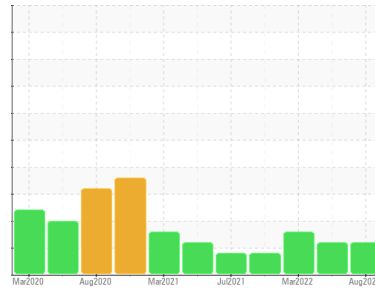


# PROBLEM SUMMARY

Sample Rating Trend



ISO



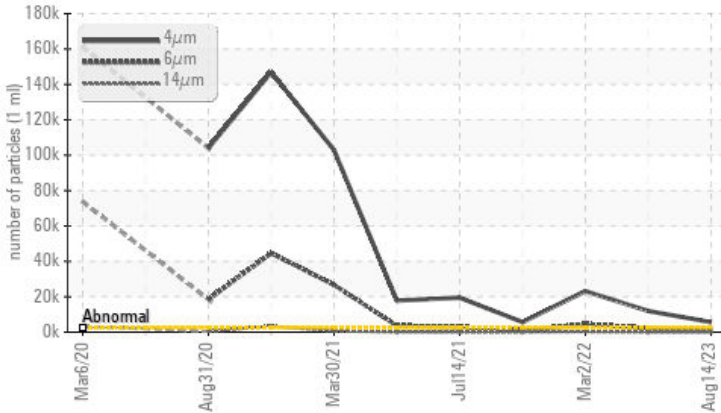
Area  
**BIG LAKE 2**  
Machine Id  
**C-163 (S/N XC0570)**

Component  
**Refrigeration Compressor**

Fluid  
**TULCO LUBSOIL SYN RL WI 100 (250 GAL)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

No corrective action is recommended at this time.  
Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>2500	▲ <b>5627</b>	▲ 11983	▲ 23170
Particles >6µm	ASTM D7647	>320	▲ <b>1152</b>	▲ 2210	▲ 4548
Oil Cleanliness	ISO 4406 (c)	>18/15/13	▲ <b>20/17/12</b>	▲ 21/18/13	▲ 22/19/15

Customer Id: COGBGL2  
Sample No.: TO90002199  
Lab Number: 05931592  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Angela Borella +1 800-237-1369  
[angela.borella@wearcheckusa.com](mailto:angela.borella@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 15 Mar 2023 Diag: Doug Bogart

ISO



No corrective action is recommended at this time. 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



### 02 Mar 2022 Diag: Don Baldrige

ISO



We recommend you service the filters on this component if applicable. 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. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



### 30 Nov 2021 Diag: Doug Bogart

ISO



We recommend you service the filters on this component if applicable. 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.

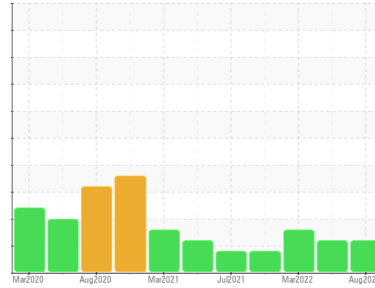
view report



Area  
**BIG LAKE 2**  
Machine Id  
**C-163 (S/N XC0570)**

Component  
**Refrigeration Compressor**

Fluid  
**TULCO LUBSOIL SYN RL WI 100 (250 GAL)**



## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. 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.

### 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>TO90002199</b>	TO90002319	TO90000117
Sample Date	Client Info	<b>14 Aug 2023</b>	15 Mar 2023	02 Mar 2022
Machine Age	mths	Client Info	0	0
Oil Age	mths	Client Info	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 >8	<b>7</b>	7	2
Chromium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >3	<b>0</b>	1	0
Lead	ppm	ASTM D5185m >2	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >8	<b>&lt;1</b>	0	0
Tin	ppm	ASTM D5185m >4	<b>1</b>	<1	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
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>0</b>	0	2
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	<b>1</b>	<1	0
Calcium	ppm	ASTM D5185m	<b>5</b>	8	6
Phosphorus	ppm	ASTM D5185m 1500	<b>1138</b>	982	1289
Zinc	ppm	ASTM D5185m	<b>20</b>	30	21
Sulfur	ppm	ASTM D5185m	<b>21</b>	53	15

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>2</b>	2	<1
Sodium	ppm	ASTM D5185m	<b>2</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0
Water	%	ASTM D6304 >2.26	<b>0.039</b>	0.008	0.026
ppm Water	ppm	ASTM D6304 >22600	<b>399.1</b>	83.9	267.7

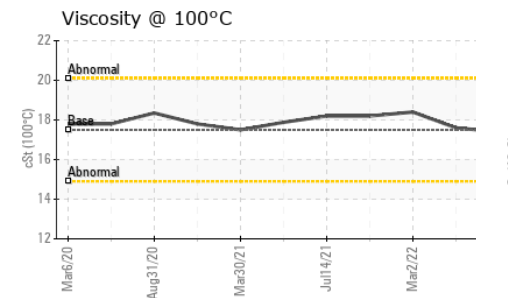
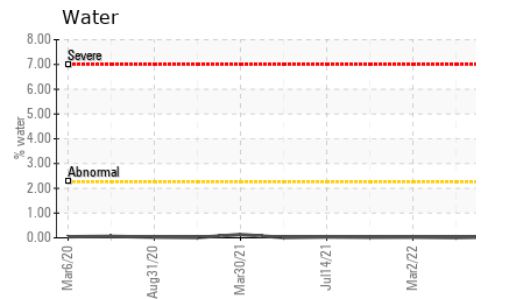
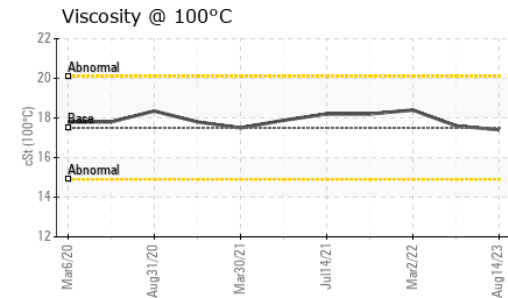
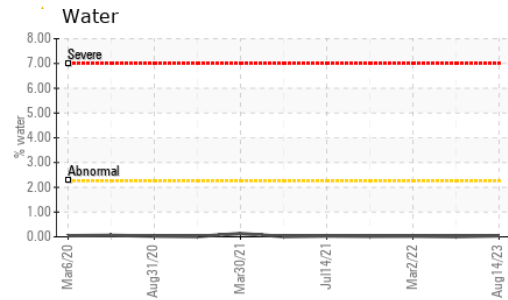
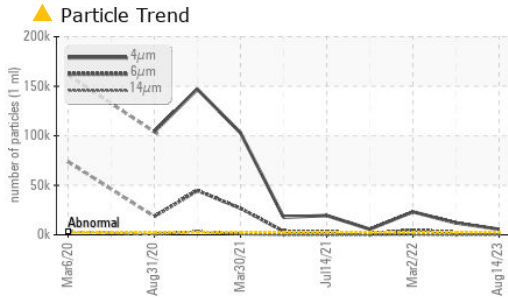
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >2500	<b>▲ 5627</b>	▲ 11983	▲ 23170
Particles >6µm	ASTM D7647 >320	<b>▲ 1152</b>	▲ 2210	▲ 4548
Particles >14µm	ASTM D7647 >80	<b>34</b>	48	▲ 246
Particles >21µm	ASTM D7647 >20	<b>7</b>	9	▲ 55
Particles >38µm	ASTM D7647 >4	<b>0</b>	0	2
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >18/15/13	<b>▲ 20/17/12</b>	▲ 21/18/13	▲ 22/19/15

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974 0.04	<b>0.029</b>	0.028	0.041

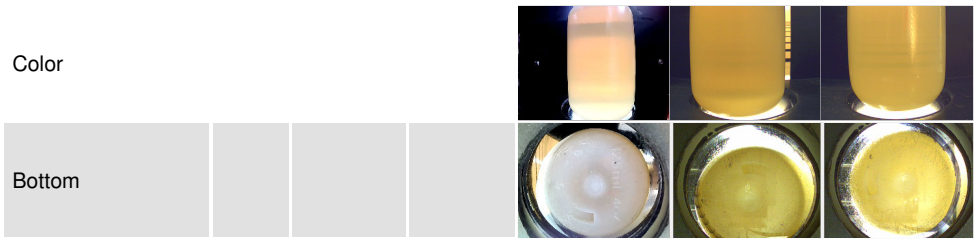
# OIL ANALYSIS REPORT



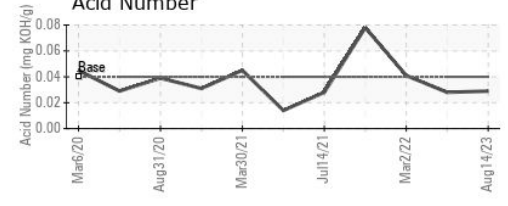
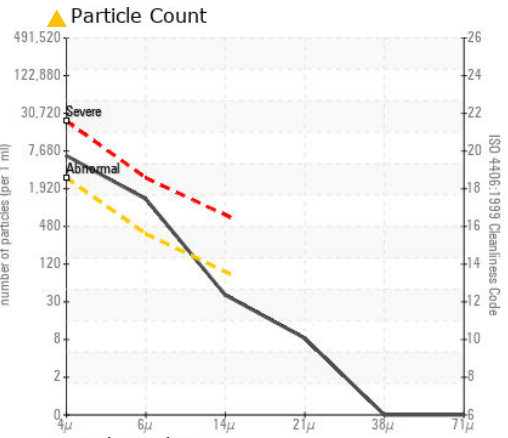
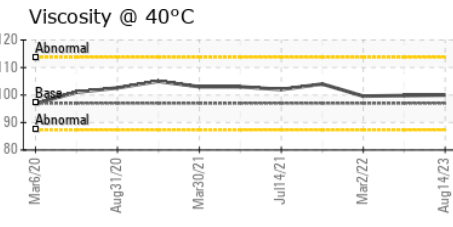
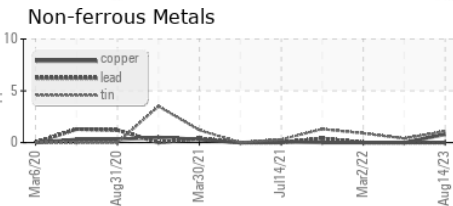
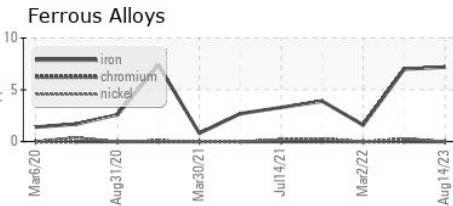
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>2.26	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	97	100	99.8
Visc @ 100°C	cSt	ASTM D445	17.5	17.4	18.4
Viscosity Index (VI)	Scale	ASTM D2270	198	191	194

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO90002199 **Received** : 22 Aug 2023  
**Lab Number** : 05931592 **Diagnosed** : 24 Aug 2023  
**Unique Number** : 10616863 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KV100, PrtCount, VI )

**CANES MIDSTREAM**  
 BIG LAKE, TX  
 US 76932  
 Contact: GRANT SCHWERTNER  
 gschwertner@canesmidstream.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)