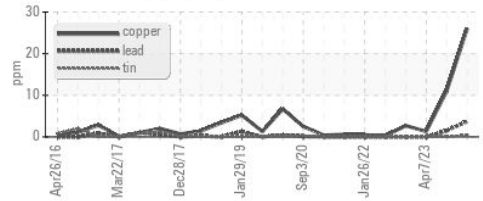
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

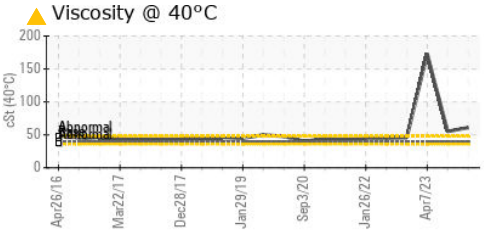
Ferrous Alloys



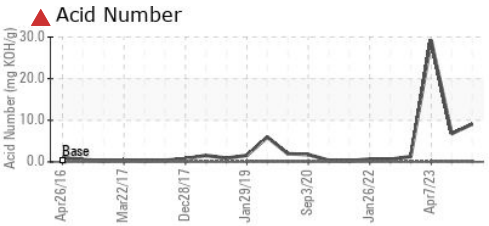
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : UCZ06184425
Lab Number : 06184425
Unique Number : 11035751
Test Package : IND 2 (Additional Tests: KF)

Received : 20 May 2024
Tested : 21 May 2024
Diagnosed : 22 May 2024 - Don Baldridge

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)

ZORN COMPRESSOR EQUIPMENT
227 AMBROSIO DR, SUITE A
GURNEE, IL
US 60031
Contact: Rachel Pesnikov
rachel.pesnikov@zornair.com
T: (847)599-1333
F: x: