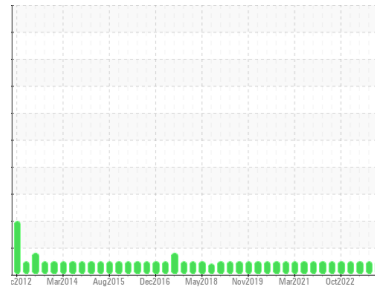




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**FES 8 FES (S/N XA0237)**  
 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 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>USP0008180</b>	USP0000401	USP243673
Sample Date	Client Info		<b>01 Apr 2024</b>	28 Aug 2023	21 May 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>1</b>	<1	3
Chromium	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	<b>&lt;1</b>	0	1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	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>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m >8	<b>1</b>	0	<1
Tin	ppm	ASTM D5185m >4	<b>1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	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>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Calcium	ppm	ASTM D5185m	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>0</b>	1	<1
Zinc	ppm	ASTM D5185m	<b>0</b>	2	0
Sulfur	ppm	ASTM D5185m 50	<b>0</b>	0	14

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>2</b>	2	2
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	0
Potassium	ppm	ASTM D5185m >20	<b>1</b>	2	<1
Water	%	ASTM D6304 >0.01	<b>0.003</b>	0.005	0.004
ppm Water	ppm	ASTM D6304 >100	<b>35</b>	58.3	47.5

## FLUID CLEANLINESS

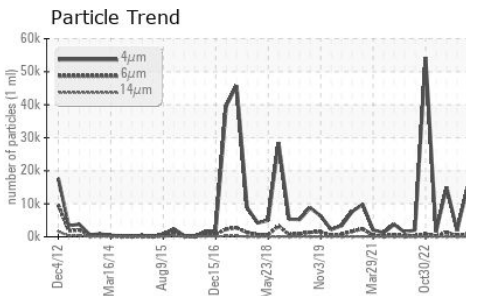
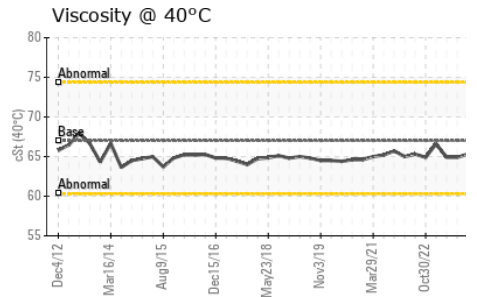
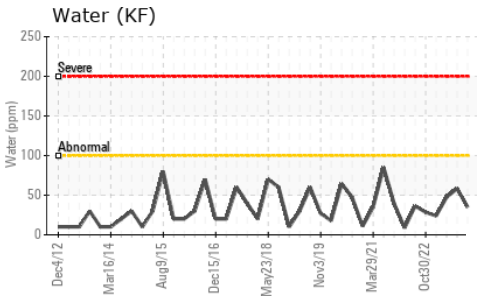
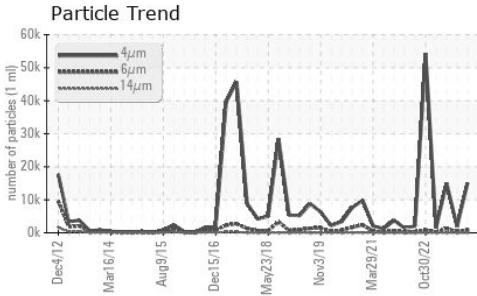
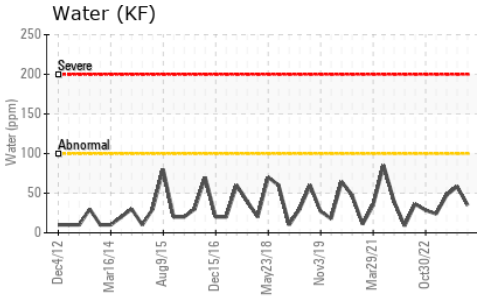
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>15081</b>	1873	15066
Particles >6µm	ASTM D7647 >2500		<b>798</b>	359	1306
Particles >14µm	ASTM D7647 >320		<b>33</b>	27	74
Particles >21µm	ASTM D7647 >80		<b>8</b>	10	16
Particles >38µm	ASTM D7647 >20		<b>0</b>	0	5
Particles >71µm	ASTM D7647 >4		<b>0</b>	0	2
Oil Cleanliness	ISO 4406 (c)	>--/18/15	<b>21/17/12</b>	18/16/12	21/18/13

## FLUID DEGRADATION

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



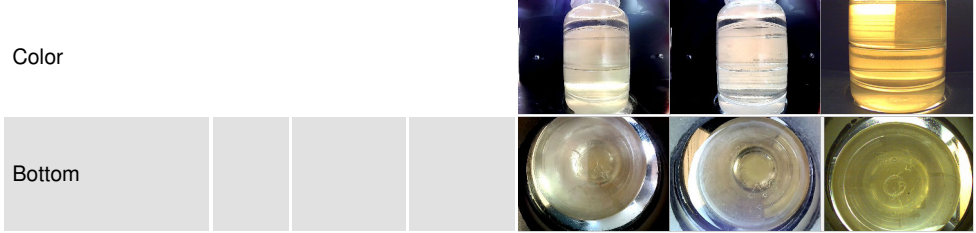
# OIL ANALYSIS REPORT



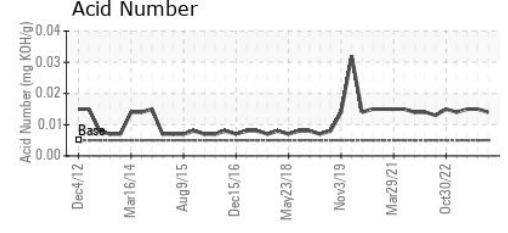
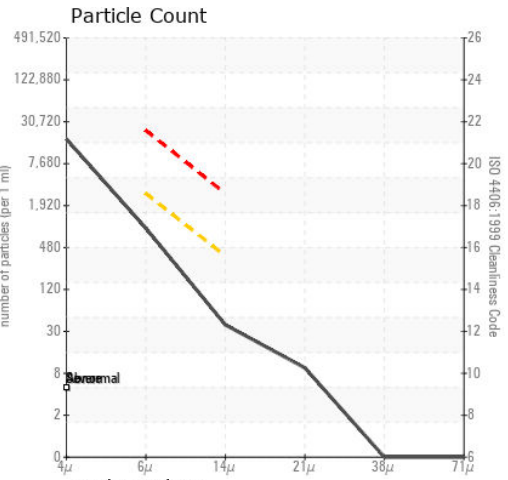
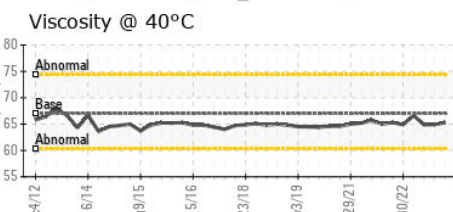
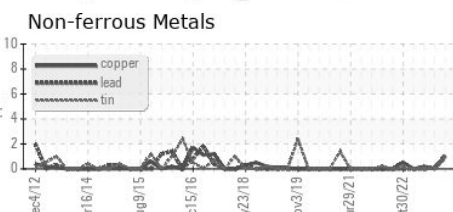
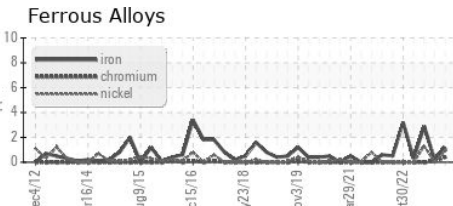
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	65.3	64.9	64.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0008180  
**Lab Number** : 06135721  
**Unique Number** : 10955186  
**Test Package** : IND 2  
**Received** : 02 Apr 2024  
**Tested** : 04 Apr 2024  
**Diagnosed** : 04 Apr 2024 - Doug Bogart

**TYSON-DAKOTA CITY-PRO**  
 P.O. BOX 515  
 DAKOTA CITY, NE  
 US 68731  
 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)