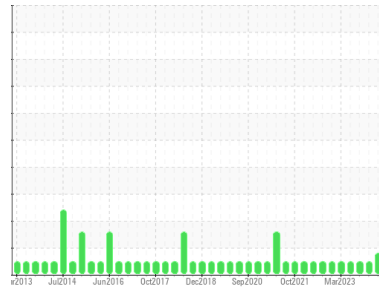




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**FRICK TYSROGCNQ 3**  
 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 moderate 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>USP0011383</b>	USP0005400	USP0003214
Sample Date	Client Info		<b>06 May 2024</b>	23 Jan 2024	09 Oct 2023
Machine Age	hrs	Client Info	<b>22754</b>	21338	20077
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>ATTENTION</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >8	<b>2</b>	2	2
Chromium	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >3	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m >8	<b>&lt;1</b>	0	<1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	1	0
Calcium	ppm	ASTM D5185m	<b>0</b>	1	0
Phosphorus	ppm	ASTM D5185m	<b>0</b>	<1	<1
Zinc	ppm	ASTM D5185m	<b>2</b>	0	0
Sulfur	ppm	ASTM D5185m 50	<b>0</b>	13	10

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>1</b>	1	<1
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	2
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	0
Water	%	ASTM D6304 >0.01	<b>0.008</b>	0.005	0.007
ppm Water	ppm	ASTM D6304 >100	<b>81</b>	50	73.9

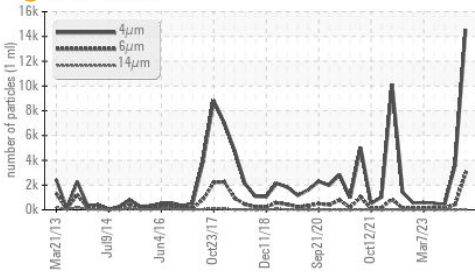
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>14543</b>	3581	405
Particles >6µm	ASTM D7647	>2500	<b>2958</b>	425	98
Particles >14µm	ASTM D7647	>320	<b>35</b>	15	19
Particles >21µm	ASTM D7647	>80	<b>7</b>	5	7
Particles >38µm	ASTM D7647	>20	<b>1</b>	1	1
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/18/15	<b>21/19/12</b>	19/16/11	16/14/11

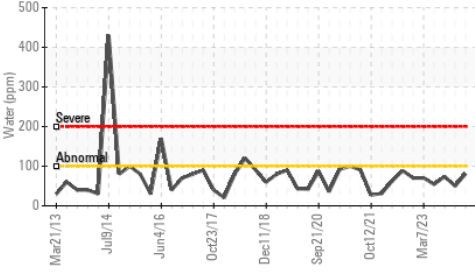
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974 0.005	<b>0.013</b>	0.015	0.014

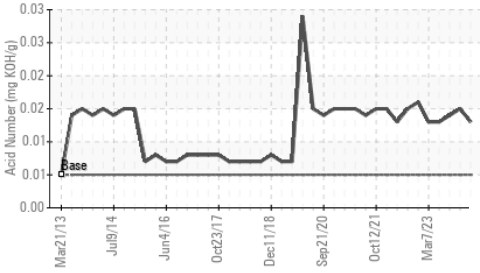
### Particle Trend



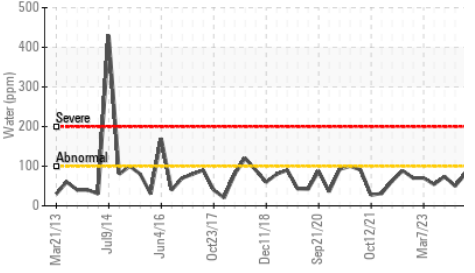
### Water (KF)



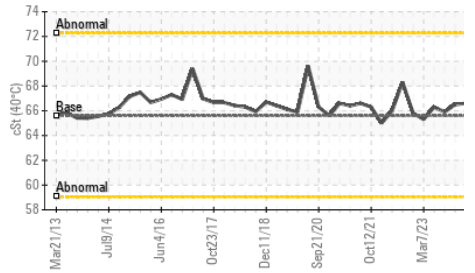
### Acid Number



### Water (KF)



### Viscosity @ 40°C



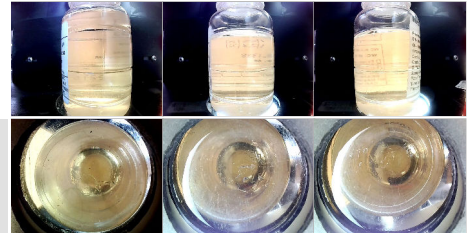
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	66.6	66.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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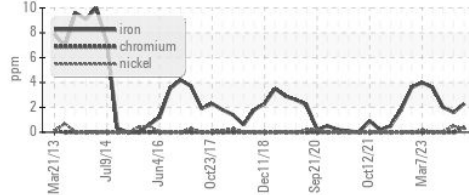
Color

Bottom

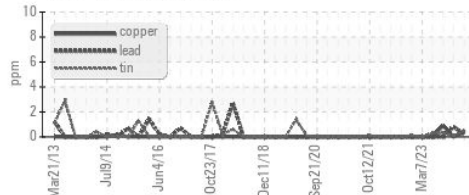


### GRAPHS

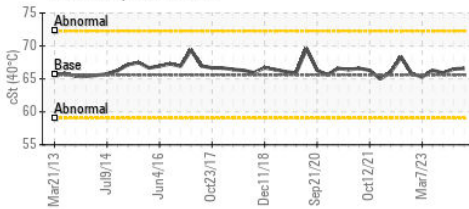
#### Ferrous Alloys



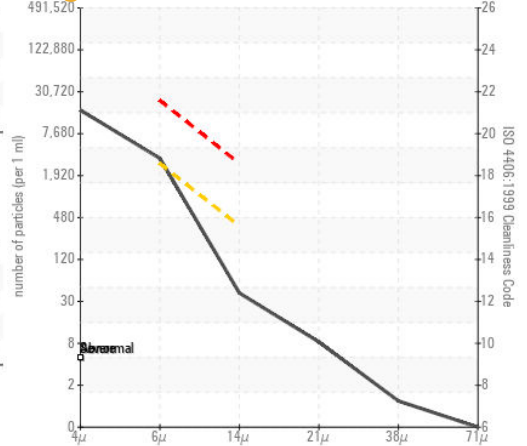
#### Non-ferrous Metals



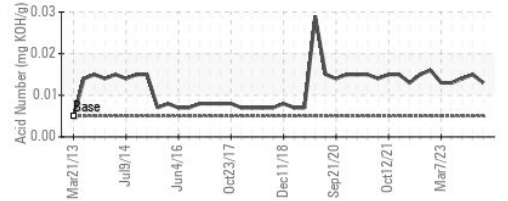
#### Viscosity @ 40°C



#### Particle Count



#### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : USP0011383  
 Lab Number : 06177240  
 Unique Number : 11023293  
 Test Package : IND 2

Received : 13 May 2024  
 Tested : 14 May 2024  
 Diagnosed : 14 May 2024 - Doug Bogart

TYSON CNQ -ROGERS-USP

ROGERS, AR  
 US

Contact: SERVICE MANAGER

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: