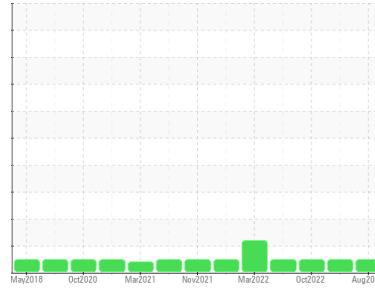




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**SUGAR WAREHOUSE (S/N F13541496233)**

Component  
**Compressor**  
Fluid  
**INGERSOLL-RAND ULTRA FG (5 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination 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>WC0735884</b>	WC0754363	WC0705506
Sample Date	Client Info			<b>24 Aug 2023</b>	28 Dec 2022	19 Oct 2022
Machine Age	hrs	Client Info		<b>432</b>	14779	13143
Oil Age	hrs	Client Info		<b>4463</b>	6281	5645
Oil Changed	Client Info			<b>Not Changed</b>	N/A	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	<1	0
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m		<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</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	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>0</b>	2	1
Calcium	ppm	ASTM D5185m		<b>37</b>	70	72
Phosphorus	ppm	ASTM D5185m		<b>276</b>	326	356
Zinc	ppm	ASTM D5185m		<b>0</b>	2	<1
Sulfur	ppm	ASTM D5185m		<b>567</b>	616	805

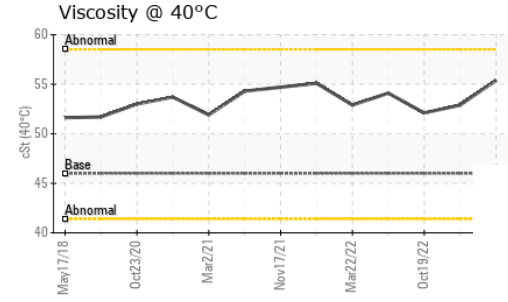
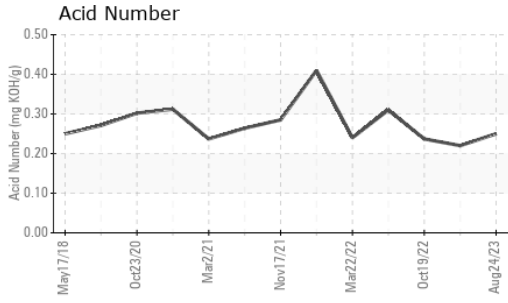
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	1	0
Sodium	ppm	ASTM D5185m		<b>43</b>	22	20
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	4	3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.25</b>	0.22	0.237

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	VLITE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

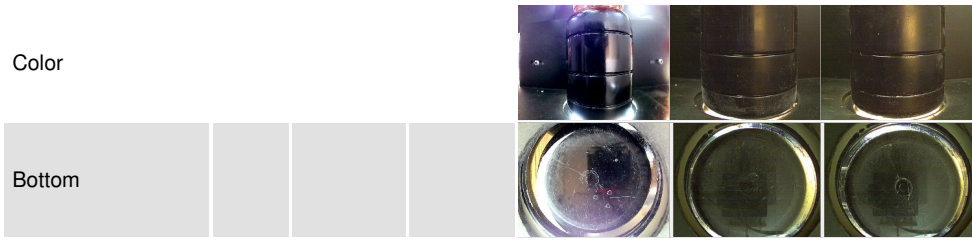


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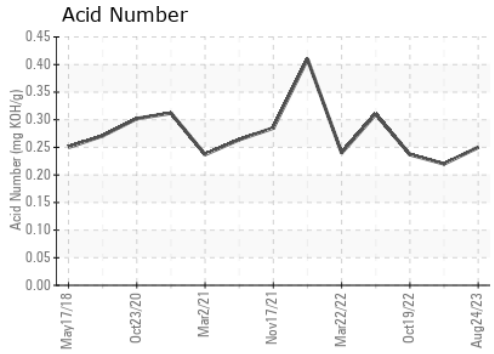
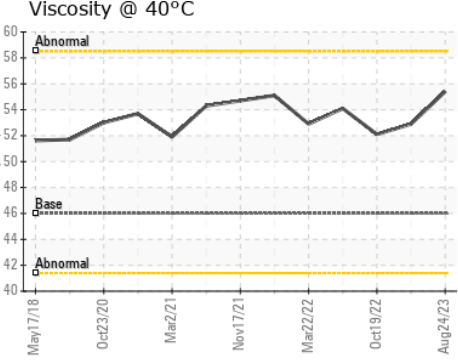
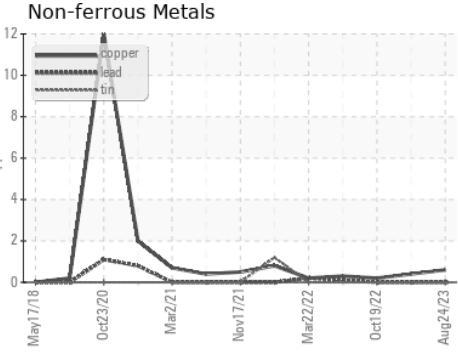
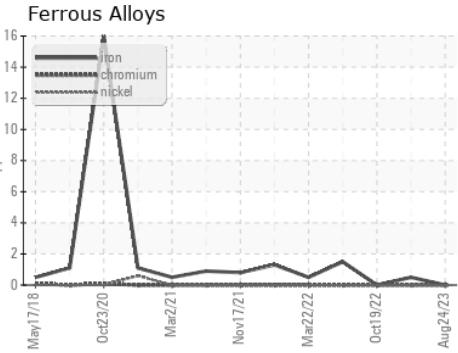


FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	46.0	<b>55.4</b>	52.9	52.1

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



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0735884  
**Lab Number** : **05961314**  
**Unique Number** : 10662527  
**Test Package** : IND 2  
**Received** : 26 Sep 2023  
**Diagnosed** : 27 Sep 2023  
**Diagnostician** : Doug Bogart

**SOUTHERN MN BEET SUGAR**  
 83550 COUNTY ROAD 21  
 RENVILLE, MN  
 US 56284  
 Contact: DEWEY THEIN

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)

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 F: (320)329-3154