



# PROBLEM SUMMARY

Sample Rating Trend



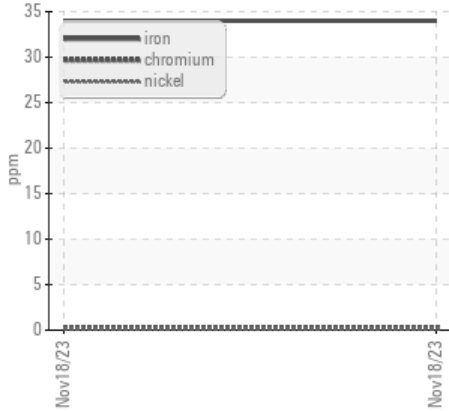
**WEAR**



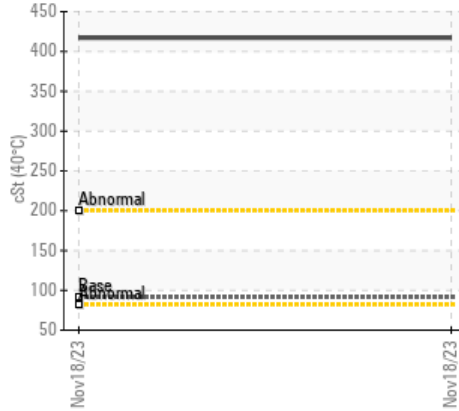
Machine Id  
**1181115 EMV P3 N-BTTM (S/N U091401946)**  
Component  
**Vacuum Pump**  
Fluid  
**USPI VAC 100 (--- GAL)**

## COMPONENT CONDITION SUMMARY

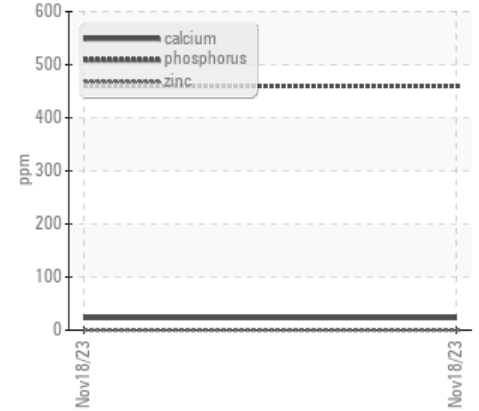
### ▲ Ferrous Alloys



### ▲ Viscosity @ 40°C



### ▲ Additives



## RECOMMENDATION

We advise an early resample to confirm this situation. We were unable to perform a particle count due to a high concentration of particles present in this sample.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	---	---
Iron	ppm	ASTM D5185m	>20	<b>▲ 34</b>	---	---
Calcium	ppm	ASTM D5185m	0	<b>▲ 23</b>	---	---
Phosphorus	ppm	ASTM D5185m	1800	<b>▲ 460</b>	---	---
Sulfur	ppm	ASTM D5185m	0	<b>▲ 10225</b>	---	---
Silt	scalar	*Visual	NONE	<b>▲ MODER</b>	---	---
Debris	scalar	*Visual	NONE	<b>▲ MODER</b>	---	---
Visc @ 40°C	cSt	ASTM D445	91	<b>▲ 417.1</b>	---	---

Customer Id: JBSBEA  
Sample No.: USPM31308  
Lab Number: 06010900  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@wearcheckusa.com)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We advise an early resample to confirm this situation.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

## HISTORICAL DIAGNOSIS



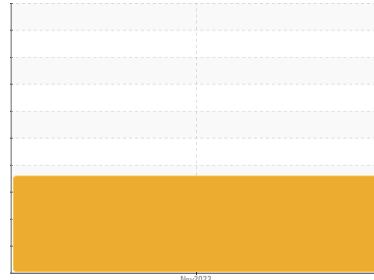
# OIL ANALYSIS REPORT

Sample Rating Trend

**WEAR**



Machine Id  
**1181115 EMV P3 N-BTTM (S/N U091401946)**  
 Component  
**Vacuum Pump**  
 Fluid  
**USPI VAC 100 (--- GAL)**



## DIAGNOSIS

### ▲ Recommendation

We advise an early resample to confirm this situation. We were unable to perform a particle count due to a high concentration of particles present in this sample.

### ▲ Wear

The iron level is abnormal.

### ▲ Contamination

There is a moderate amount of visible silt present in the sample. Moderate concentration of visible dirt/debris present in the oil.

### ▲ Fluid Condition

The oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand or type of oil. Confirmed. The AN level is acceptable for this fluid.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>USPM31308</b>	---	---
Sample Date	Client Info		<b>18 Nov 2023</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>▲ 34</b>	---	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m >20	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	---	---
Lead	ppm	ASTM D5185m >20	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m >20	<b>10</b>	---	---
Tin	ppm	ASTM D5185m >20	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	---	---
Barium	ppm	ASTM D5185m 0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m 0	<b>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m 0	<b>5</b>	---	---
Calcium	ppm	ASTM D5185m 0	<b>▲ 23</b>	---	---
Phosphorus	ppm	ASTM D5185m 1800	<b>▲ 460</b>	---	---
Zinc	ppm	ASTM D5185m 0	<b>0</b>	---	---
Sulfur	ppm	ASTM D5185m 0	<b>▲ 10225</b>	---	---

## CONTAMINANTS

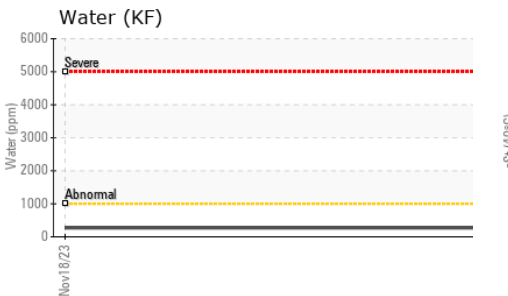
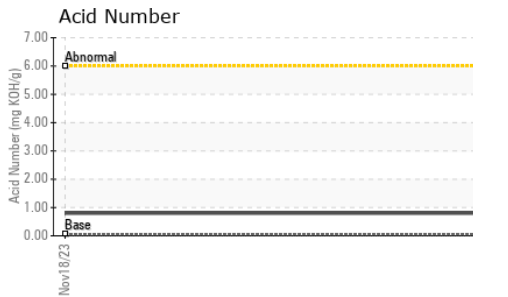
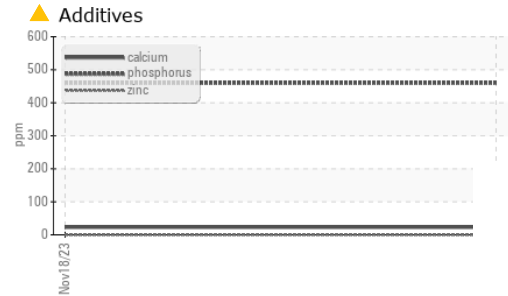
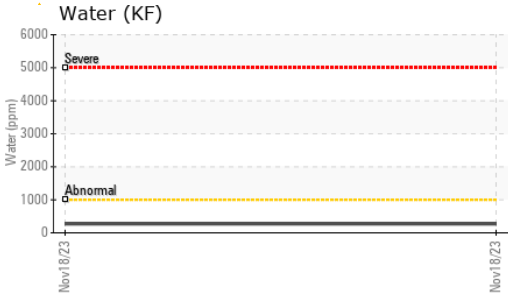
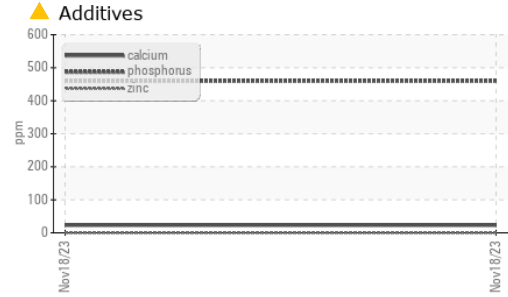
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>3</b>	---	---
Sodium	ppm	ASTM D5185m	<b>6</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>5</b>	---	---
Water	%	ASTM D6304 >.1	<b>0.027</b>	---	---
ppm Water	ppm	ASTM D6304 >1000	<b>271.8</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	<b>0.80</b>	---	---



# OIL ANALYSIS REPORT



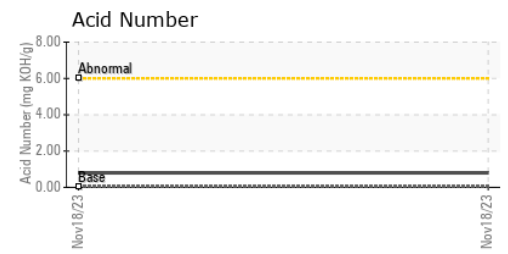
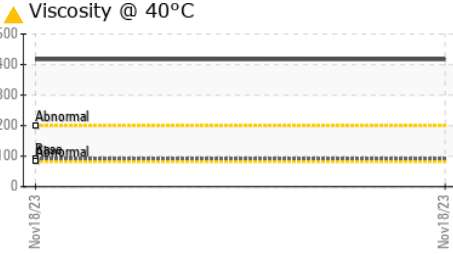
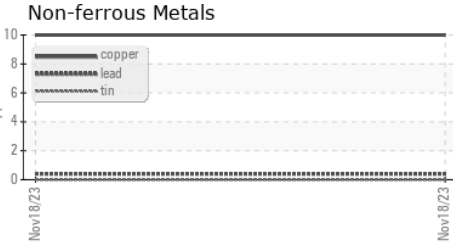
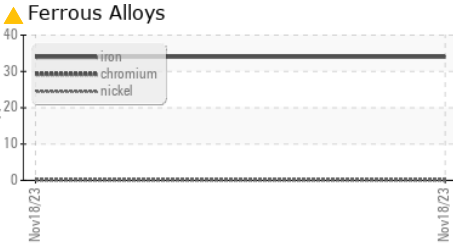
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	▲ MODER	---
Debris	scalar	*Visual	NONE	▲ MODER	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 91	▲ 417.1	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USPM31308 **Received** : 17 Nov 2023  
**Lab Number** : 06010900 **Diagnosed** : 22 Nov 2023  
**Unique Number** : 10750044 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**JBS - BEARDSTOWN**  
 8295 ARENZVILLE RD  
 BEARDSTOWN, IL  
 US 62618  
 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:  
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