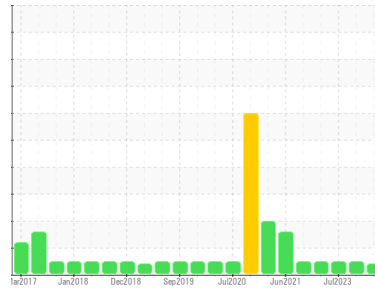




# OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id  
**BUSCH PR5-507 P1 (S/N C4434)**  
 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

High 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>USPM37797</b>	USPM30847	USPM27907
Sample Date	Client Info	<b>01 Jun 2024</b>	17 Nov 2023	18 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>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >90	<b>6</b>	0	1
Chromium	ppm	ASTM D5185m >5	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m >5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >7	<b>1</b>	2	1
Lead	ppm	ASTM D5185m >12	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >30	<b>1</b>	<1	<1
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>&lt;1</b>	0	0
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	6
Calcium	ppm	ASTM D5185m 0	<b>0</b>	<1	9
Phosphorus	ppm	ASTM D5185m 1800	<b>955</b>	790	838
Zinc	ppm	ASTM D5185m 0	<b>0</b>	0	8
Sulfur	ppm	ASTM D5185m 0	<b>37</b>	0	22

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >60	<b>3</b>	2	2
Sodium	ppm	ASTM D5185m	<b>2</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>3</b>	2	<1
Water	%	ASTM D6304 >.1	<b>0.073</b>	0.043	0.079
ppm Water	ppm	ASTM D6304 >1000	<b>734</b>	433	795.7

## FLUID CLEANLINESS

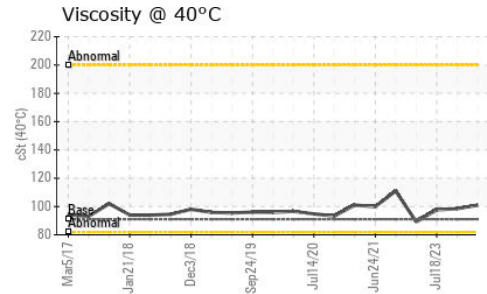
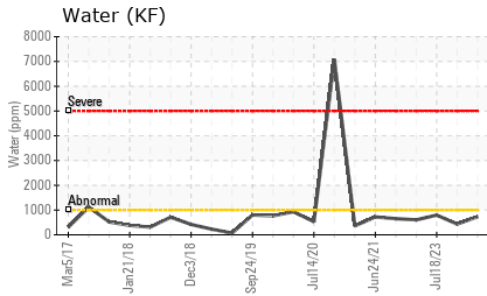
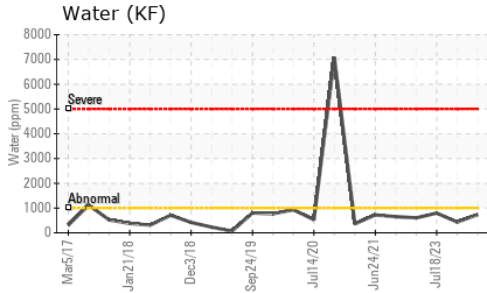
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>---</b>	149	466
Particles >6µm	ASTM D7647 >1300	<b>---</b>	46	136
Particles >14µm	ASTM D7647 >160	<b>---</b>	6	15
Particles >21µm	ASTM D7647 >40	<b>---</b>	1	4
Particles >38µm	ASTM D7647 >10	<b>---</b>	0	0
Particles >71µm	ASTM D7647 >3	<b>---</b>	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>---</b>	14/13/10	16/14/11

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	<b>0.08</b>	0.083	0.05



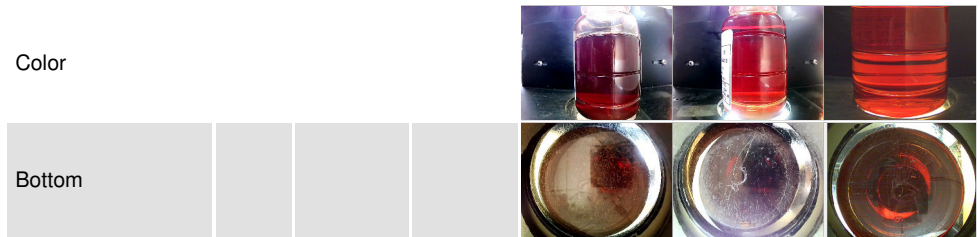
# OIL ANALYSIS REPORT



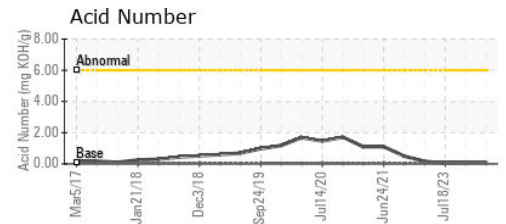
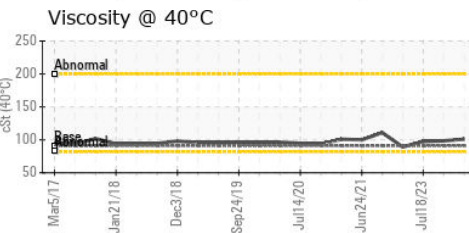
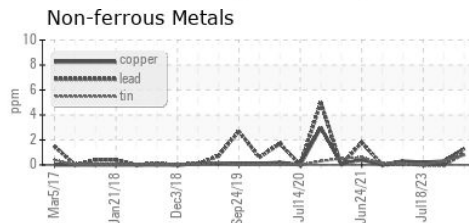
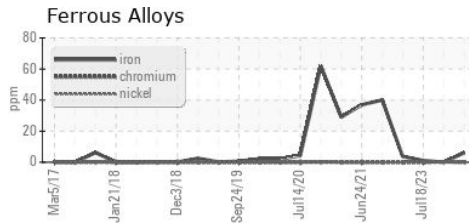
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	▲ HEAVY	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 91	101	98.5	97.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : USPM37797  
 Lab Number : 06214037  
 Unique Number : 11086901  
 Test Package : IND 2

Received : 18 Jun 2024  
 Tested : 21 Jun 2024  
 Diagnosed : 21 Jun 2024 - Doug Bogart

**TYSON-Emporia-USP**  
 2101 West Sixth  
 Emporia, KS  
 US 66801  
 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: (620)343-3640

F: (620)340-1253