

### **OIL ANALYSIS REPORT**

# RRICK TYSPBFP 3HSK (S/N TDSH233L1943E)

Refrigeration Compressor

USPI ALT-68 SC (180 GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

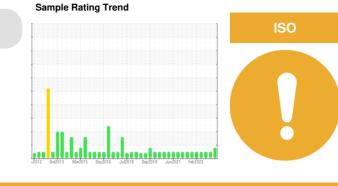
All component wear rates are normal.

#### 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 INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0006654	USP0005624	USP0001196
Sample Date		Client Info		27 Apr 2024	23 Jan 2024	15 Oct 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	0	5	2
Chromium	ppm	ASTM D5185m	>2	0	0	0
Nickel	ppm	ASTM D5185m		0	0	<1
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	<1
Copper	ppm	ASTM D5185m		0	0	0
Tin	ppm	ASTM D5185m	>4	0	<1	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	<1	0
Magnesium	ppm	ASTM D5185m		0	<1	<1
Calcium	ppm	ASTM D5185m		0	0	0
Phosphorus	ppm	ASTM D5185m		0	0	0
Zinc	ppm	ASTM D5185m		0	0	<1
Sulfur	ppm	ASTM D5185m	50	0	5	0
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	1	<1
Sodium	ppm	ASTM D5185m		0	<1	0
Potassium	ppm	ASTM D5185m	>20	0	0	<1
Water	%	ASTM D6304	>0.01	0.007	0.001	0.006
ppm Water	ppm	ASTM D6304	>100	80	1	64.2
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		16339	1952	5359
Particles >6µm		ASTM D7647	>2500	93400	487	607
Particles >14µm		ASTM D7647	>320	99	28	35
Particles >21µm		ASTM D7647	>80	17	7	9
Particles >38µm		ASTM D7647	>20	0	1	0
Particles >71µm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>/18/15	<b>2</b> 1/19/14	18/16/12	20/16/12
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	0.015	0.014	0.013

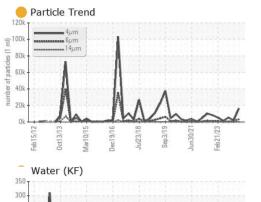
Contact/Location: RICHARD RICKELS - TYSPBFP Page 1 of 2

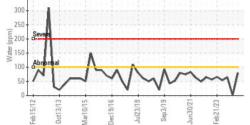


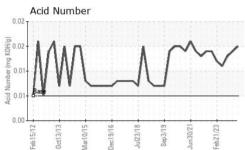
## **OIL ANALYSIS REPORT**

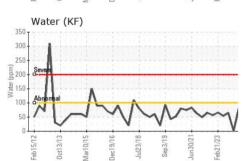
scalar

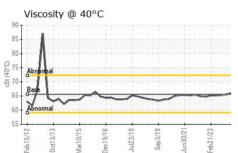
\*Visual











	•					
VISUAL						
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE

NORML

SAMPLE IMAGES	6	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65.6	66.1	65.6	65.3
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Free Water	scalar	*Visual		NEG	NEG	NEG
Emulsified Water	scalar	*Visual	>0.01	NEG	NEG	NEG
Odor	scalar	*Visual	NORML	NORML	NORML	NORML

NORML

Color

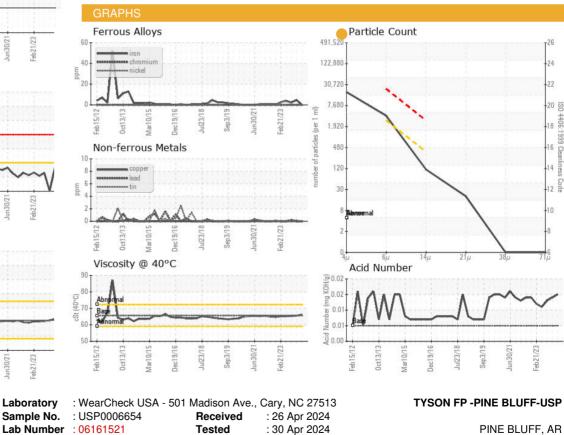
Appearance



NORML

NORML

Bottom



: 30 Apr 2024 - Jonathan Hester



To discuss this sample report, contact Customer Service at 1-800-237-1369.

Unique Number : 10996944

Test Package : IND 2

\* - 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)

Diagnosed

Report Id: TYSPBFP [WUSCAR] 06161521 (Generated: 05/04/2024 05:33:10) Rev: 1

Certificate 12367

Contact/Location: RICHARD RICKELS - TYSPBFP

US 71602

T:

F:

Contact: RICHARD RICKELS