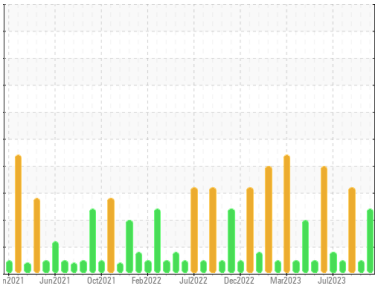
PROBLEM SUMMARY

Sample Rating Trend

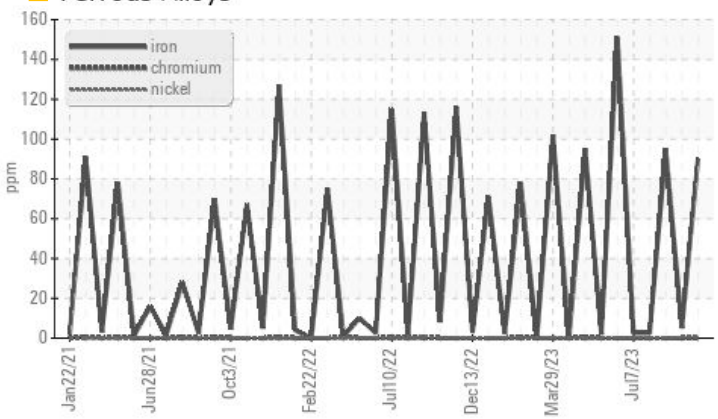


WEAR

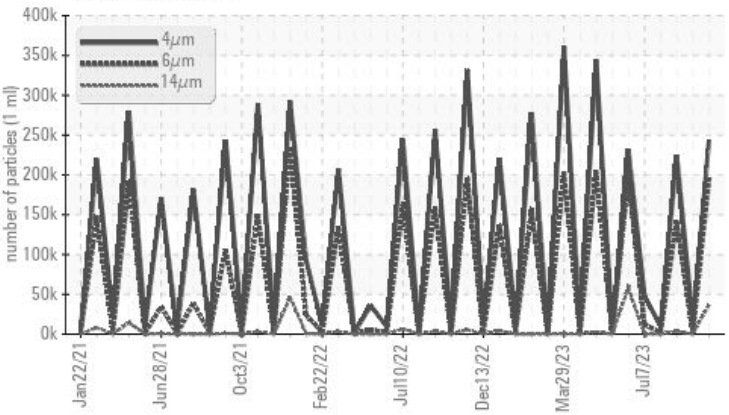
Machine Id
RECYCLE NH3 OIL
Component
Refrigeration Compressor
Fluid
USPI ALT-68 SC (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



▲ Particle Trend



RECOMMENDATION

This is a baseline read-out on the submitted sample.
TANK A DIRTY

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>8	▲ **90**	5	▲ 95
Particles >6µm		ASTM D7647	>2500	▲ **192272**	2283	▲ 141257
Particles >14µm		ASTM D7647	>320	▲ **36436**	31	▲ 3607
Particles >21µm		ASTM D7647	>80	▲ **5232**	4	▲ 176
Oil Cleanliness		ISO 4406 (c)	>--/18/15	▲ **25/25/22**	21/18/12	▲ 25/24/19

Customer Id: TYSBER01
Sample No.: USP0003961
Lab Number: 06025755
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

27 Nov 2023 Diag: Doug Bogart

NORMAL

This is a baseline read-out on the submitted sample. TANK B FILTERED 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

01 Nov 2023 Diag: Doug Bogart

WEAR

This is a baseline read-out on the submitted sample. TANK B DIRTYThe iron level is abnormal. There is a high amount of particulates present in the oil. The AN level is at the top-end of the recommended limit. Confirm oil type.

view report

17 Jul 2023 Diag: Doug Bogart

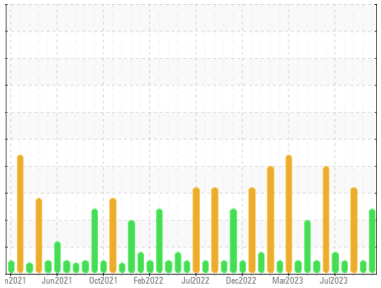
NORMAL

This is a baseline read-out on the submitted sample. CLEAN TANK A 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
RECYCLE NH3 OIL
Component
Refrigeration Compressor
Fluid
USPI ALT-68 SC (--- GAL)

DIAGNOSIS

Recommendation
This is a baseline read-out on the submitted sample. TANK A DIRTY

Wear
The iron level is abnormal.

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

Fluid Condition
The AN level is at the top-end of the recommended limit. Confirm oil type.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USP0003961**	USP0003859	USP0003104
Sample Date		Client Info		**02 Dec 2023**	27 Nov 2023	01 Nov 2023
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				**ABNORMAL**	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	▲ **90**	5	▲ 95
Chromium	ppm	ASTM D5185m	>2	**0**	0	0
Nickel	ppm	ASTM D5185m		**<1**	<1	0
Titanium	ppm	ASTM D5185m		**0**	<1	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**	<1	0
Tin	ppm	ASTM D5185m	>4	**0**	<1	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	<1	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**	<1	0
Manganese	ppm	ASTM D5185m		**<1**	<1	0
Magnesium	ppm	ASTM D5185m		**0**	<1	0
Calcium	ppm	ASTM D5185m		**0**	<1	0
Phosphorus	ppm	ASTM D5185m		**0**	0	0
Zinc	ppm	ASTM D5185m		**0**	0	0
Sulfur	ppm	ASTM D5185m	50	**26**	0	0

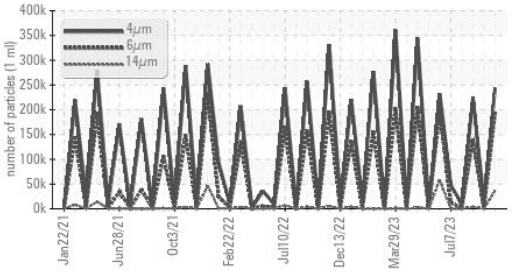
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**5**	5	3
Sodium	ppm	ASTM D5185m		**<1**	0	0
Potassium	ppm	ASTM D5185m	>20	**0**	1	0
Water	%	ASTM D6304	>0.01	**0.008**	0.002	0.004
ppm Water	ppm	ASTM D6304	>100	**88**	19	43.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**243411**	13454	224544
Particles >6µm		ASTM D7647	>2500	▲ **192272**	2283	▲ 141257
Particles >14µm		ASTM D7647	>320	▲ **36436**	31	▲ 3607
Particles >21µm		ASTM D7647	>80	▲ **5232**	4	▲ 176
Particles >38µm		ASTM D7647	>20	**7**	0	1
Particles >71µm		ASTM D7647	>4	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/18/15	▲ **25/25/22**	21/18/12	▲ 25/24/19

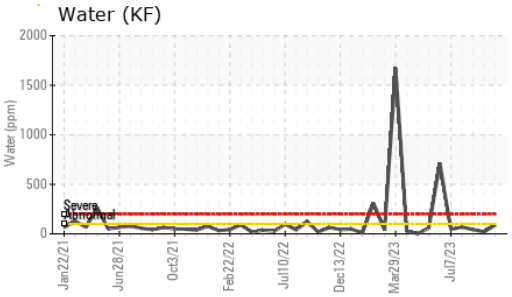
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	**0.027**	0.015	0.014

OIL ANALYSIS REPORT

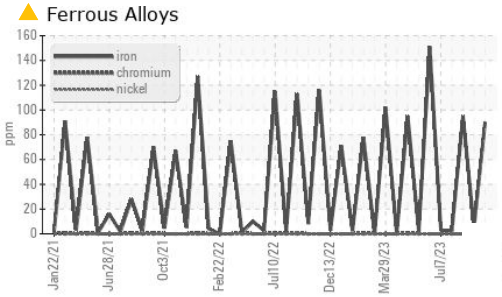
Particle Trend



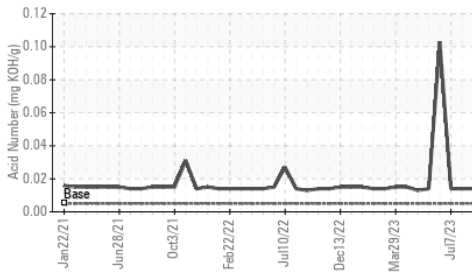
Water (KF)



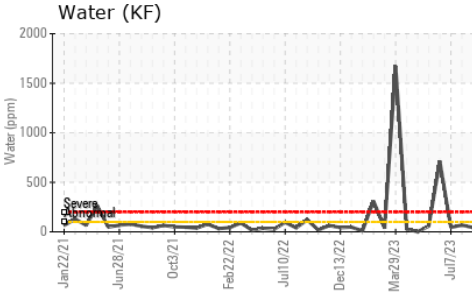
Ferrous Alloys



Acid Number



Water (KF)



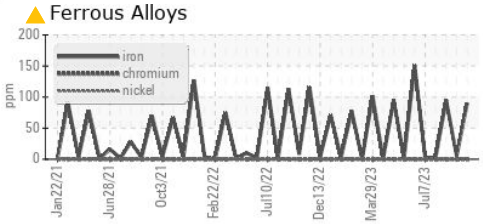
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**LIGHT**	NONE	LIGHT
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65.6	**61.3**	62.0	61.8

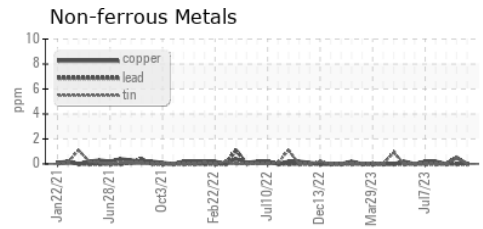
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

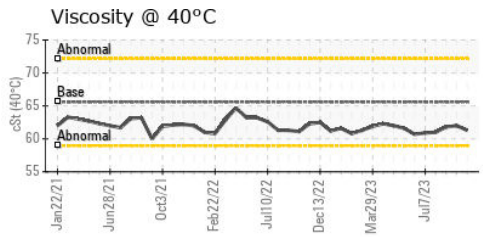
Ferrous Alloys



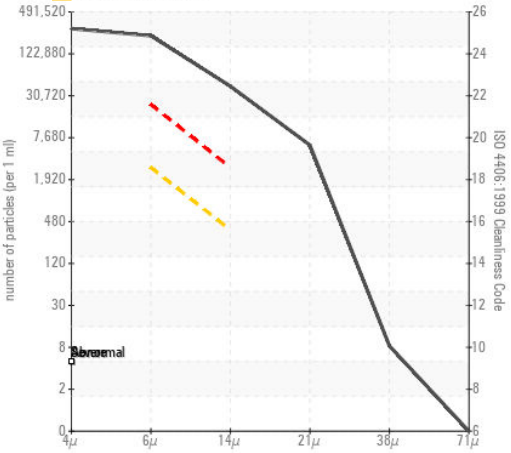
Non-ferrous Metals



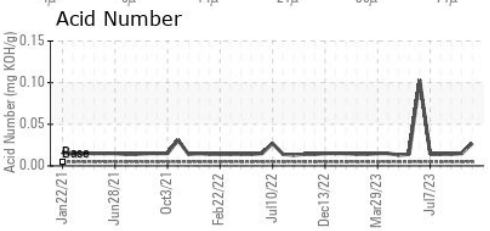
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0003961
Lab Number : 06025755
Unique Number : 10775546
Test Package : IND 2

Received : 05 Dec 2023
Diagnosed : 06 Dec 2023
Diagnostician : Doug Bogart

Certificate L2367

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)

TYSON -BERRYVILLE-USP
110 WEST FREEMAN
BERRYVILLE, AR
US 72616
Contact: MIKE CISCO

T: (870)423-5556
F: (870)423-1602