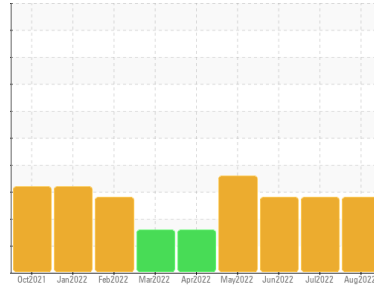


# PROBLEM SUMMARY

## Sample Rating Trend



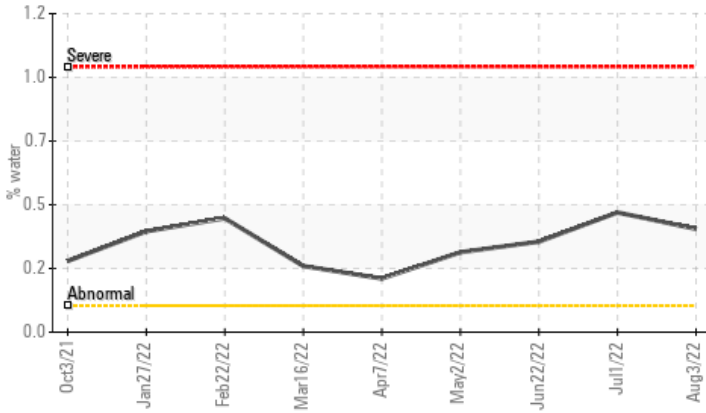
**WATER**



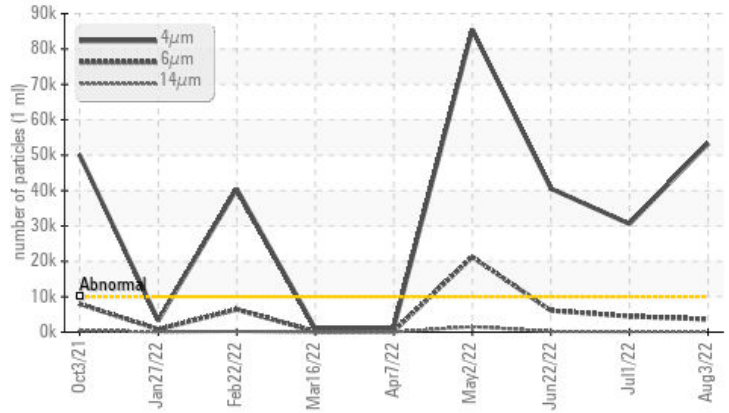
Machine Id  
**FRICK FRICK A**  
Component  
**Screw Compressor**  
Fluid  
**ISO 100 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Water



### ▲ Particle Trend



## RECOMMENDATION

We 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>0.389</b>	▲ 0.451	▲ 0.341
ppm Water	ppm	ASTM D6304	>1000	▲ <b>3890.3</b>	▲ 4512.2	▲ 3410.1
Particles >4µm		ASTM D7647	>10000	▲ <b>53278</b>	▲ 30572	▲ 40554
Particles >6µm		ASTM D7647	>2500	▲ <b>3638</b>	▲ 4466	▲ 6070
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ <b>23/19/14</b>	▲ 22/19/14	▲ 23/20/15

Customer Id: GARROW  
Sample No.: TO60000186  
Lab Number: 05623047  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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	Sep 25 2022	?	We recommend you service the filters on this component.

## HISTORICAL DIAGNOSIS

### 01 Jul 2022 Diag: Angela Borella

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

[view report](#)



### 22 Jun 2022 Diag: Angela Borella

#### 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](#)



### 02 May 2022 Diag: Doug Bogart

#### WATER



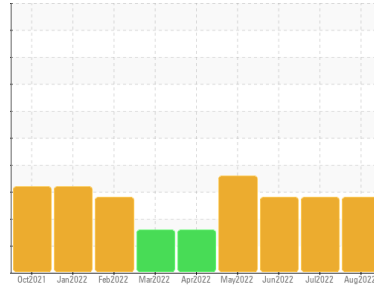
We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. 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 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 high 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>TO60000186</b>	TO60000182	TO50000459
Sample Date	Client Info		<b>03 Aug 2022</b>	01 Jul 2022	22 Jun 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>	<1	<1
Chromium	ppm	ASTM D5185m >4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m >30	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	2	1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

**ADDITIVES**

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>3</b>	7	4
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185m	<b>2</b>	2	4
Phosphorus	ppm	ASTM D5185m	<b>26</b>	28	31
Zinc	ppm	ASTM D5185m	<b>1</b>	5	2
Sulfur	ppm	ASTM D5185m	<b>2445</b>	1584	1130

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>20</b>	23	22
Sodium	ppm	ASTM D5185m	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	1	1
Water	%	ASTM D6304 >0.1	<b>▲ 0.389</b>	▲ 0.451	▲ 0.341
ppm Water	ppm	ASTM D6304 >1000	<b>▲ 3890.3</b>	▲ 4512.2	▲ 3410.1

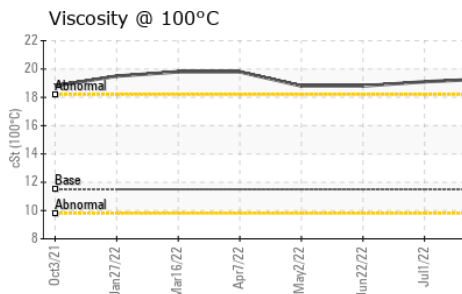
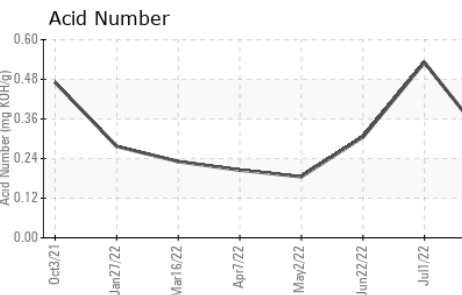
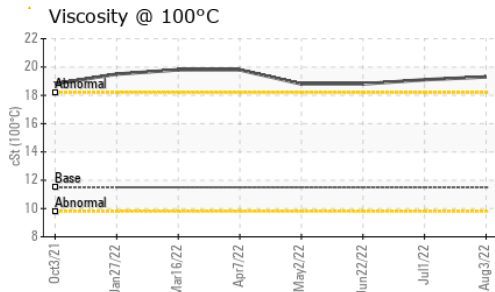
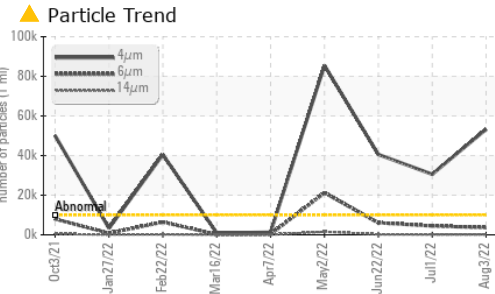
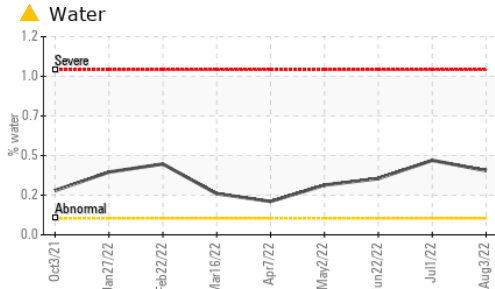
**FLUID CLEANLINESS**

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>▲ 53278</b>	▲ 30572	▲ 40554
Particles >6µm	ASTM D7647	>2500	<b>▲ 3638</b>	▲ 4466	▲ 6070
Particles >14µm	ASTM D7647	>320	<b>148</b>	145	201
Particles >21µm	ASTM D7647	>80	<b>45</b>	31	38
Particles >38µm	ASTM D7647	>20	<b>2</b>	1	1
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>▲ 23/19/14</b>	▲ 22/19/14	▲ 23/20/15

**FLUID DEGRADATION**

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.296</b>	0.531	0.305

# OIL ANALYSIS REPORT

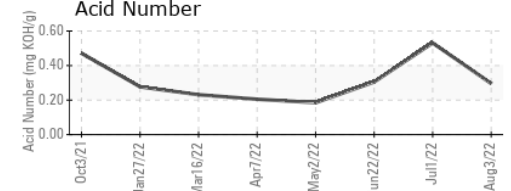
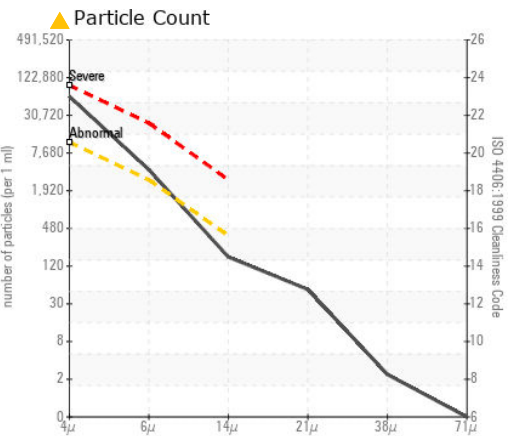
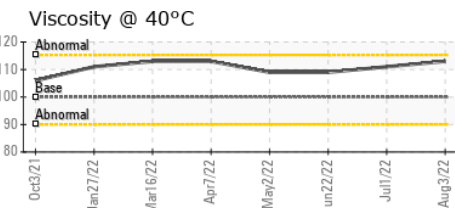
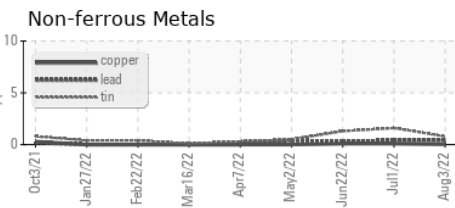
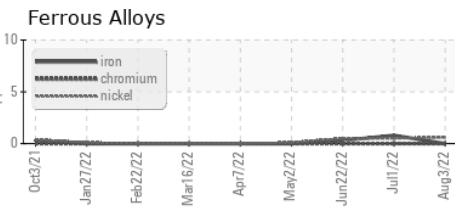


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	113	109
Visc @ 100°C	cSt	ASTM D445	11.5	19.3	18.8
Viscosity Index (VI)	Scale	ASTM D2270	102	193	193

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO60000186 **Received** : 22 Aug 2022  
**Lab Number** : 05623047 **Diagnosed** : 23 Aug 2022  
**Unique Number** : 10102554 **Diagnostician** : Don Baldrige  
**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)