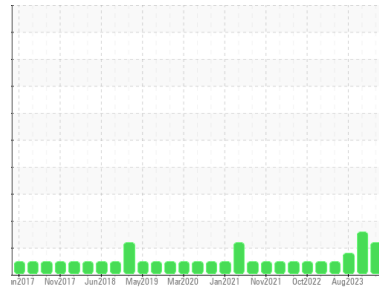




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**BUSCH TYSWALWAS VAC 6C (S/N U120601128)**  
 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 a high amount of silt (particulates < 14 microns in size) 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>USPM36368</b>	USPM31860	USPM29088
Sample Date	Client Info		<b>29 May 2024</b>	12 Dec 2023	01 Aug 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>ABNORMAL</b>	ABNORMAL	ATTENTION

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	<b>75</b>	45	91
Chromium	ppm	ASTM D5185m >5	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >7	<b>2</b>	<1	<1
Lead	ppm	ASTM D5185m >12	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >30	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m >9	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	<1
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>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m 0	<b>1</b>	0	0
Phosphorus	ppm	ASTM D5185m 1800	<b>1190</b>	1140	1432
Zinc	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	0
Sulfur	ppm	ASTM D5185m 0	<b>0</b>	16	1

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >60	<b>2</b>	2	1
Sodium	ppm	ASTM D5185m	<b>15</b>	11	19
Potassium	ppm	ASTM D5185m >20	<b>2</b>	1	2
Water	%	ASTM D6304 >.1	<b>0.061</b>	0.038	0.041
ppm Water	ppm	ASTM D6304 >1000	<b>619</b>	383	410.1

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 132220</b>	▲ 109273	● 5859
Particles >6µm	ASTM D7647	>1300	<b>▲ 14387</b>	▲ 18880	● 899
Particles >14µm	ASTM D7647	>160	<b>63</b>	▲ 213	● 26
Particles >21µm	ASTM D7647	>40	<b>11</b>	11	4
Particles >38µm	ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 24/21/13</b>	▲ 24/21/15	● 20/17/12

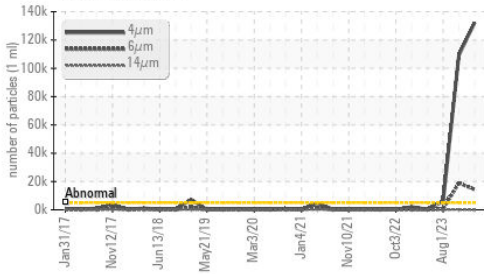
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	<b>0.33</b>	0.21	0.39

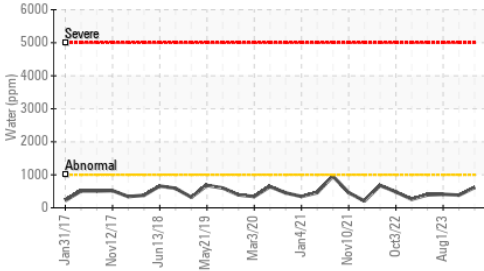


# OIL ANALYSIS REPORT

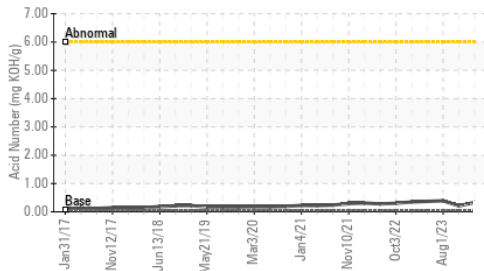
## Particle Trend



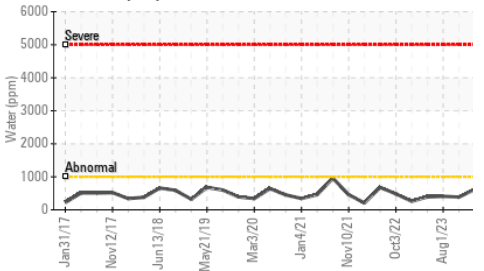
## Water (KF)



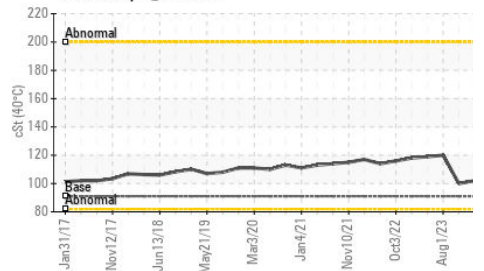
## Acid Number



## Water (KF)



## Viscosity @ 40°C

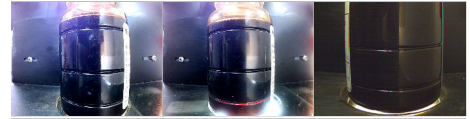


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	102	100

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

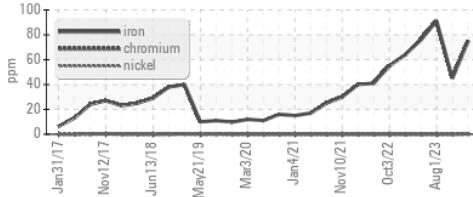


Bottom

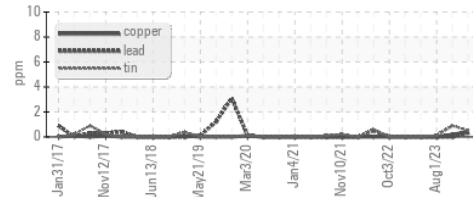


## GRAPHS

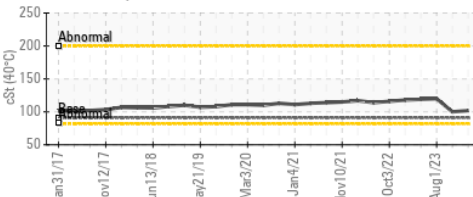
### Ferrous Alloys



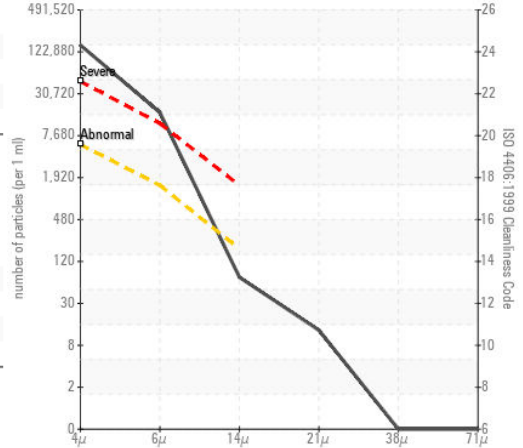
### Non-ferrous Metals



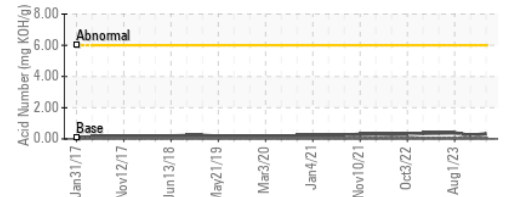
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : USPM36368  
 Lab Number : 06195475  
 Unique Number : 11057598  
 Test Package : IND 2

Received : 30 May 2024  
 Tested : 31 May 2024  
 Diagnosed : 31 May 2024 - Doug Bogart

TYSON - PASCO WALLULA -USP  
 DODD RD  
 WALLULA, WA  
 US 99363  
 Contact: RICK DUVAL

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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