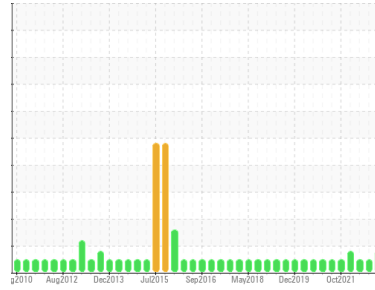




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**VILTER TYSPER 01 (S/N 13134)**

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>USP0004792</b>	USP0000890	USP245071
Sample Date	Client Info	<b>03 Jan 2024</b>	31 Jul 2023	19 Jan 2023
Machine Age	mths Client Info	<b>0</b>	0	0
Oil Age	mths 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>	0	0
Nickel	ppm ASTM D5185m	<b>0</b>	<1	0
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	0
Lead	ppm ASTM D5185m >2	<b>0</b>	0	0
Copper	ppm ASTM D5185m >8	<b>&lt;1</b>	0	0
Tin	ppm ASTM D5185m >4	<b>0</b>	0	0
Vanadium	ppm ASTM D5185m	<b>0</b>	0	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>	<1	<1
Molybdenum	ppm ASTM D5185m	<b>0</b>	0	0
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Calcium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Phosphorus	ppm ASTM D5185m	<b>0</b>	0	0
Zinc	ppm ASTM D5185m	<b>2</b>	0	0
Sulfur	ppm ASTM D5185m 50	<b>0</b>	0	20

## CONTAMINANTS

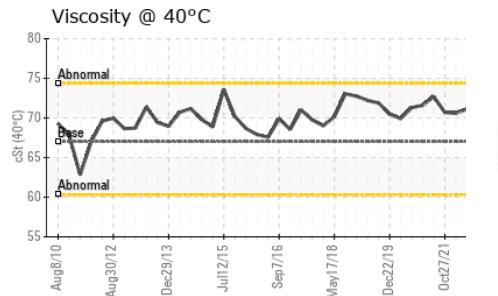
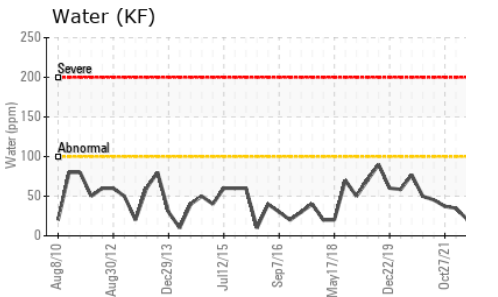
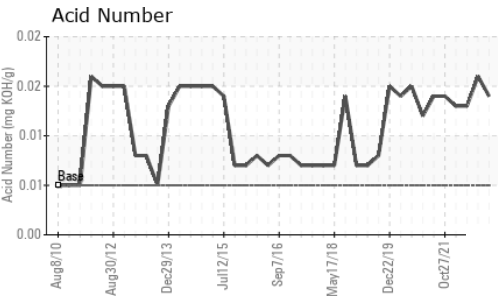
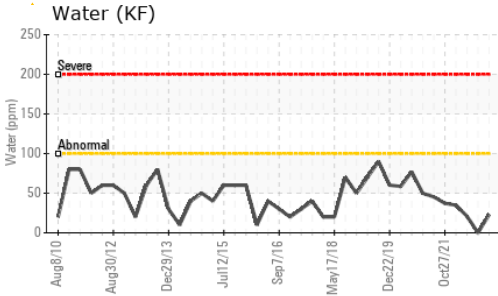
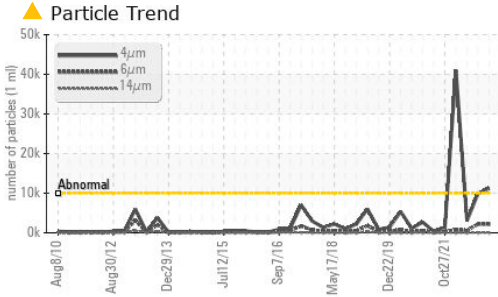
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >15	<b>3</b>	<1	2
Sodium	ppm ASTM D5185m	<b>0</b>	0	0
Potassium	ppm ASTM D5185m >20	<b>0</b>	0	<1
Water	% ASTM D6304 >0.01	<b>0.002</b>	0.001	0.002
ppm Water	ppm ASTM D6304 >100	<b>23</b>	0.00	21.0

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	<b>▲ 11204</b>	9916	3017
Particles >6µm	ASTM D7647 >2500	<b>2189</b>	2220	569
Particles >14µm	ASTM D7647 >320	<b>49</b>	71	17
Particles >21µm	ASTM D7647 >80	<b>7</b>	10	4
Particles >38µm	ASTM D7647 >20	<b>0</b>	0	0
Particles >71µm	ASTM D7647 >4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >20/18/15	<b>▲ 21/18/13</b>	20/18/13	19/16/11

## FLUID DEGRADATION

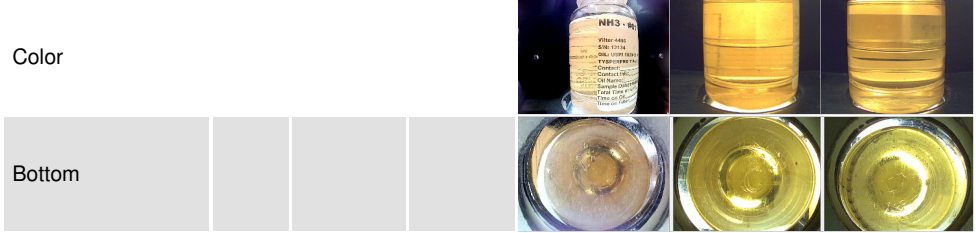
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974 0.005	<b>0.014</b>	0.016	0.013



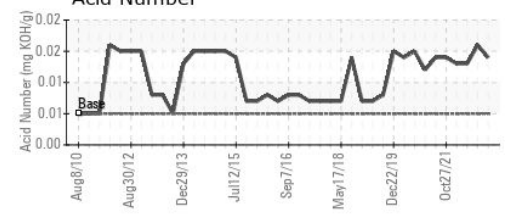
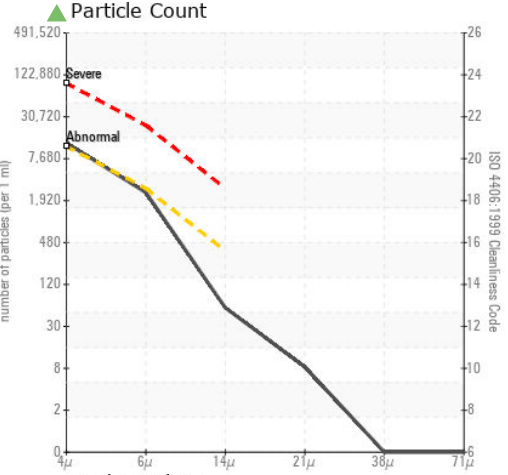
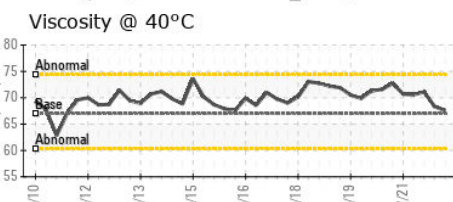
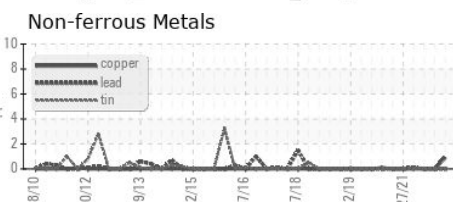
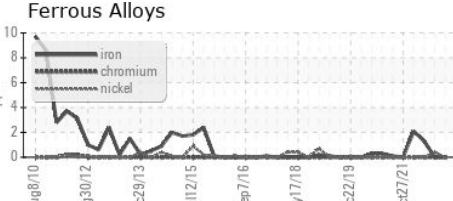
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	VLITE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	67.6	68.3	71.1

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0004792 **Received** : 17 Jan 2024  
**Lab Number** : 06062783 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10834165 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**TYSON TCCS -PERRY-USP**

PERRY, IA  
 US  
 Contact: SCOTT UHL  
 scott.uhl@tyson.com  
 T: (515)465-9740  
 F: (402)465-9735

Certificate L2367  
 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)