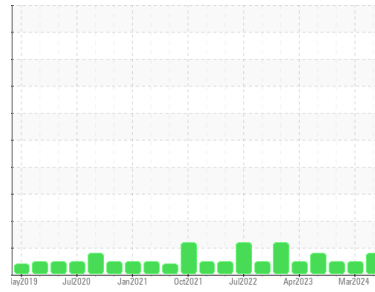




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**FES GEA 2 WEST ER (S/N 00709-005-1-01-02)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**USPI 1009-68 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 < 6 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>USP0013053</b>	USP0008278	USP0004622
Sample Date	Client Info			<b>20 Jun 2024</b>	30 Mar 2024	03 Jan 2024
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>ATTENTION</b>	NORMAL	NORMAL

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

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

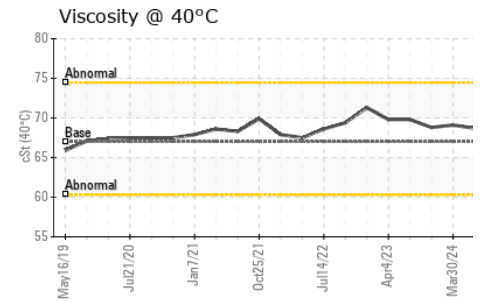
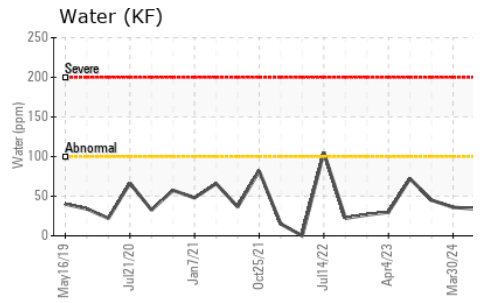
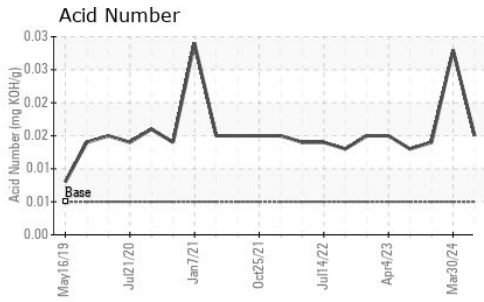
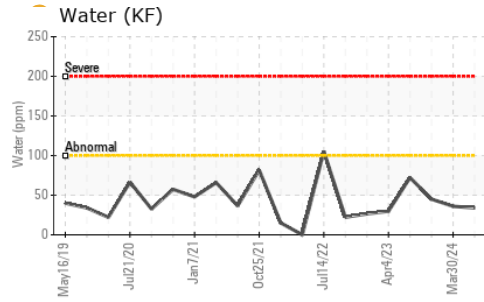
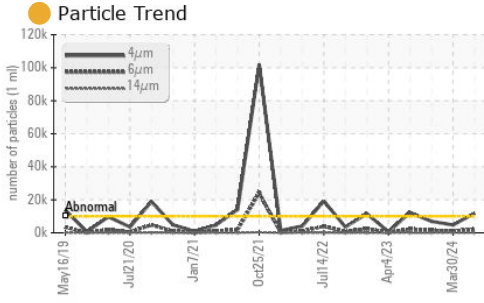
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>2</b>	1	2
Sodium	ppm	ASTM D5185m		<b>1</b>	<1	0
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	0
Water	%	ASTM D6304	>0.01	<b>0.003</b>	0.003	0.004
ppm Water	ppm	ASTM D6304	>100	<b>34</b>	36	45

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>11870</b>	4747	6942
Particles >6µm		ASTM D7647	>2500	<b>2193</b>	902	1564
Particles >14µm		ASTM D7647	>320	<b>50</b>	26	46
Particles >21µm		ASTM D7647	>80	<b>4</b>	7	7
Particles >38µm		ASTM D7647	>20	<b>0</b>	1	0
Particles >71µm		ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>21/18/13</b>	19/17/12	20/18/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	<b>0.015</b>	0.028	0.014



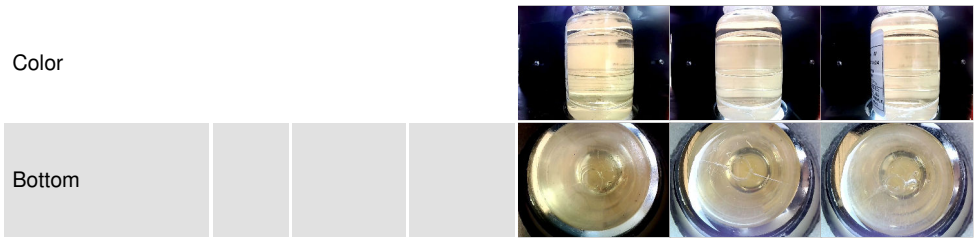
# OIL ANALYSIS REPORT



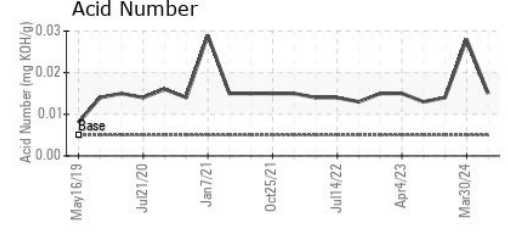
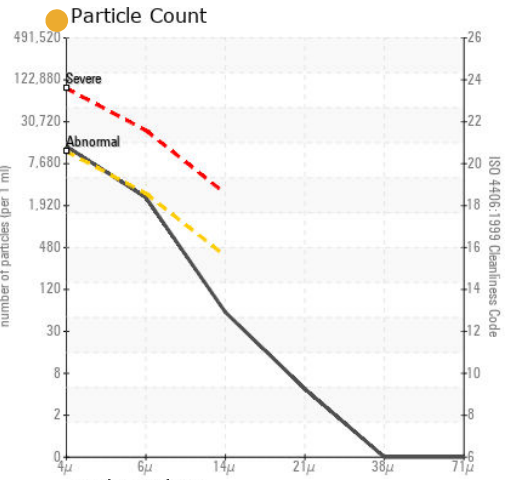
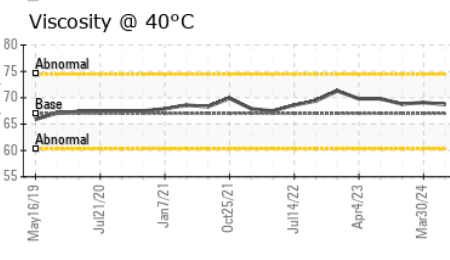
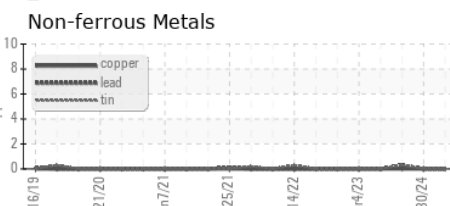
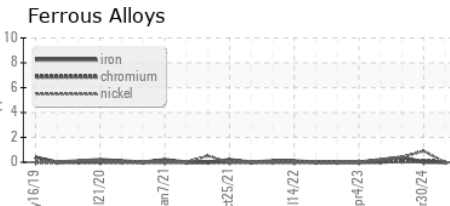
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 67	68.7	69.1	68.8

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0013053 **Received** : 25 Jun 2024  
**Lab Number** : 06220387 **Tested** : 26 Jun 2024  
**Unique Number** : 11098584 **Diagnosed** : 27 Jun 2024 - Doug Bogart  
**Test Package** : IND 2

**TYSON -STORM LAKE-USP**  
 STORM LAKE, IA  
 US  
 Contact: STEVE SWANSON

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)

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 F: (712)749-5277