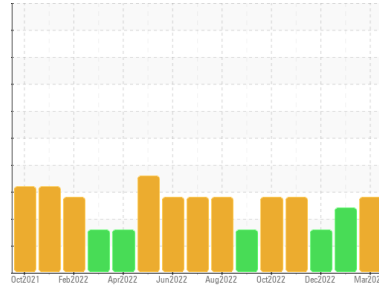


# PROBLEM SUMMARY

Sample Rating Trend



**WATER**

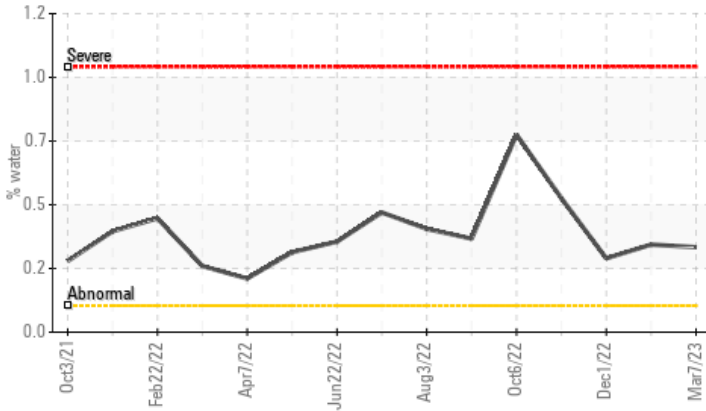


Machine Id  
**FRICK FRICK A**

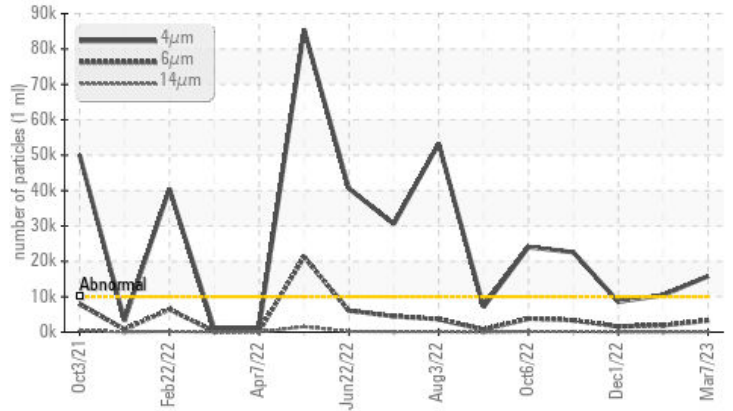
Component  
**Screw Compressor**  
Fluid  
**COMPRESSOR OIL ISO 100 (--- GAL)**

## COMPONENT CONDITION SUMMARY

▲ Water



▲ Particle Trend



## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.1	▲ <b>0.320</b>	▲ 0.330	▲ 0.278
ppm Water	ppm	ASTM D6304	>1000	▲ <b>3203.0</b>	▲ 3306.1	▲ 2787.6
Particles >4µm		ASTM D7647	>10000	▲ <b>15823</b>	▲ 10453	8599
Particles >6µm		ASTM D7647	>2500	▲ <b>3317</b>	1917	1587
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ <b>21/19/14</b>	▲ 21/18/14	20/18/13

Customer Id: GARROW  
Sample No.: TO70000057  
Lab Number: 05790916  
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](mailto:dougb@wearcheckusa.com)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	MISSED	May 01 2023	?	We recommend you service the filters on this component.

## HISTORICAL DIAGNOSIS

### 07 Feb 2023 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 moderate amount of silt (particulates < 6 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](#)



### 01 Dec 2022 Diag: Don Baldrige

#### 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 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

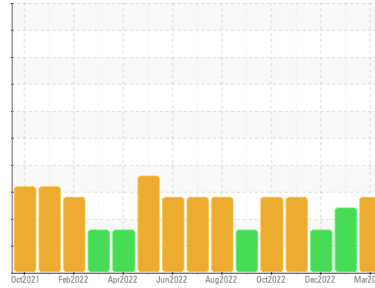


We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



Machine Id  
**FRICK FRICK A**  
Component  
**Screw Compressor**  
Fluid  
**COMPRESSOR OIL ISO 100 (--- 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 moderate amount of silt (particulates < 14 microns in size) present in the oil. There is a light concentration of water present in the oil.

**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			<b>TO70000057</b>	TO70000053	TO60000196
Sample Date	Client Info			<b>07 Mar 2023</b>	07 Feb 2023	01 Dec 2022
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

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

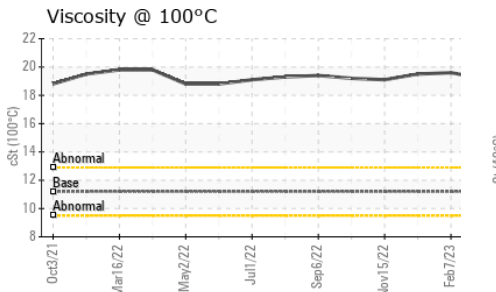
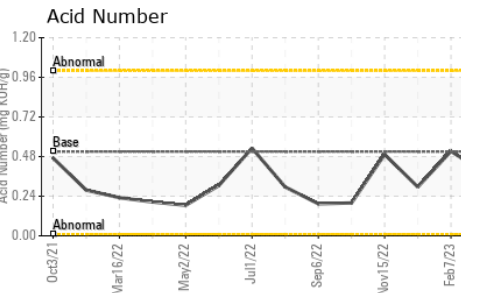
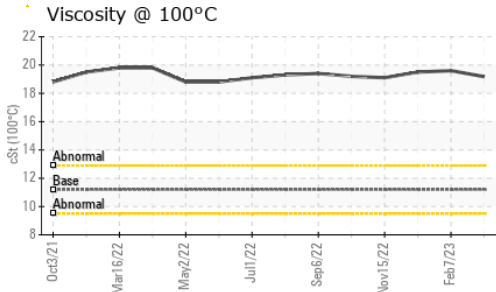
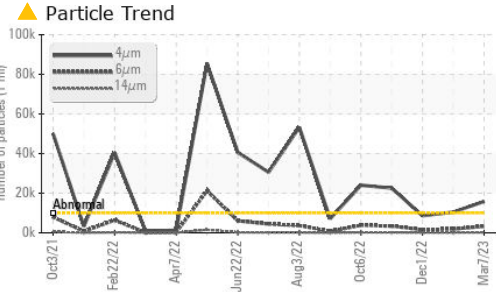
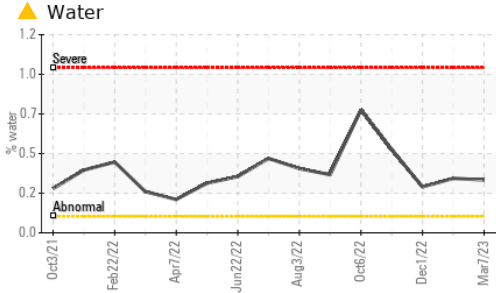
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	0	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	5	<b>2</b>	<1	13
Calcium	ppm	ASTM D5185m	5	<b>0</b>	2	0
Phosphorus	ppm	ASTM D5185m	150	<b>27</b>	32	31
Zinc	ppm	ASTM D5185m	5	<b>0</b>	4	2
Sulfur	ppm	ASTM D5185m	5000	<b>3098</b>	3058	3616

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>39</b>	47	38
Sodium	ppm	ASTM D5185m		<b>0</b>	3	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Water	%	ASTM D6304	>0.1	<b>▲ 0.320</b>	▲ 0.330	▲ 0.278
ppm Water	ppm	ASTM D6304	>1000	<b>▲ 3203.0</b>	▲ 3306.1	▲ 2787.6

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>▲ 15823</b>	▲ 10453	8599
Particles >6µm		ASTM D7647	>2500	<b>▲ 3317</b>	1917	1587
Particles >14µm		ASTM D7647	>320	<b>115</b>	93	76
Particles >21µm		ASTM D7647	>80	<b>9</b>	21	15
Particles >38µm		ASTM D7647	>20	<b>1</b>	2	1
Particles >71µm		ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>▲ 21/19/14</b>	▲ 21/18/14	20/18/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.51	<b>0.384</b>	0.512	0.296

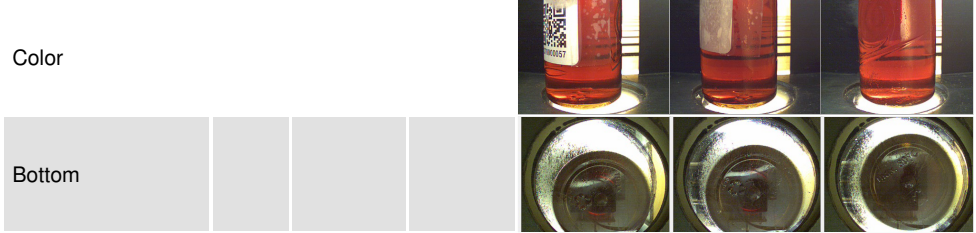
# OIL ANALYSIS REPORT



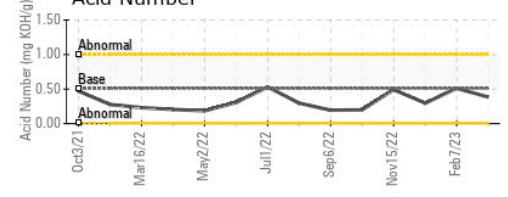
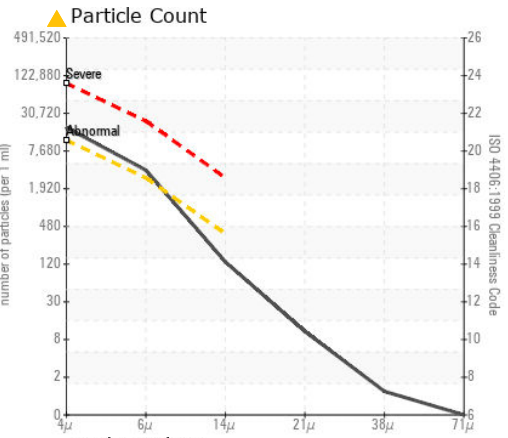
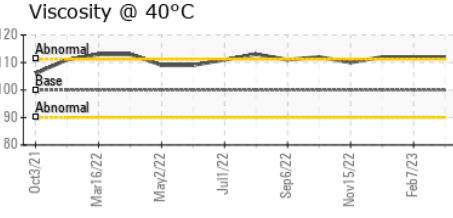
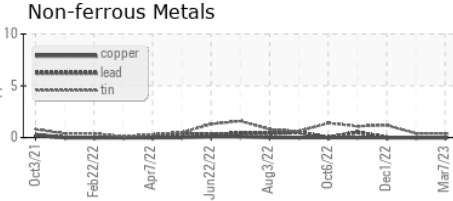
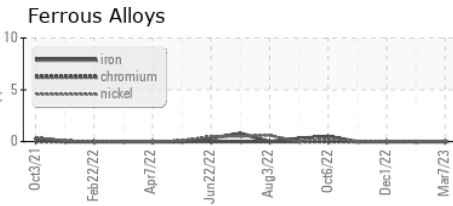
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	100	112	112
Visc @ 100°C	cSt	ASTM D445	11.2	19.18	19.5
Viscosity Index (VI)	Scale	ASTM D2270	97	193	197

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO70000057 **Received** : 14 Mar 2023  
**Lab Number** : 05790916 **Diagnosed** : 20 Mar 2023  
**Unique Number** : 10375587 **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

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)