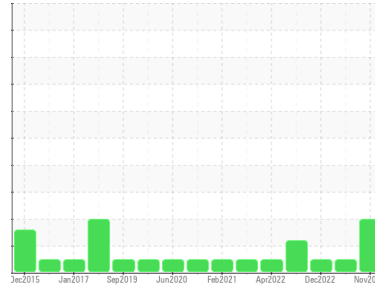




# PROBLEM SUMMARY

## Sample Rating Trend

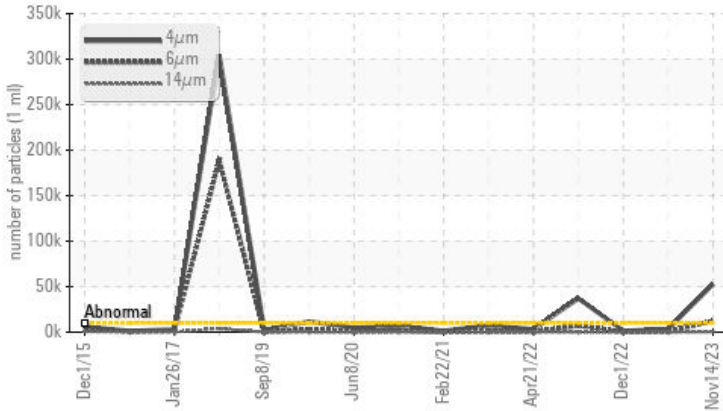
ISO



Machine Id  
**COMP 32 (S/N 46007 CGI)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**USPI 1009-68 SC (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ 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			ABNORMAL	NORMAL	NORMAL
Particles >4µm	ASTM D7647	>10000	▲ 52715	3412	1410
Particles >6µm	ASTM D7647	>2500	▲ 12210	728	213
Particles >14µm	ASTM D7647	>320	▲ 487	33	7
Particles >21µm	ASTM D7647	>80	▲ 99	7	1
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 23/21/16	19/17/12	18/15/10

Customer Id: TYSTRA  
 Sample No.: USP0003513  
 Lab Number: 06016467  
 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	---	---	?	We recommend you service the filters on this component.

## HISTORICAL DIAGNOSIS

### 23 May 2023 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination 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



### 01 Dec 2022 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination 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



### 16 Oct 2022 Diag: Doug Bogart

ISO



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.

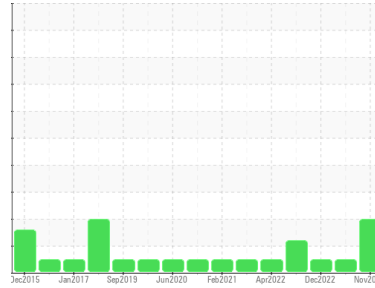
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**COMP 32 (S/N 46007 CGI)**

Component  
**Refrigeration Compressor**  
Fluid  
**USPI 1009-68 SC (--- 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 particulates 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>USP0003513</b>	USP249519	USP239411
Sample Date	Client Info		<b>14 Nov 2023</b>	23 May 2023	01 Dec 2022
Machine Age	hrs	Client Info	<b>24198</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>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >8	<b>2</b>	4	3
Chromium	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >3	<b>0</b>	0	0
Lead	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >8	<b>&lt;1</b>	0	<1
Tin	ppm	ASTM D5185m >4	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	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	<1
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>0</b>	<1	0
Zinc	ppm	ASTM D5185m	<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m 50	<b>0</b>	0	54

## CONTAMINANTS

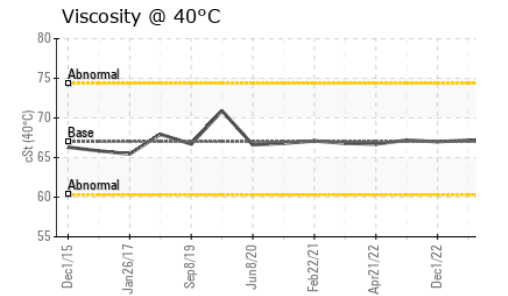
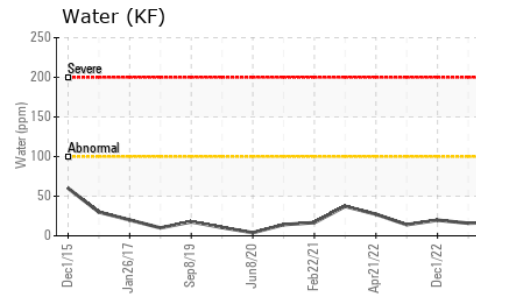
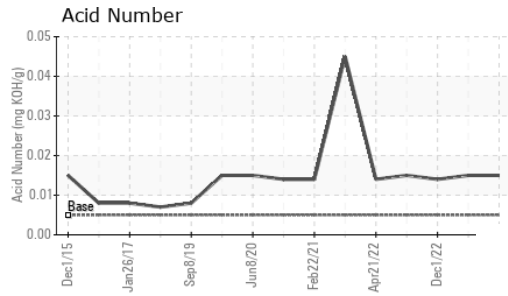
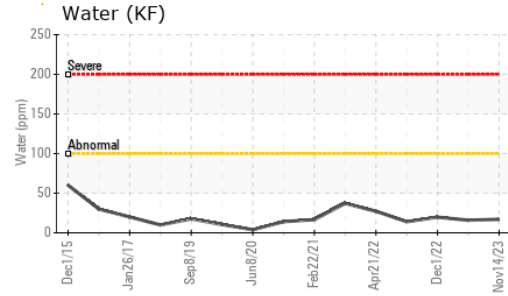
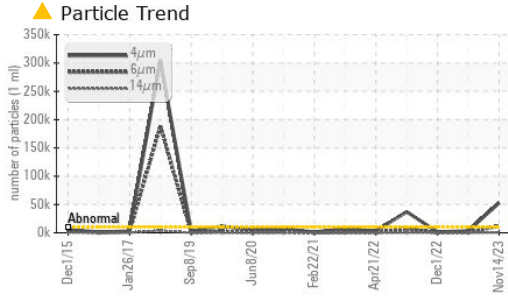
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>&lt;1</b>	1	<1
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185m >20	<b>1</b>	2	0
Water	%	ASTM D6304 >0.01	<b>0.002</b>	0.002	0.002
ppm Water	ppm	ASTM D6304 >100	<b>17</b>	15.9	19.8

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>▲ 52715</b>	3412	1410
Particles >6µm	ASTM D7647	>2500	<b>▲ 12210</b>	728	213
Particles >14µm	ASTM D7647	>320	<b>▲ 487</b>	33	7
Particles >21µm	ASTM D7647	>80	<b>▲ 99</b>	7	1
Particles >38µm	ASTM D7647	>20	<b>4</b>	1	0
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>▲ 23/21/16</b>	19/17/12	18/15/10

## FLUID DEGRADATION

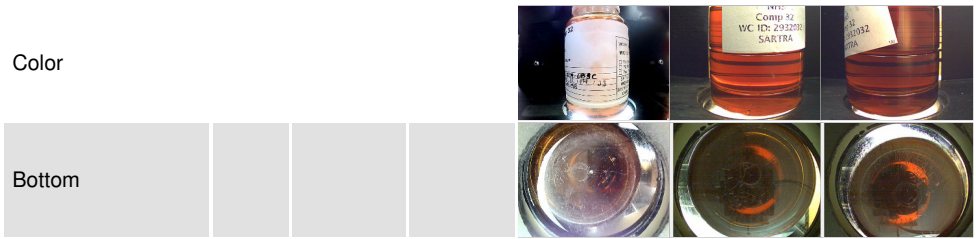
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974 0.005	<b>0.015</b>	0.015	0.014



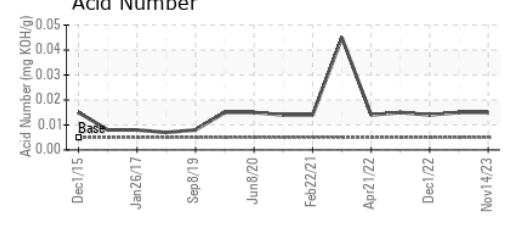
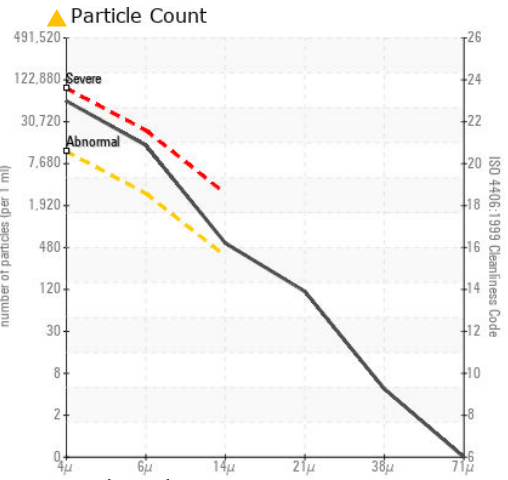
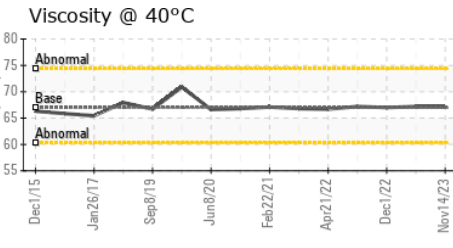
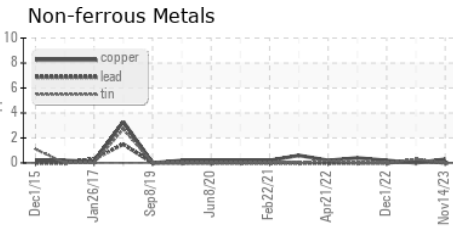
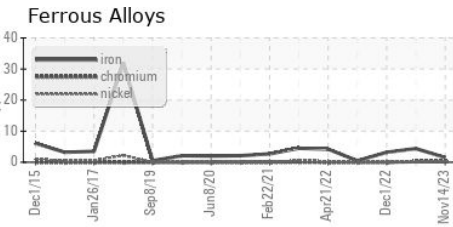
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML
Emulsified Water	scalar	*Visual	>0.01	<b>NEG</b>	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67	<b>67.1</b>	67.2

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0003513 **Received** : 24 Nov 2023  
**Lab Number** : 06016467 **Diagnosed** : 27 Nov 2023  
**Unique Number** : 10755611 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**SARA LEE - TRAVERSE CITY**  
 2314 SYBRANT RD  
 TRAVERSE CITY, MI  
 US 49684  
 Contact:

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)

T:  
F: