



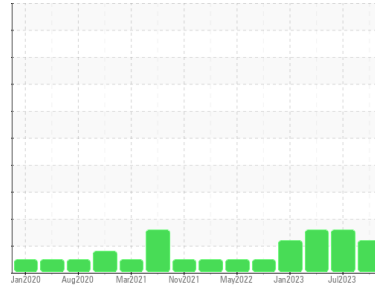
# PROBLEM SUMMARY

Sample Rating Trend

ISO

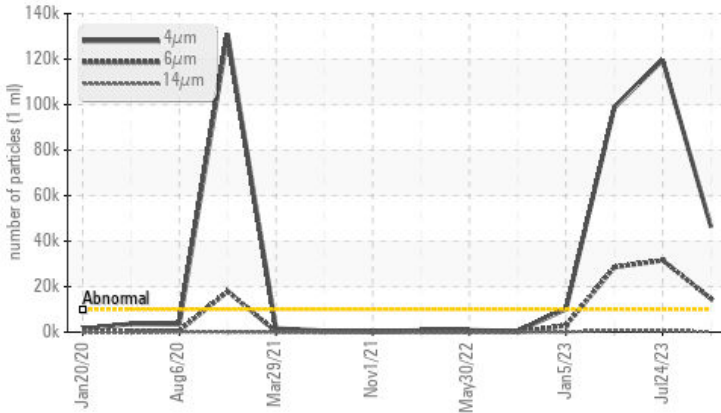


Machine Id  
**GEA TYSCLA 12B (S/N 06429-015-1-01)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**USPI ALT-68 SC (--- GAL)**



## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>10000	▲ <b>46307</b>	▲ 119552	▲ 98683
Particles >6µm	ASTM D7647	>2500	▲ <b>14706</b>	▲ 31546	▲ 28539
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ <b>23/21/15</b>	▲ 24/22/16	▲ 24/22/17

Customer Id: TYSCLA  
 Sample No.: USP0002969  
 Lab Number: 05995656  
 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

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 24 Jul 2023 Diag: Doug Bogart

ISO



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 trace of moisture present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 17 Apr 2023 Diag: Doug Bogart

ISO



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

view report



### 05 Jan 2023 Diag: Doug Bogart

ISO



Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate 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.

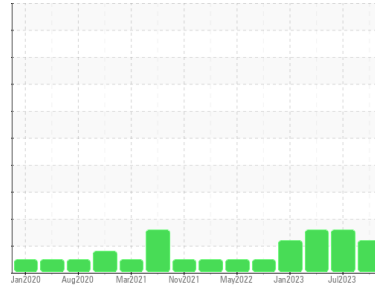
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**GEA TYSCLA 12B (S/N 06429-015-1-01)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**USPI ALT-68 SC (--- GAL)**

## DIAGNOSIS

### Recommendation

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>USP0002969</b>	USP0001007	USP248549
Sample Date	Client Info		<b>31 Oct 2023</b>	24 Jul 2023	17 Apr 2023
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 >8	<b>2</b>	6	4
Chromium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	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>	0	0
Copper	ppm	ASTM D5185m >8	<b>0</b>	<1	0
Tin	ppm	ASTM D5185m >4	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	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>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	0	1
Calcium	ppm	ASTM D5185m	<b>2</b>	2	0
Phosphorus	ppm	ASTM D5185m	<b>&lt;1</b>	<1	1
Zinc	ppm	ASTM D5185m	<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m 50	<b>12</b>	9	0

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>2</b>	1	2
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	0
Water	%	ASTM D6304 >0.01	<b>0.004</b>	0.010	0.006
ppm Water	ppm	ASTM D6304 >100	<b>42.3</b>	100.4	63.6

## FLUID CLEANLINESS

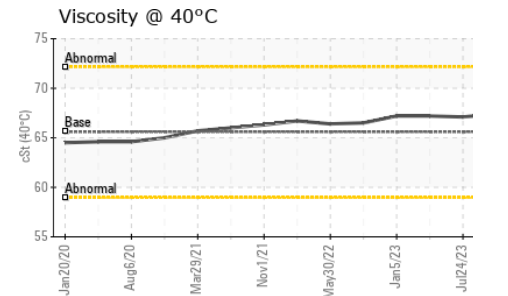
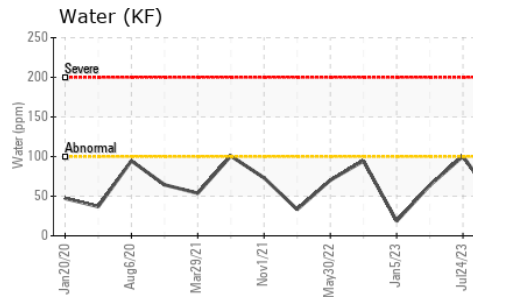
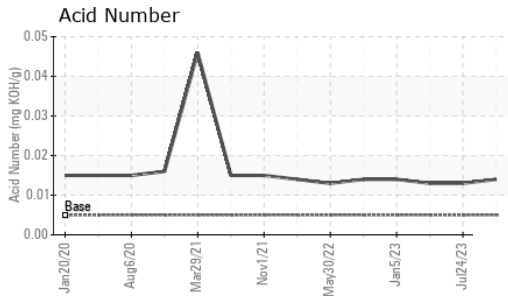
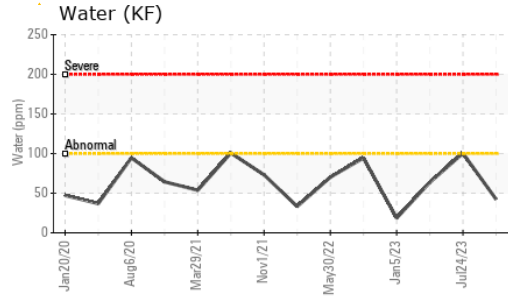
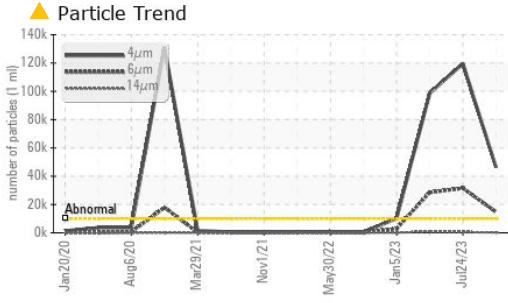
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>▲ 46307</b>	▲ 119552	▲ 98683
Particles >6µm	ASTM D7647	>2500	<b>▲ 14706</b>	▲ 31546	▲ 28539
Particles >14µm	ASTM D7647	>320	<b>269</b>	▲ 473	▲ 748
Particles >21µm	ASTM D7647	>80	<b>26</b>	29	79
Particles >38µm	ASTM D7647	>20	<b>0</b>	0	1
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>▲ 23/21/15</b>	▲ 24/22/16	▲ 24/22/17

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974 0.005	<b>0.014</b>	0.013	0.013



# OIL ANALYSIS REPORT

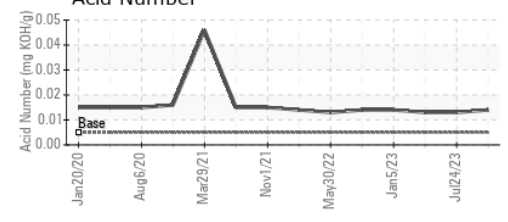
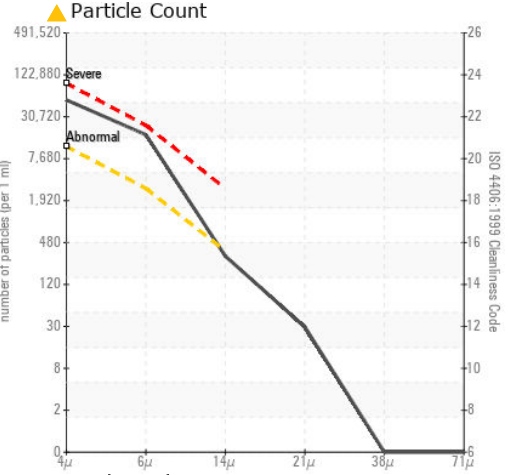
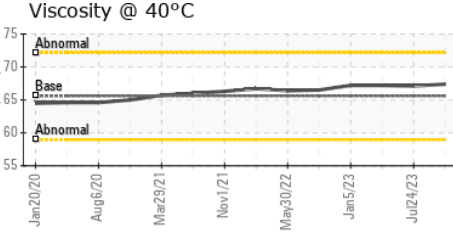
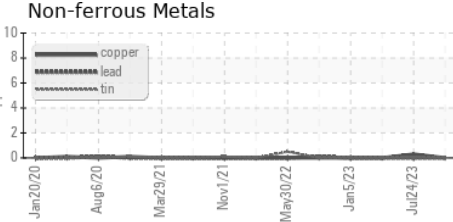
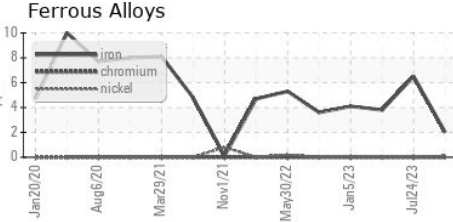


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65.6	67.4	67.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0002969 **Received** : 01 Nov 2023  
**Lab Number** : 05995656 **Diagnosed** : 03 Nov 2023  
**Unique Number** : 10724016 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**TYSON -CLARKSVILLE-USP**  
 CLARKSVILLE, AR  
 US  
 Contact: BRENT SMITH

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:  
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