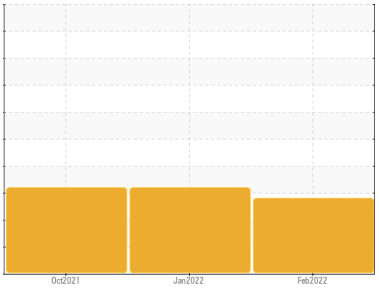
PROBLEM SUMMARY

Sample Rating Trend

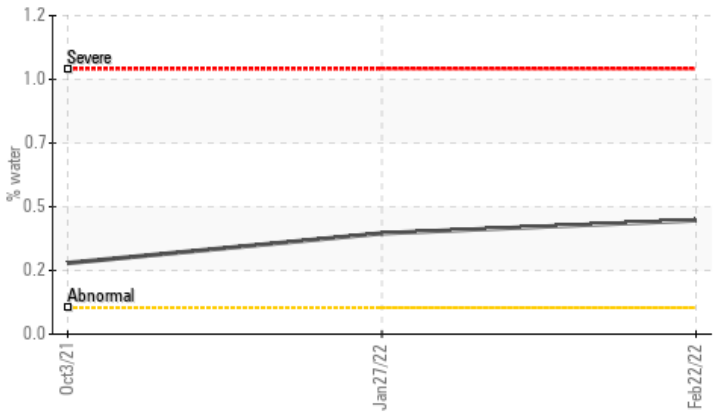


WATER

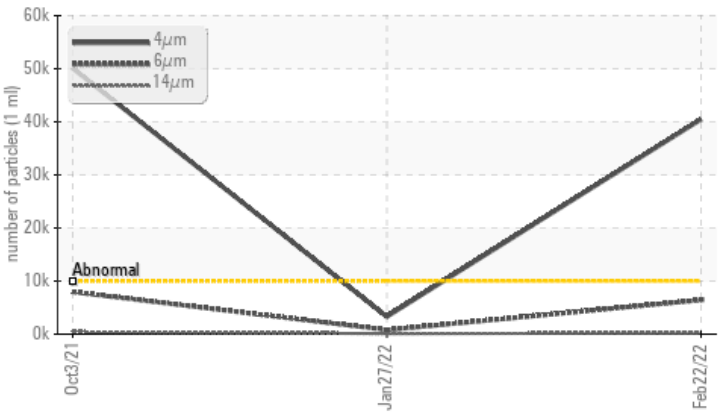
Machine Id
FRICK FRICK A
Component
Screw Compressor
Fluid
ISO 100 (--- GAL)

COMPONENT CONDITION SUMMARY

Water



Particle Trend



RECOMMENDATION

We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.1	▲ **0.429**	▲ 0.380	▲ 0.268
ppm Water	ppm	ASTM D6304	>1000	▲ **4296.1**	▲ 3807.0	▲ 2681.6
Particles >4µm		ASTM D7647	>10000	▲ **40464**	3288	▲ 50068
Particles >6µm		ASTM D7647	>2500	▲ **6430**	791	▲ 7959
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ **23/20/15**	19/17/14	▲ 23/20/16
Debris	scalar	*Visual	NONE	▲ **MODER**	NONE	LIGHT

Customer Id: GARROW
Sample No.: TO50000456
Lab Number: 05535248
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@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
Water Drain-off	MISSED	May 05 2022	?	We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid.

HISTORICAL DIAGNOSIS

27 Jan 2022 Diag: Jonathan Hester

WATER

We advise that you follow the water drain-off procedure for this component. 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. Elemental level of silicon (Si) above normal. 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

03 Oct 2021 Diag: Doug Bogart

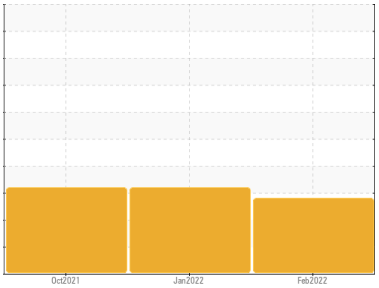
WATER

We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of particulates present in the oil. There is a light concentration of water present in the oil. 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



WATER

Machine Id
FRICK FRICK A
Component
Screw Compressor
Fluid
ISO 100 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Insufficient sample was received to conduct all the routine laboratory tests. There is a high amount of silt (particulates < 14 microns in size) present in the oil. There is a moderate concentration of water present in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**TO50000456**	TO50000455	TO50000451
Sample Date		Client Info		**22 Feb 2022**	27 Jan 2022	03 Oct 2021
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**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>60	**0**	0	<1
Chromium	ppm	ASTM D5185m	>4	**0**	0	0
Nickel	ppm	ASTM D5185m		**0**	<1	<1
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	1
Aluminum	ppm	ASTM D5185m	>5	**0**	0	<1
Lead	ppm	ASTM D5185m	>10	**0**	0	<1
Copper	ppm	ASTM D5185m	>30	**0**	0	<1
Tin	ppm	ASTM D5185m	>15	**<1**	<1	<1
Antimony	ppm	ASTM D5185m		**---**	---	<1
Vanadium	ppm	ASTM D5185m		**0**	0	<1
Cadmium	ppm	ASTM D5185m		**0**	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**1**	0	1
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	0	<1
Magnesium	ppm	ASTM D5185m		**0**	0	<1
Calcium	ppm	ASTM D5185m		**0**	0	5
Phosphorus	ppm	ASTM D5185m		**12**	7	9
Zinc	ppm	ASTM D5185m		**0**	0	1
Sulfur	ppm	ASTM D5185m		**1969**	2026	326

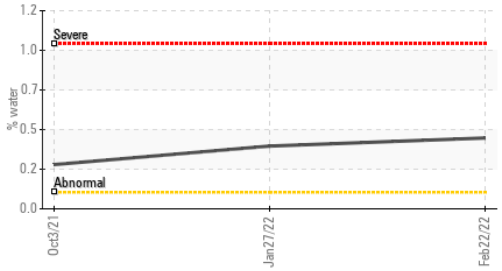
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**28**	▲ 52	17
Sodium	ppm	ASTM D5185m		**0**	0	1
Potassium	ppm	ASTM D5185m	>20	**2**	<1	<1
Water	%	ASTM D6304	>0.1	▲ **0.429**	▲ 0.380	▲ 0.268
ppm Water	ppm	ASTM D6304	>1000	▲ **4296.1**	▲ 3807.0	▲ 2681.6

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	▲ **40464**	3288	▲ 50068
Particles >6µm		ASTM D7647	>2500	▲ **6430**	791	▲ 7959
Particles >14µm		ASTM D7647	>320	**207**	90	▲ 443
Particles >21µm		ASTM D7647	>80	**40**	33	▲ 109
Particles >38µm		ASTM D7647	>20	**0**	1	2
Particles >71µm		ASTM D7647	>4	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ **23/20/15**	19/17/14	▲ 23/20/16

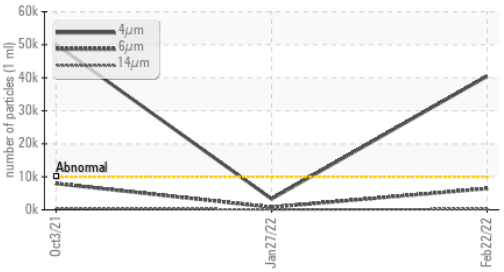
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**---**	0.277	0.471

OIL ANALYSIS REPORT

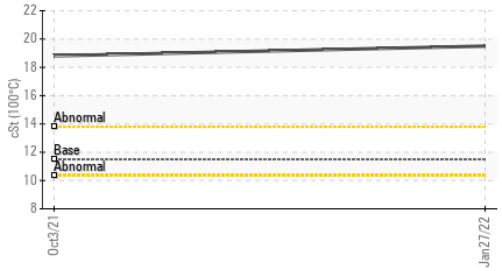
Water



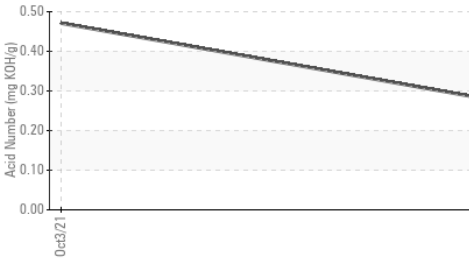
Particle Trend



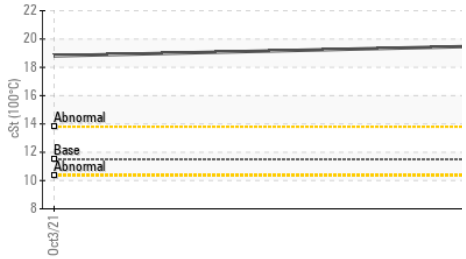
Viscosity @ 100°C



Acid Number



Viscosity @ 100°C



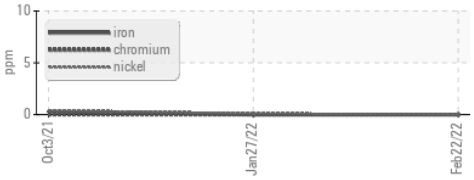
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	▲ **MODER**	NONE	LIGHT
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	100	---	111	106
Visc @ 100°C	cSt	ASTM D445	11.5	---	19.5	18.81
Viscosity Index (VI)	Scale	ASTM D2270	102	---	198	198

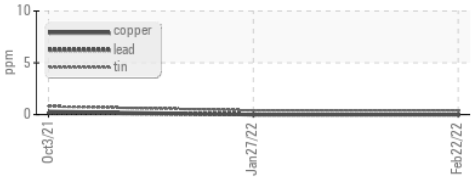
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

Ferrous Alloys

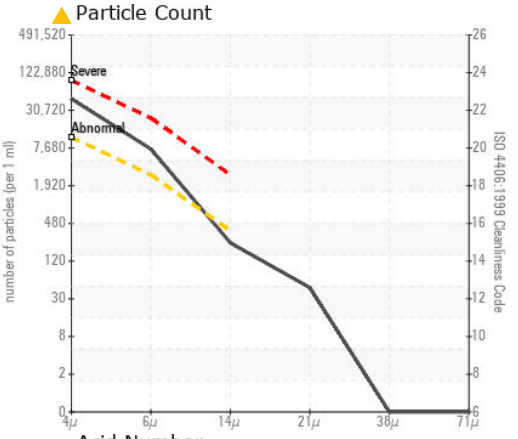


Non-ferrous Metals

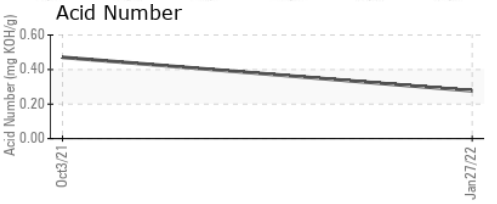


Viscosity @ 40°C

Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50000456 **Received** : 03 May 2022
Lab Number : 05535248 **Diagnosed** : 05 May 2022
Unique Number : 9959537 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)

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)

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