



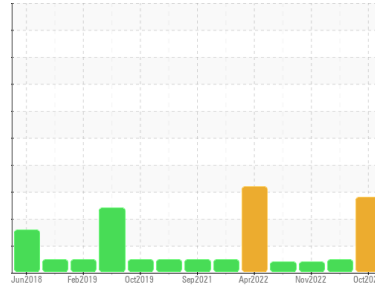
# PROBLEM SUMMARY

Sample Rating Trend

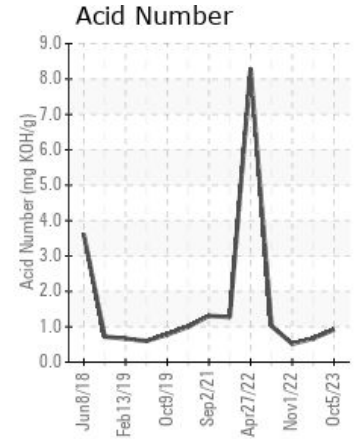
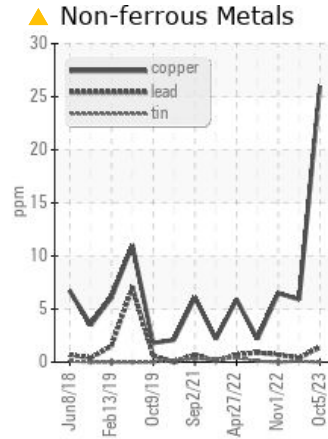
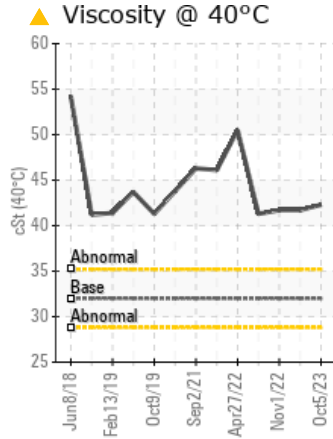
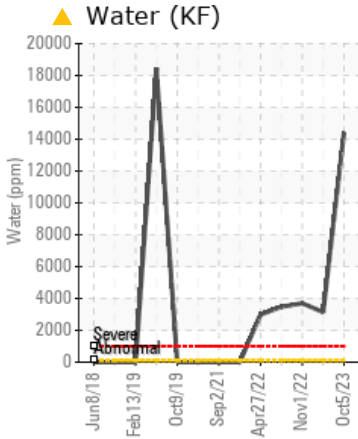
**WATER**



Area  
**[21973327]**  
 Machine Id  
**170-329 ROTARY SCREW COMPRESSOR**  
 Component  
**Rotary Compressor**  
 Fluid  
**SULLAIR SULLUBE 32 (20 LTR)**



## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	NORMAL	ABNORMAL
Copper	ppm	ASTM D5185(m)	>20	▲ 26	6
Water	%	ASTM D6304*	>0.6	▲ 1.441	0.313
ppm Water	ppm	ASTM D6304*		▲ 14410.4	3138.0
Emulsified Water	scalar	Visual*	>0.6	▲ .2%	NEG
Visc @ 40°C	cSt	ASTM D7279(m)	32.0	▲ 42.3	41.7

Customer Id: FLASTS  
 Sample No.: WC0840186  
 Lab Number: 02590295  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Kevin Marson +1 (289)291-4644 x4644  
[Kevin.Marson@wearcheck.com](mailto:Kevin.Marson@wearcheck.com)

To change component or sample information:  
 Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Water Access	---	---	?	We advise that you check for the source of water entry.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.
Filter Fluid	---	---	?	We advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil.

## HISTORICAL DIAGNOSIS

### 06 Jun 2023 Diag: Kevin Marson

#### NORMAL



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. The water content is negligible. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within SAE 10W range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 01 Nov 2022 Diag: Kevin Marson

#### VISCOSITY



Resample at the next service interval to monitor. The fluid was specified as SULLAIR SULLUBE 32, however, a fluid match indicates that this fluid is ISO 46 Synthetic (PAG) Compressor Oil. Please confirm the oil type and grade on your next sample. All component wear rates are normal. The water content is negligible. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 03 Aug 2022 Diag: Kevin Marson

#### VISCOSITY



Resample at the next service interval to monitor. The fluid was specified as SULLAIR SULLUBE 32, however, a fluid match indicates that this fluid is ISO 46 Synthetic (PAG) Compressor Oil. Please confirm the oil type and grade on your next sample. All component wear rates are normal. The water content is negligible. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

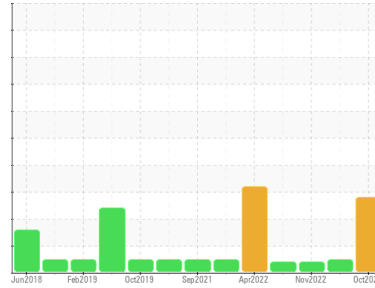
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Area  
**[21973327]**  
 Machine Id  
**170-329 ROTARY SCREW COMPRESSOR**  
 Component  
**Rotary Compressor**  
 Fluid  
**SULLAIR SULLUBE 32 (20 LTR)**

## DIAGNOSIS

### ▲ Recommendation

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. We recommend an early resample to monitor this condition.

### ▲ Wear

Copper ppm levels are abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core).

### ▲ Contamination

There is a moderate concentration of water present in the oil.

### ▲ Fluid Condition

An increase in the AN level is noted. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0840186</b>	WC0813421	WC0729487
Sample Date	Client Info		<b>05 Oct 2023</b>	06 Jun 2023	01 Nov 2022
Machine Age	mths	Client Info	<b>0</b>	0	0
Oil Age	mths	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	NORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>0</b>	0	0
Iron	ppm	ASTM D5185(m) >70	<b>4</b>	3	8
Chromium	ppm	ASTM D5185(m) >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m) >3	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m) >4	<b>1</b>	<1	<1
Copper	ppm	ASTM D5185(m) >20	<b>▲ 26</b>	6	6
Tin	ppm	ASTM D5185(m) >3	<b>0</b>	<1	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	<b>5</b>	2	1
Barium	ppm	ASTM D5185(m) 745	<b>678</b>	777	802
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	<b>1</b>	1	<1
Calcium	ppm	ASTM D5185(m) 1	<b>8</b>	4	5
Phosphorus	ppm	ASTM D5185(m) 3	<b>1</b>	<1	0
Zinc	ppm	ASTM D5185(m)	<b>81</b>	106	102
Sulfur	ppm	ASTM D5185(m)	<b>288</b>	315	313
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

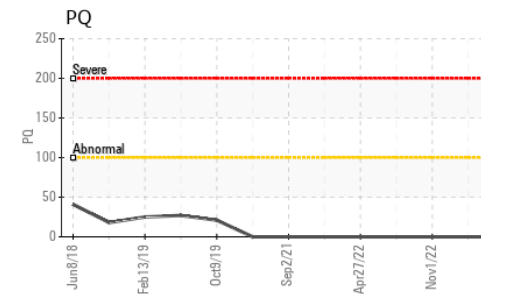
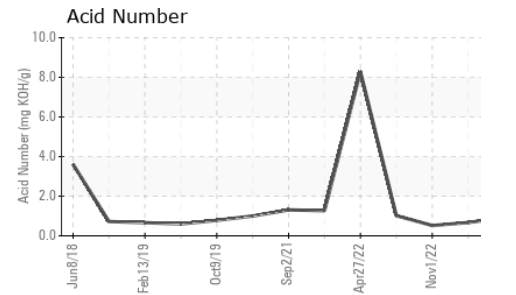
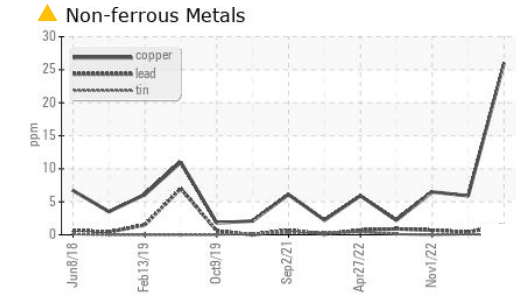
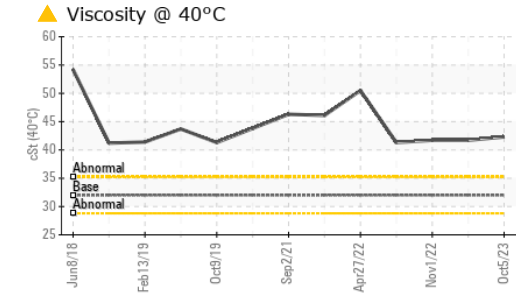
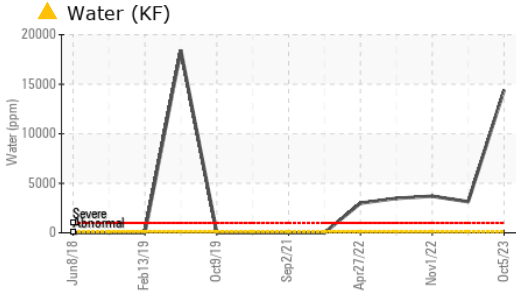
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >45	<b>2</b>	1	1
Sodium	ppm	ASTM D5185(m)	<b>38</b>	44	41
Potassium	ppm	ASTM D5185(m) >20	<b>4</b>	10	5
Water	%	ASTM D6304* >0.6	<b>▲ 1.441</b>	0.313	0.369
ppm Water	ppm	ASTM D6304*	<b>▲ 14410.4</b>	3138.0	3698.9

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	<b>0.92</b>	0.67	0.52



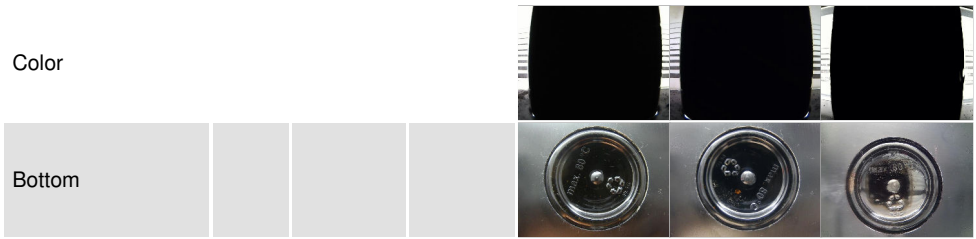
# OIL ANALYSIS REPORT



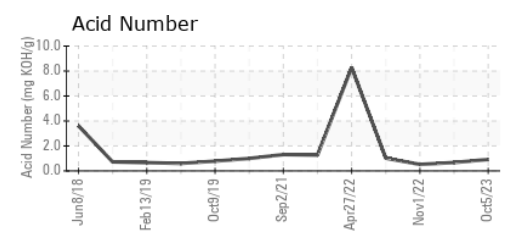
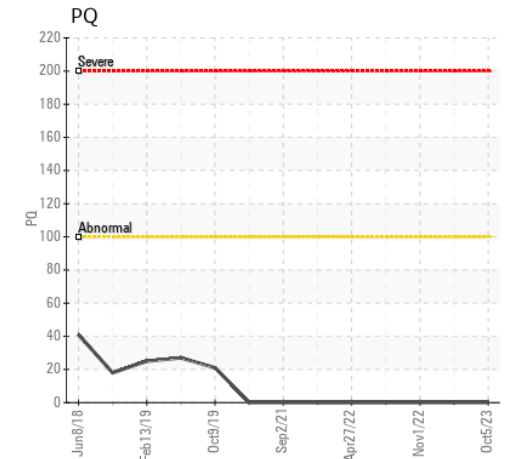
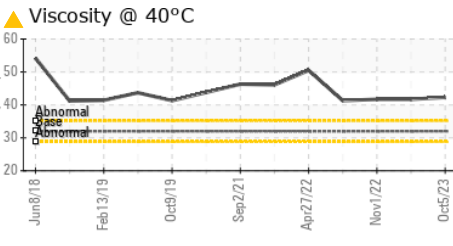
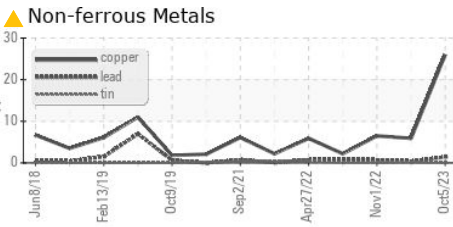
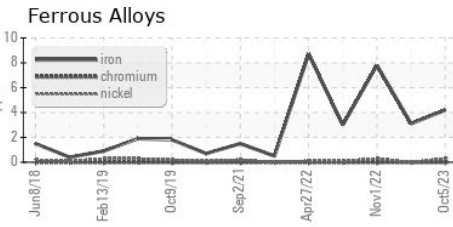
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.6	NEG	NEG
Free Water	scalar	Visual*	▲.2%	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	▲ 42.3	41.7	▲ 41.7

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



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
 Sample No. : WC0840186  
 Lab Number : 02590295  
 Unique Number : 5659361  
 Test Package : IND 2 ( Additional Tests: KF, TAN Man )

**ARAUCO - St. Stephen**  
 151 Church Street  
 St. Stephen, NB  
 CA E3L 3A6  
 Contact: Jim Sears  
 Jim.Sears@arauco.com  
 T: (506)465-2858  
 F: (506)465-2831

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.