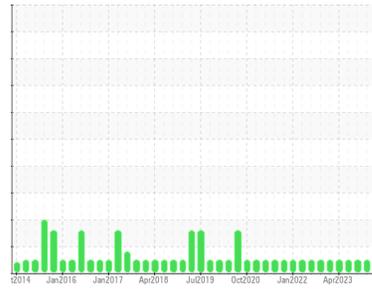




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

## FES TYSNAS 5E (S/N D3271)

Component

### Refrigeration Compressor

Fluid

### USPI ALT-68 SC (25 GAL)

#### DIAGNOSIS

##### 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.

#### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>USP0013396</b>	USP0007276	USP0001234
Sample Date	Client Info		<b>11 Jun 2024</b>	05 Feb 2024	15 Oct 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>NORMAL</b>	NORMAL	NORMAL

#### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >8	<b>0</b>	0	0
Chromium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	<b>0</b>	0	<1
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	<1
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>&lt;1</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	0
Magnesium	ppm	ASTM D5185m	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>0</b>	0	0
Zinc	ppm	ASTM D5185m	<b>0</b>	0	<1
Sulfur	ppm	ASTM D5185m 50	<b>0</b>	4	0

#### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>1</b>	1	2
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	<1
Water	%	ASTM D6304 >0.01	<b>0.007</b>	0.002	0.003
ppm Water	ppm	ASTM D6304 >100	<b>77</b>	23	28.0

#### FLUID CLEANLINESS

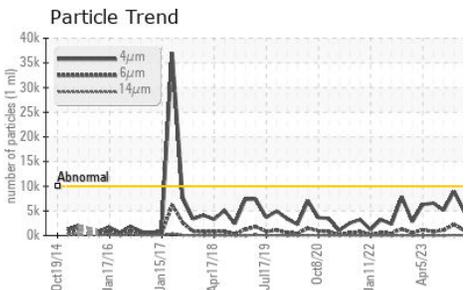
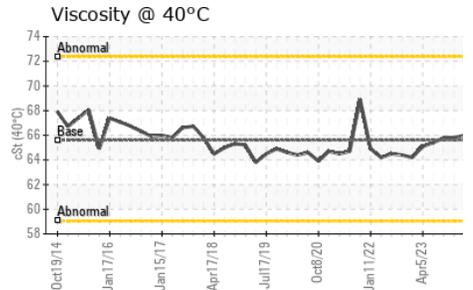
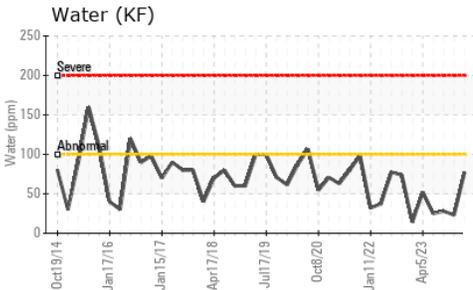
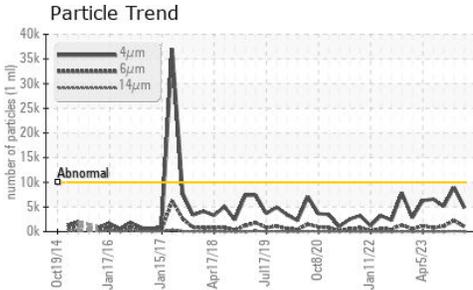
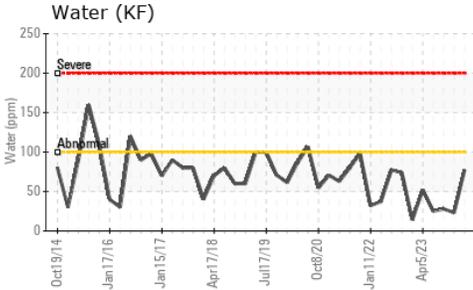
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>4805</b>	8941	5115
Particles >6µm	ASTM D7647	>2500	<b>1011</b>	2251	1106
Particles >14µm	ASTM D7647	>320	<b>17</b>	107	21
Particles >21µm	ASTM D7647	>80	<b>3</b>	21	6
Particles >38µm	ASTM D7647	>20	<b>0</b>	1	1
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>19/17/11</b>	20/18/14	20/17/12

#### FLUID DEGRADATION

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



# OIL ANALYSIS REPORT



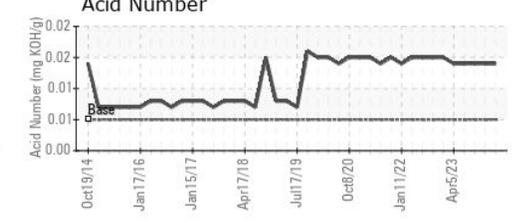
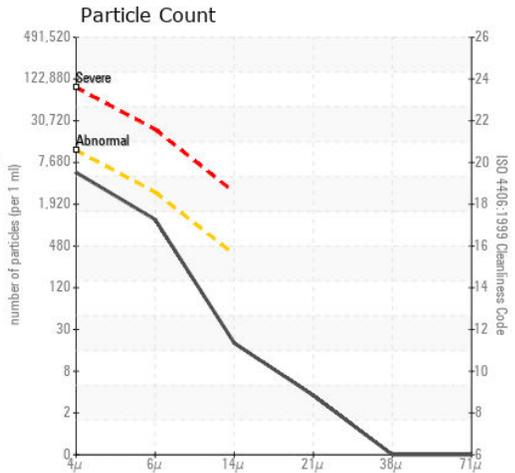
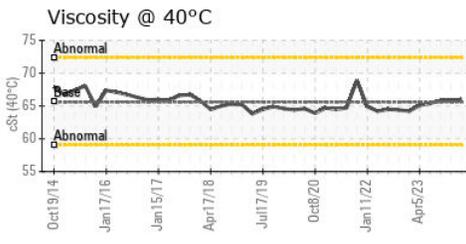
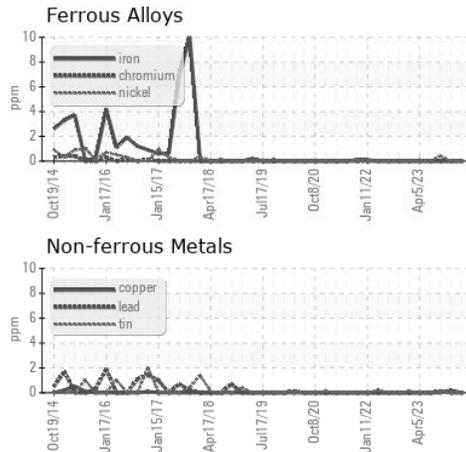
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	66.0	65.8

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



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : USP0013396  
 Lab Number : 06207892  
 Unique Number : 11075353  
 Test Package : IND 2  
 Received : 12 Jun 2024  
 Tested : 15 Jun 2024  
 Diagnosed : 15 Jun 2024 - Doug Bogart

TYSON -NASHVILLE- USP

NASHVILLE, 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: