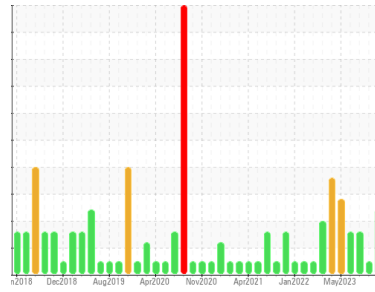




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**HAARSLEV SKF NORTH END HAARSLEV**  
 Component  
**Bearing**  
 Fluid  
**USPI 1580-680 (--- QTS)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of particulates 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>USPM36441</b>	USPM30227	USPM31488
Sample Date	Client Info	<b>03 Jun 2024</b>	27 Feb 2024	28 Nov 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	NORMAL	MARGINAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	<b>0</b>	4	1
Chromium	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	3
Lead	ppm	ASTM D5185m >20	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >20	<b>2</b>	2	2
Tin	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>0</b>	<1	<1
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>0</b>	2	<1
Calcium	ppm	ASTM D5185m	<b>0</b>	2	1
Phosphorus	ppm	ASTM D5185m 290	<b>1450</b>	1555	1214
Zinc	ppm	ASTM D5185m	<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m	<b>1300</b>	1165	1026

## CONTAMINANTS

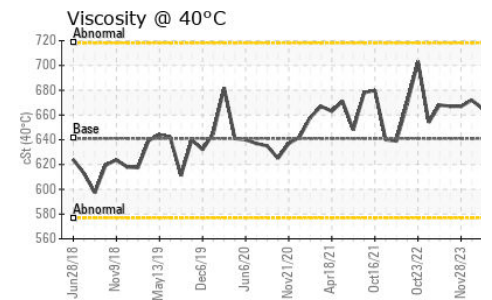
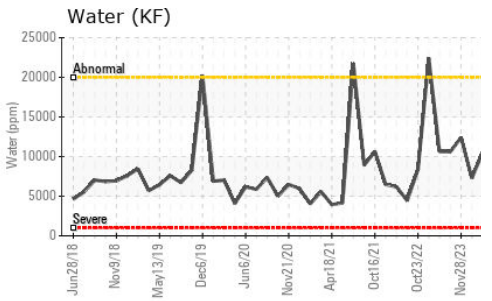
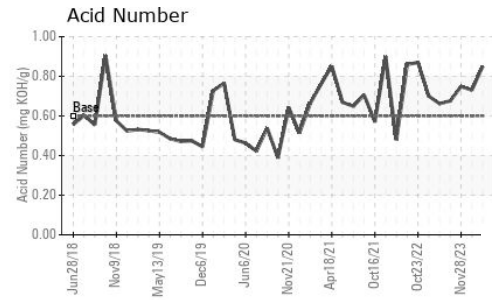
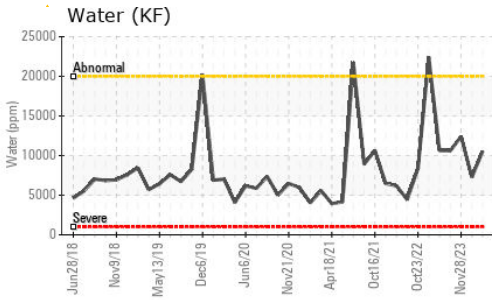
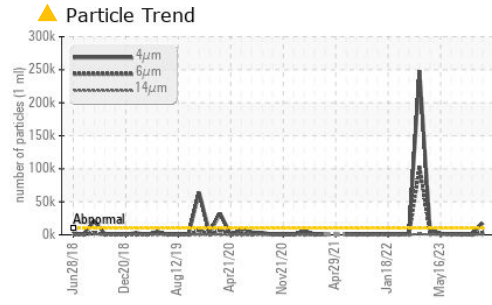
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>1</b>	1	2
Sodium	ppm	ASTM D5185m	<b>1</b>	1	10
Potassium	ppm	ASTM D5185m >20	<b>4</b>	3	2
Water	%	ASTM D6304 >2.0	<b>1.052</b>	0.728	▲ 1.24
ppm Water	ppm	ASTM D6304 >20000	<b>10522</b>	7284	▲ 12400

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	● <b>17476</b>	748	704
Particles >6µm	ASTM D7647 >2500	● <b>3647</b>	254	271
Particles >14µm	ASTM D7647 >160	▲ <b>399</b>	58	42
Particles >21µm	ASTM D7647 >40	▲ <b>128</b>	28	14
Particles >38µm	ASTM D7647 >10	● <b>16</b>	5	2
Particles >71µm	ASTM D7647 >3	● <b>3</b>	1	0
Oil Cleanliness	ISO 4406 (c) >20/18/14	▲ <b>21/19/16</b>	17/15/13	17/15/13

## FLUID DEGRADATION

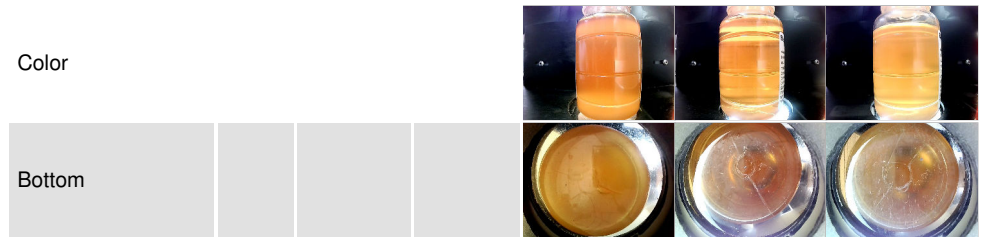
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.6	<b>0.85</b>	0.73	0.749



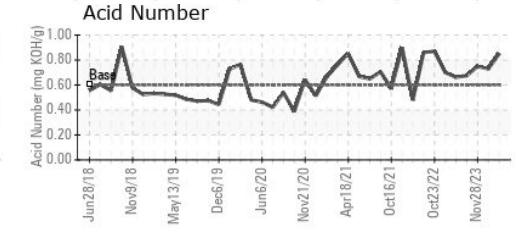
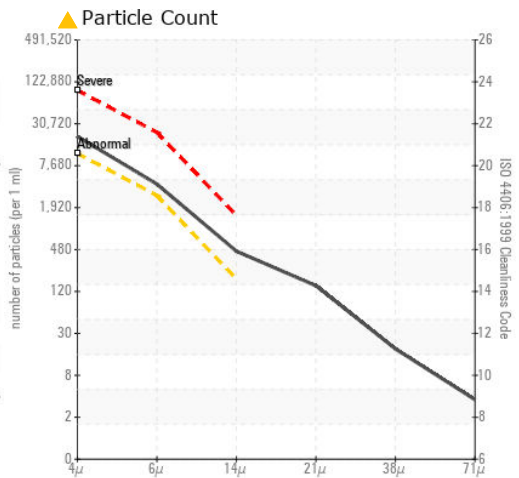
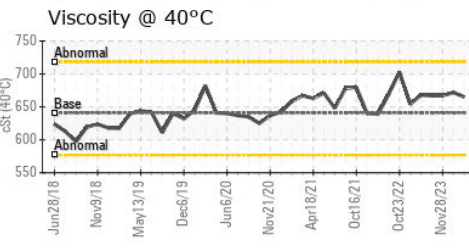
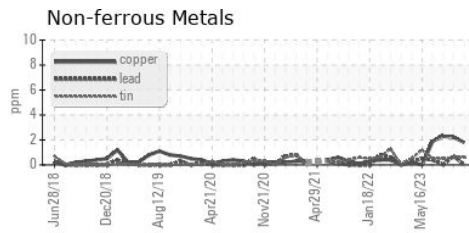
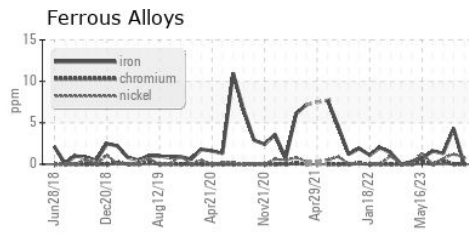
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>2.0	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 641	665	672	667

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. : USPM36441  
 Lab Number : 06199257  
 Unique Number : 11061380  
 Test Package : IND 2

Received : 04 Jun 2024  
 Tested : 09 Jun 2024  
 Diagnosed : 09 Jun 2024 - Doug Bogart

TYSON - DAKOTA CITY RENDERING

DAKOTA CITY, NE  
 US  
 Contact:

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: