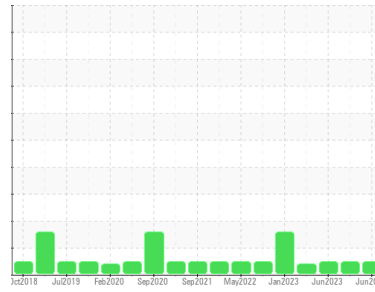




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**BUSCH 5 VACUUM (S/N S00311FMNLHGA03)**  
 Component  
**Pump**  
 Fluid  
**USPI MAX FG VAC 100 (--- 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>USPM36488</b>	USPM30949	USP243711
Sample Date	Client Info		<b>04 Jun 2024</b>	08 Feb 2024	04 Jun 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 >90	<b>0</b>	0	0
Chromium	ppm	ASTM D5185m >5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >7	<b>0</b>	0	0
Lead	ppm	ASTM D5185m >12	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >30	<b>0</b>	<1	0
Tin	ppm	ASTM D5185m >9	<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>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>1</b>	2	2
Zinc	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Sulfur	ppm	ASTM D5185m	<b>42</b>	96	0

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >60	<b>10</b>	11	16
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Water	%	ASTM D6304 >.1	<b>0.007</b>	0.002	0.008
ppm Water	ppm	ASTM D6304 >1000	<b>71</b>	25	82.1

## FLUID CLEANLINESS

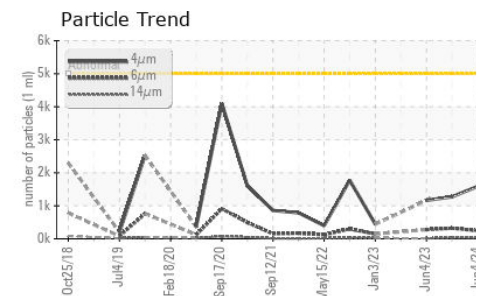
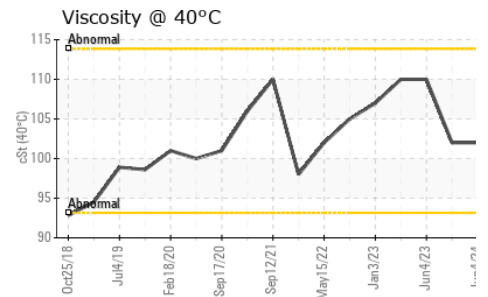
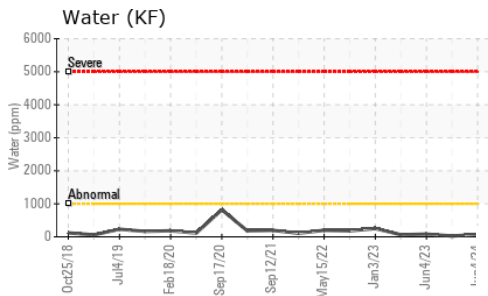
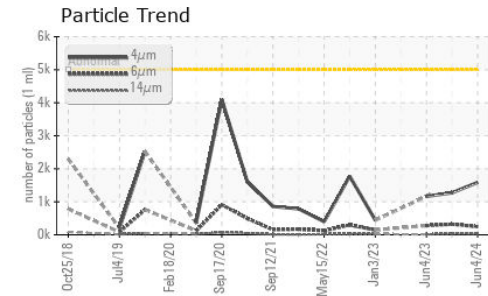
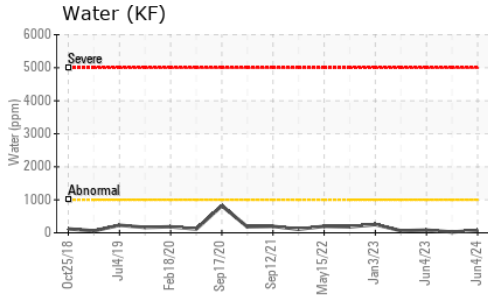
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>1589</b>	1273	1165
Particles >6µm	ASTM D7647	>1300	<b>245</b>	321	277
Particles >14µm	ASTM D7647	>160	<b>29</b>	35	13
Particles >21µm	ASTM D7647	>40	<b>11</b>	10	3
Particles >38µm	ASTM D7647	>10	<b>5</b>	1	1
Particles >71µm	ASTM D7647	>3	<b>2</b>	0	1
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>18/15/12</b>	17/16/12	17/15/11

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.059</b>	0.055	0.137



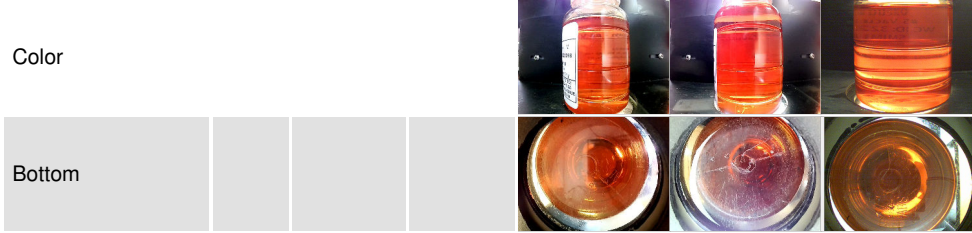
# OIL ANALYSIS REPORT



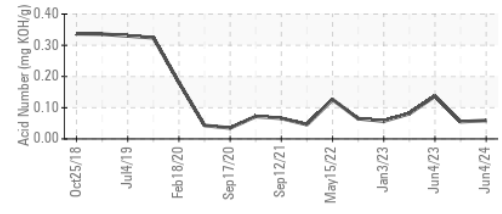
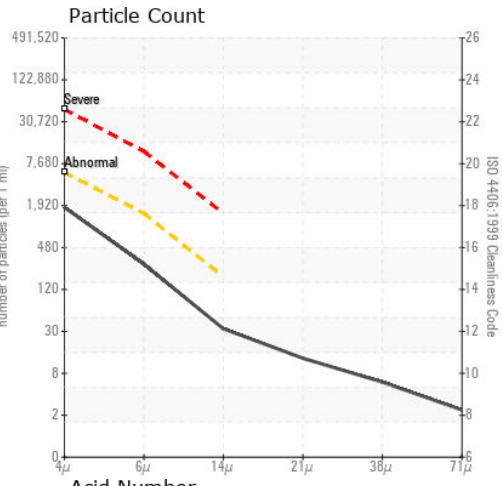
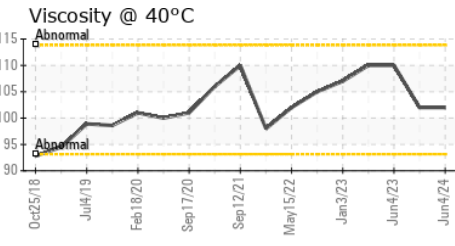
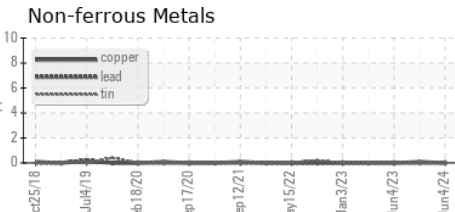
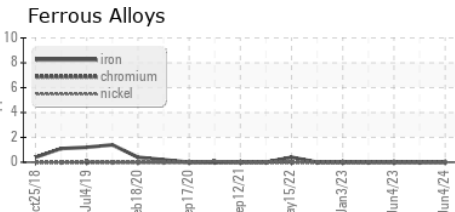
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	102	102	110

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USPM36488  
**Lab Number** : 06200189  
**Unique Number** : 11062312  
**Test Package** : IND 2

**SMITHFIELD FOODS-MIDDLESBORO**  
 MIDDLESBORO, KY  
 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: