

## **OIL ANALYSIS REPORT**

#### Sample Rating Trend

### NORMAL

### FRICK TYSRUSDIS-6X6 (S/N 8460R73542) Component

**Refrigeration Compressor** 

USPI ALT-68 SC (--- GAL)

#### 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. The amount and size of particulates present in the system are acceptable.

#### Fluid Condition

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

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-2013 Jun2014 Mar2016 Sep.2017 Feb.2019 Jul2020 Occ2021 Jan2023								
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2		
Sample Number		Client Info		USP214746	USP0001921	USP246962		
Sample Date		Client Info		08 Jan 2024	10 Oct 2023	17 Jul 2023		
Machine Age	hrs	Client Info		3365	3350	3280		
Oil Age	hrs	Client Info		0	0	0		
Oil Changed		Client Info		N/A	N/A	N/A		
Sample Status				NORMAL	NORMAL	NORMAL		
WEAR METALS		method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>8	0	0	0		
Chromium	ppm	ASTM D5185m	>2	0	0	0		
Nickel	ppm	ASTM D5185m		0	<1	0		
Titanium	ppm	ASTM D5185m		0	0	0		
Silver	ppm	ASTM D5185m	>2	0	0	0		
Aluminum	ppm	ASTM D5185m	>3	0	0	0		
Lead	ppm	ASTM D5185m	>2	0	0	0		
Copper	ppm	ASTM D5185m	>8	0	0	0		
Tin	ppm	ASTM D5185m	>4	0	0	0		
Vanadium	ppm	ASTM D5185m		0	0	0		
Cadmium	ppm	ASTM D5185m		0	0	0		
ADDITIVES		method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m		0	0	0		
Barium	ppm	ASTM D5185m		0	0	0		
Molybdenum	ppm	ASTM D5185m		0	0	0		
Manganese	ppm	ASTM D5185m		0	0	0		
Magnesium	ppm	ASTM D5185m		0	0	0		
Calcium	ppm	ASTM D5185m		0	0	0		
Phosphorus	ppm	ASTM D5185m		0	1	<1		
Zinc	ppm	ASTM D5185m		0	0	0		
Sulfur	ppm	ASTM D5185m	50	0	0	0		
CONTAMINANTS		method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>15	<1	<1	<1		
Sodium	ppm	ASTM D5185m		0	0	0		
Potassium	ppm	ASTM D5185m	>20	1	<1	1		
Water	%	ASTM D6304	>0.01	0.002	0.003	0.002		
ppm Water	ppm	ASTM D6304	>100	21	39.3	16.6		
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2		
Particles >4µm		ASTM D7647	>10000	3027	3270	3977		
Particles >6µm		ASTM D7647	>2500	594	784	965		
Particles >14µm		ASTM D7647	>320	24	34	50		
Particles >21µm		ASTM D7647	>80	4	7	9		
Particles >38µm		ASTM D7647	>20	0	0	0		
Deutleles 74			4	0	0	0		

Particles >71µm ASTM D7647 >4 0 0 0 **Oil Cleanliness** ISO 4406 (c) >20/18/15 19/16/12 19/17/12 19/17/13 FLUID DEGRADATION mg KOH/g ASTM D974 0.005 0.013 0.015 Acid Number (AN) 0.014



# **OIL ANALYSIS REPORT**

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ASTM D445

scalar \*Visual

scalar \*Visual

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

>0.01

65.6

White Metal

Yellow Metal

Precipitate

Silt

Debris

Odor

Color

Bottom

40

30

GRAPHS Ferrous Alloys

Sand/Dirt

Appearance

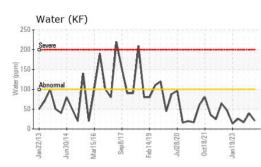
Free Water

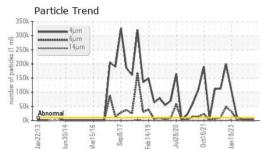
Visc @ 40°C

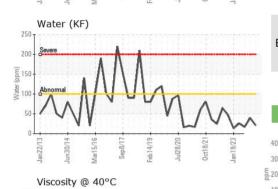
**Emulsified Water** 

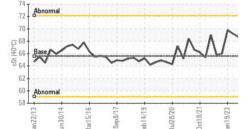
FLUID PROPERTIES

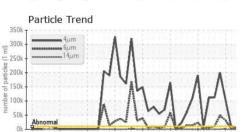
SAMPLE IMAGES

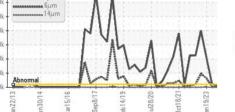




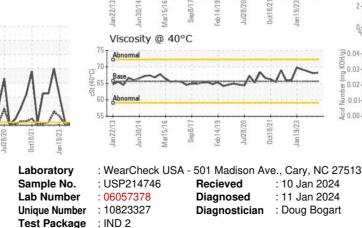




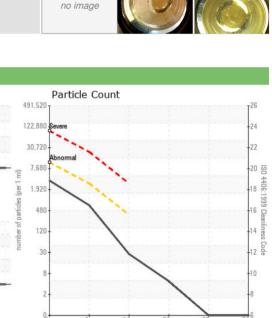




Certificate L2367



Non-ferrous Metals



NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

68.1

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

68.7

NONE

NONE

NONE

NONE

NONE

NONE

NORML

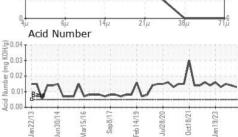
NORML

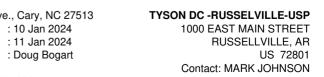
NEG

NEG

68.2

no image





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:

Contact/Location: MARK JOHNSON - TYSRUSD