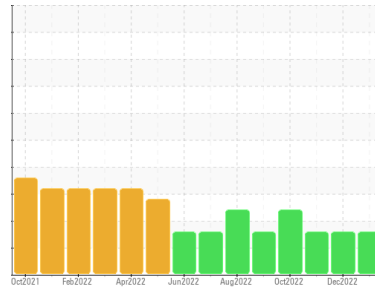


PROBLEM SUMMARY

Sample Rating Trend



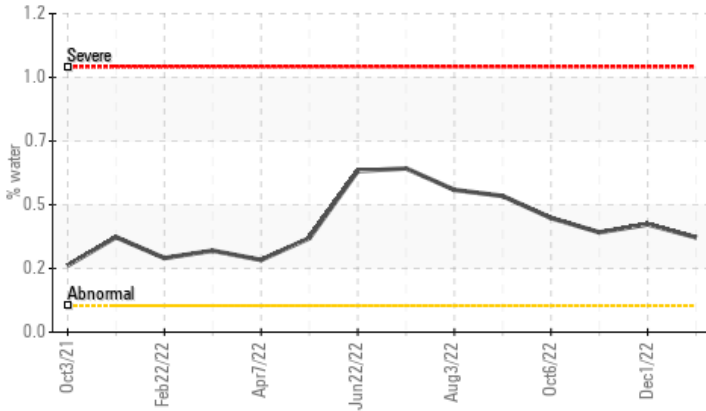
WATER



Machine Id
FRICK FRICK B
Component
Screw Compressor
Fluid
NOT GIVEN (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Water



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.1	▲ 0.357	▲ 0.406	▲ 0.376
ppm Water	ppm	ASTM D6304	>1000	▲ 3571.9	▲ 4063.1	▲ 3766.3

Customer Id: GARROW
Sample No.: TO70000052
Lab Number: 05765091
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
Change Filter	MISSED	Mar 16 2023	?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

01 Dec 2022 Diag: Don Baldrige

WATER



We recommend you service the filters on this component. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is a light concentration of water present 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](#)



15 Nov 2022 Diag: Jonathan Hester

WATER



We recommend you service the filters on this component. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is a light concentration of water present 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](#)



06 Oct 2022 Diag: Don Baldrige

WATER

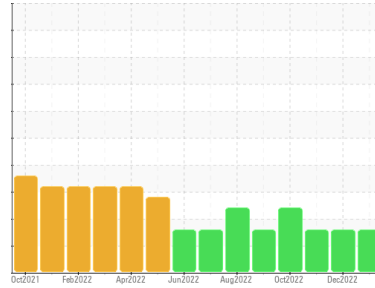


We recommend you service the filters on this component. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in 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](#)



Machine Id
FRICK FRICK B
Component
Screw Compressor
Fluid
NOT GIVEN (--- GAL)



DIAGNOSIS

Recommendation
We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number	Client Info		TO70000052	TO60000198	TO60000194
Sample Date	Client Info		07 Feb 2023	01 Dec 2022	15 Nov 2022
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	<1	0	0
Chromium	ppm	ASTM D5185m >4	0	0	0
Nickel	ppm	ASTM D5185m	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >5	0	0	0
Lead	ppm	ASTM D5185m >10	0	<1	<1
Copper	ppm	ASTM D5185m >30	0	0	0
Tin	ppm	ASTM D5185m >15	<1	1	1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

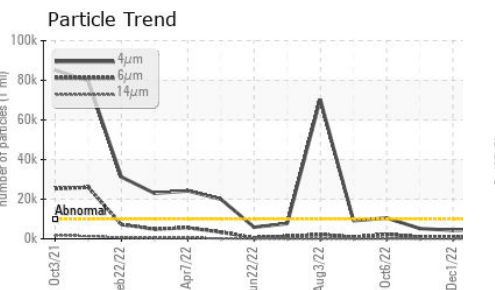
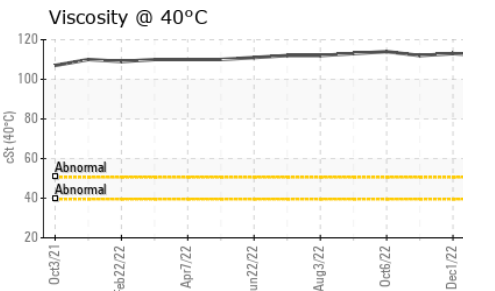
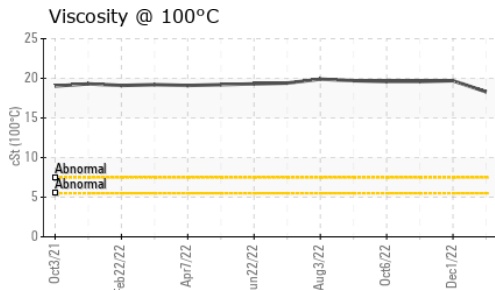
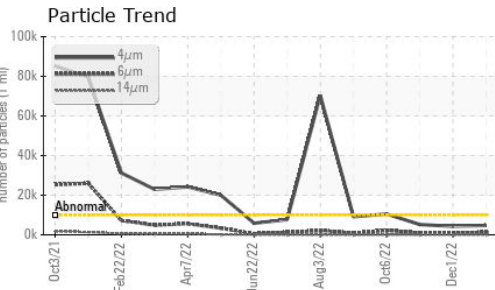
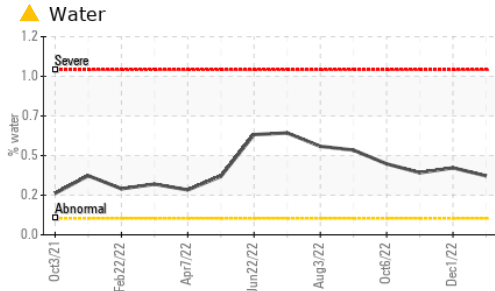
ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m	0	1	0
Calcium	ppm	ASTM D5185m	<1	0	0
Phosphorus	ppm	ASTM D5185m	24	25	21
Zinc	ppm	ASTM D5185m	<1	0	0
Sulfur	ppm	ASTM D5185m	2726	3167	3353

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	32	25	22
Sodium	ppm	ASTM D5185m	3	0	0
Potassium	ppm	ASTM D5185m >20	1	0	0
Water	%	ASTM D6304 >0.1	▲ 0.357	▲ 0.406	▲ 0.376
ppm Water	ppm	ASTM D6304 >1000	▲ 3571.9	▲ 4063.1	▲ 3766.3

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	4729	4317	5209
Particles >6µm	ASTM D7647	>2500	1259	905	893
Particles >14µm	ASTM D7647	>320	62	34	50
Particles >21µm	ASTM D7647	>80	11	6	14
Particles >38µm	ASTM D7647	>20	1	0	1
Particles >71µm	ASTM D7647	>4	0	0	1
Oil Cleanliness	ISO 4406 (c)	>20/18/15	19/17/13	19/17/12	20/17/13

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.453	0.381	0.569

OIL ANALYSIS REPORT

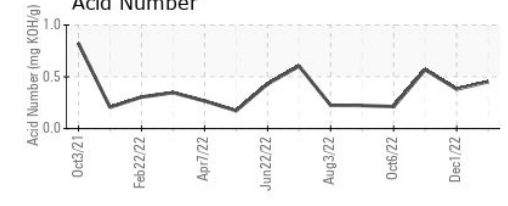
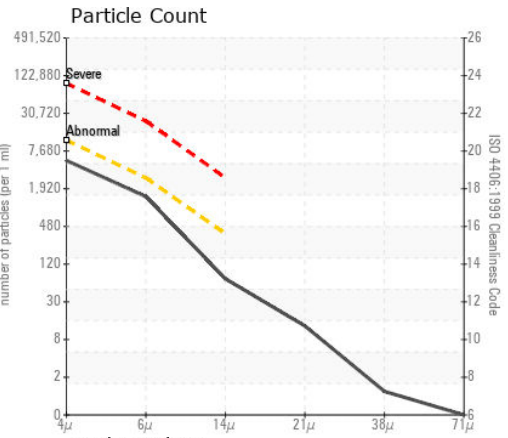
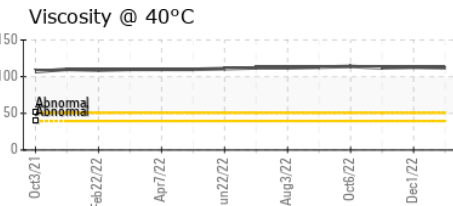
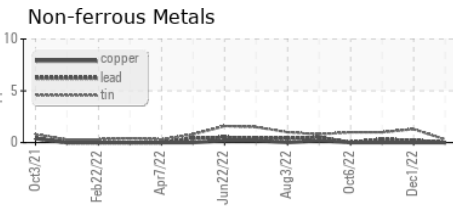
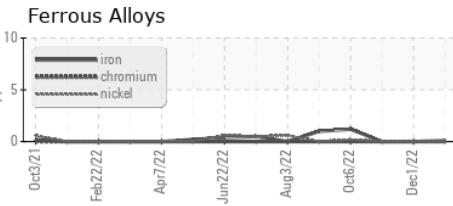


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	112	113	112
Visc @ 100°C	cSt	ASTM D445	18.3	19.7	19.6
Viscosity Index (VI)	Scale	ASTM D2270	182	197	198

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO70000052 **Received** : 10 Feb 2023
Lab Number : 05765091 **Diagnosed** : 13 Feb 2023
Unique Number : 10334699 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)

GARLAND RENEWABLES
 3175 ELM GROVE RD
 ROWLETT, TX
 US 75089
 Contact: DUSTIN FRY
 dustin@morrowrenew.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)