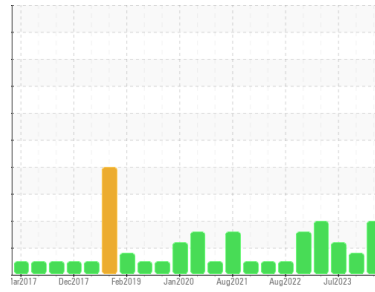




# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**BUSCH CONVERSION P-17 CV-14 VACUUM (S/N C3599)**  
 Component  
**Pump**  
 Fluid  
**USPI VAC 100 (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

### Wear

All component wear rates are normal.

### Contamination

There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris 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>USPM36790</b>	USPM30667	USPM27418
Sample Date	Client Info	<b>22 Apr 2024</b>	17 Jan 2024	06 Jul 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>	ATTENTION	ATTENTION

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >90	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185m >5	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >5	<b>0</b>	0	<1
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>	<1	0
Copper	ppm	ASTM D5185m >30	<b>0</b>	0	0
Tin	ppm	ASTM D5185m >9	<b>&lt;1</b>	<1	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 0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m 0	<b>1</b>	0	0
Calcium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m 1800	<b>622</b>	616	591
Zinc	ppm	ASTM D5185m 0	<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m 0	<b>0</b>	0	34

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >60	<b>11</b>	2	7
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	0
Water	%	ASTM D6304 >.1	<b>▲ 0.137</b>	0.033	0.025
ppm Water	ppm	ASTM D6304 >1000	<b>▲ 1380</b>	338	258.1

## FLUID CLEANLINESS

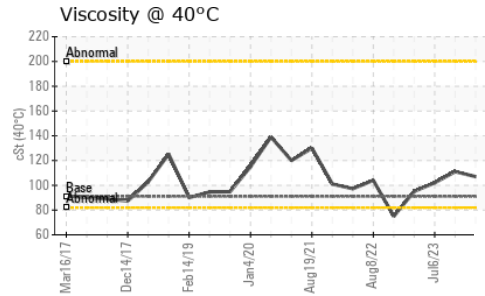
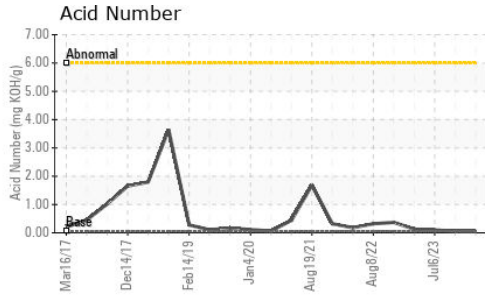
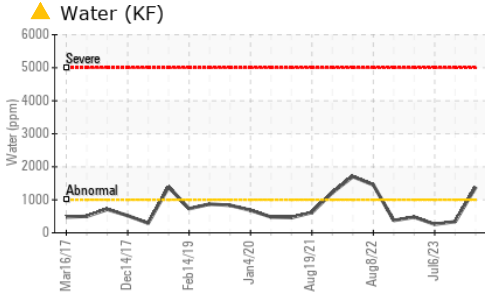
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	---	● 5115	● 5708
Particles >6µm	ASTM D7647 >1300	---	981	● 1673
Particles >14µm	ASTM D7647 >160	---	58	107
Particles >21µm	ASTM D7647 >40	---	18	22
Particles >38µm	ASTM D7647 >10	---	2	2
Particles >71µm	ASTM D7647 >3	---	1	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	---	● 20/17/13	● 20/18/14

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	<b>0.051</b>	0.059	0.10



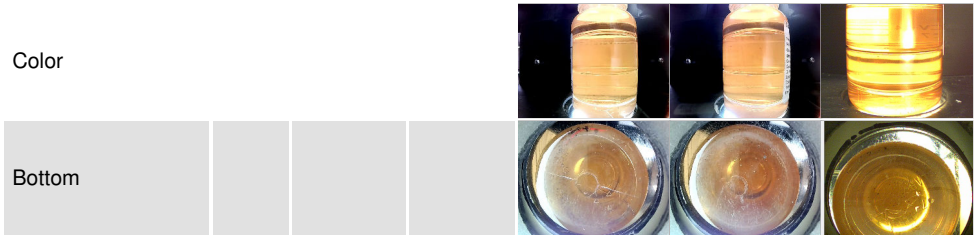
# OIL ANALYSIS REPORT



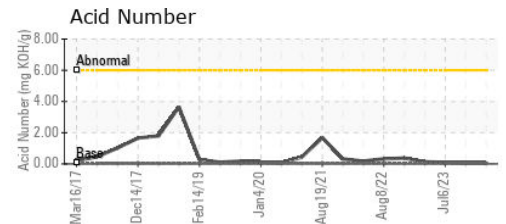
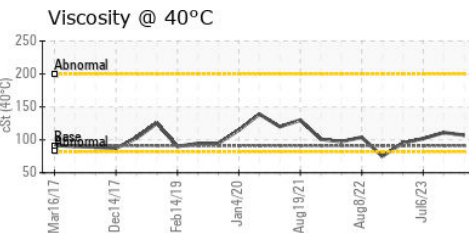
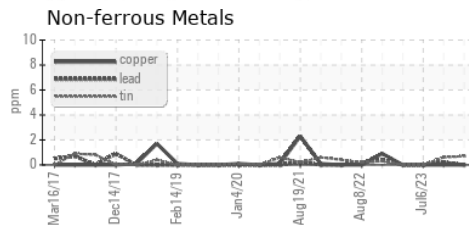
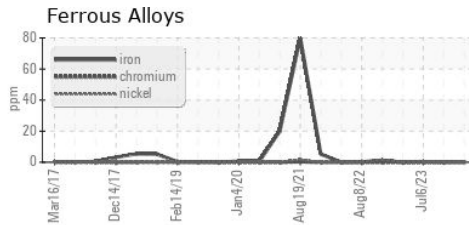
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	▲ MODER	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 91	107	111	102

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. : USPM36790  
 Lab Number : 06157728  
 Unique Number : 10993151  
 Test Package : IND 2

Received : 23 Apr 2024  
 Tested : 25 Apr 2024  
 Diagnosed : 25 Apr 2024 - Jonathan Hester

SMITHFIELD FOOD - TARHEEL  
 15855 HWY. 87 WEST  
 TARHEEL, NC  
 US 28392  
 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)

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F: