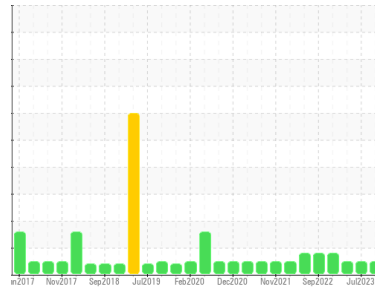




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**VAC LL-4 (S/N F13093U96127)**

Component  
**Pump**  
Fluid  
**USPI 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>USPM31143</b>	USPM5905504	USPM28627
Sample Date	Client Info		<b>02 Nov 2023</b>	18 Jul 2023	14 Apr 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>&lt;1</b>	1	2
Chromium	ppm	ASTM D5185m >5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >5	<b>&lt;1</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>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m >12	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >30	<b>0</b>	0	0
Tin	ppm	ASTM D5185m >9	<b>1</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 0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m 0	<b>2</b>	0	<1
Calcium	ppm	ASTM D5185m 0	<b>1</b>	0	0
Phosphorus	ppm	ASTM D5185m 1800	<b>738</b>	1198	1588
Zinc	ppm	ASTM D5185m 0	<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m 0	<b>20</b>	0	0

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >60	<b>12</b>	14	18
Sodium	ppm	ASTM D5185m	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0
Water	%	ASTM D6304 >.1	<b>0.030</b>	0.056	0.035
ppm Water	ppm	ASTM D6304 >1000	<b>300.9</b>	569.1	353.0

## FLUID CLEANLINESS

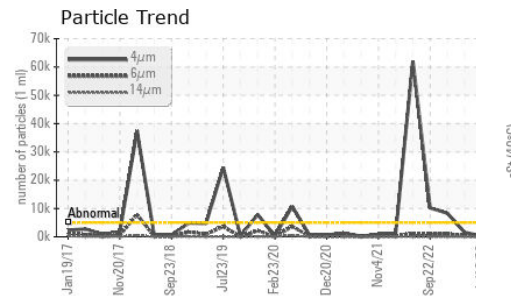
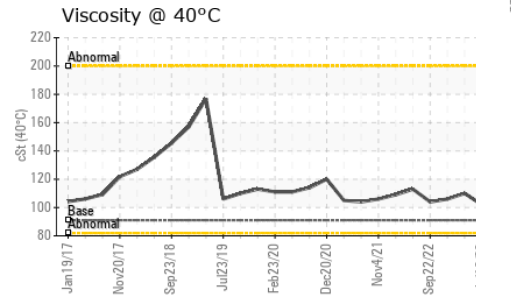
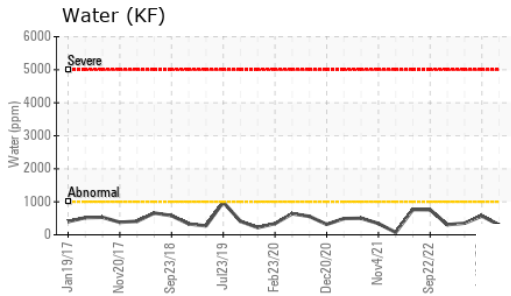
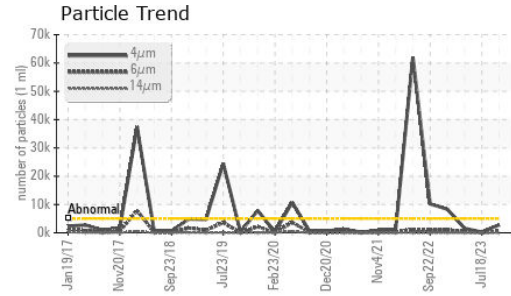
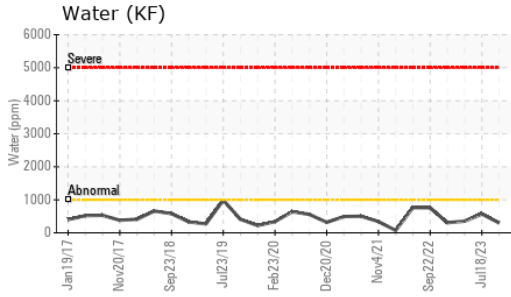
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>2795</b>	257	1582
Particles >6µm	ASTM D7647	>1300	<b>598</b>	29	380
Particles >14µm	ASTM D7647	>160	<b>38</b>	4	25
Particles >21µm	ASTM D7647	>40	<b>10</b>	2	8
Particles >38µm	ASTM D7647	>10	<b>0</b>	1	3
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	1
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>19/16/12</b>	15/12/9	18/16/12

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	<b>0.20</b>	0.13	0.26



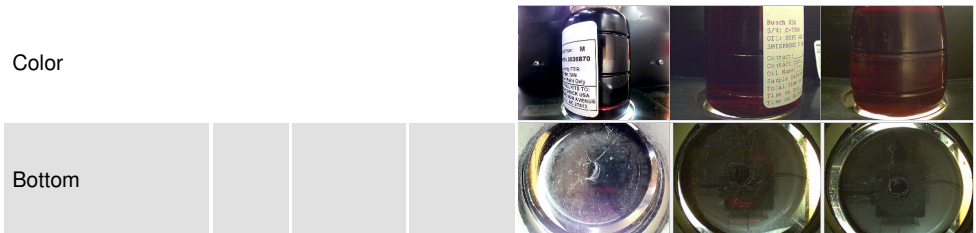
# OIL ANALYSIS REPORT



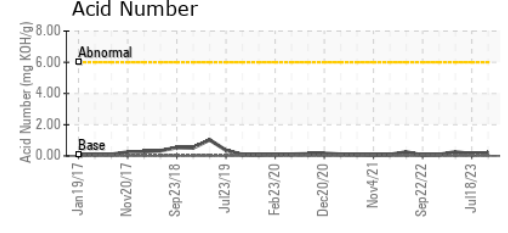
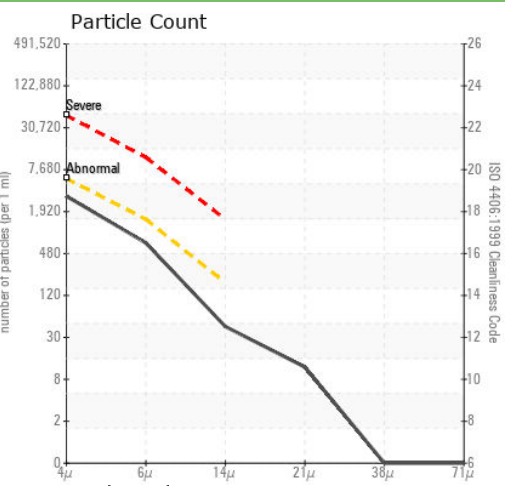
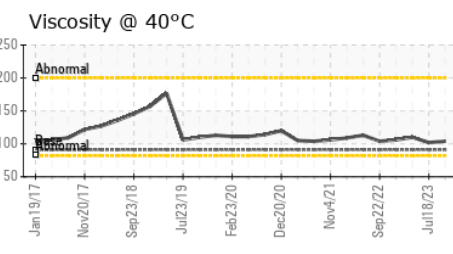
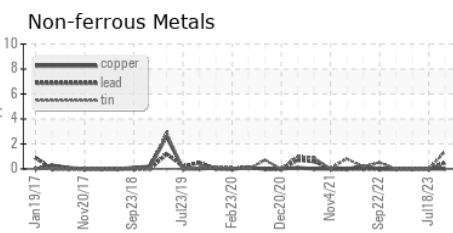
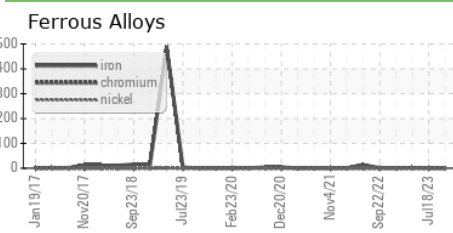
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 91	104	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.** : USPM31143 **Received** : 03 Nov 2023  
**Lab Number** : 05998041 **Diagnosed** : 06 Nov 2023  
**Unique Number** : 10726401 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**SMITHFIELD FOODS**  
 801 E. KEMPER RD  
 SPRINGDALE, OH  
 US 45246  
 Contact:

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)

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F: