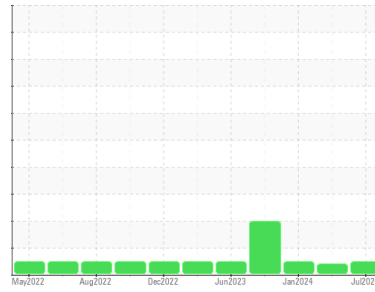




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**BUSCH VP-4A (S/N 5594331)**  
 Component  
**Vacuum 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>USPM37999</b>	USPM36555	USPM30533
Sample Date	Client Info	<b>01 Jul 2024</b>	31 Mar 2024	07 Jan 2024
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	ATTENTION	NORMAL

## WEAR METALS

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

## 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	<1
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>0</b>	0	<1
Phosphorus	ppm	ASTM D5185m 1800	<b>863</b>	734	783
Zinc	ppm	ASTM D5185m 0	<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m 0	<b>0</b>	63	0

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>2</b>	<1	2
Sodium	ppm	ASTM D5185m	<b>0</b>	1	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	<1
Water	%	ASTM D6304 >.1	<b>0.061</b>	0.027	0.047
ppm Water	ppm	ASTM D6304 >1000	<b>617</b>	278	479

## FLUID CLEANLINESS

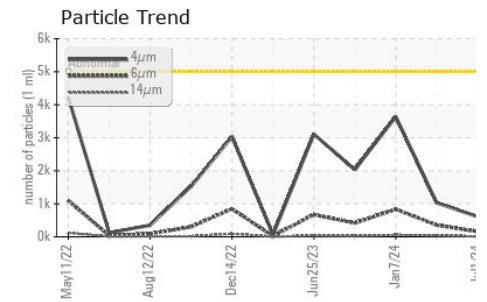
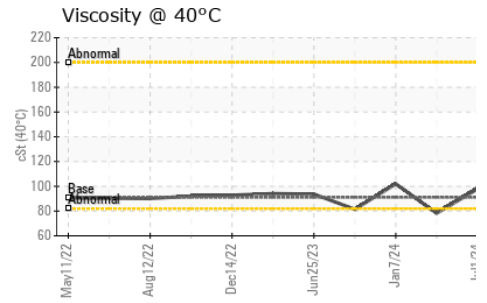
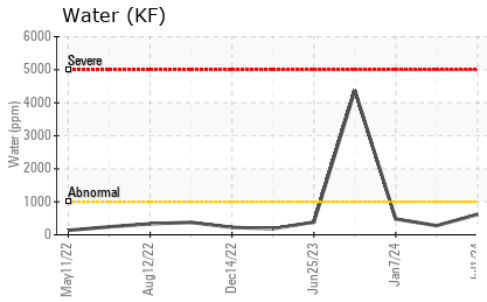
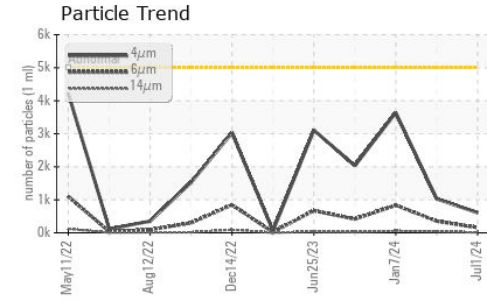
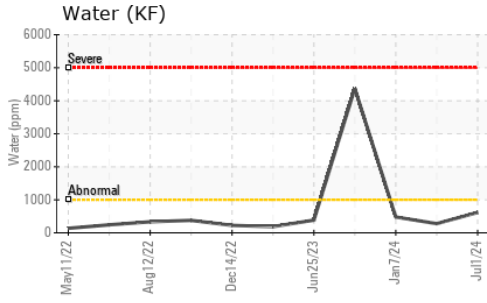
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>609</b>	1029	3638
Particles >6µm	ASTM D7647 >1300	<b>158</b>	354	835
Particles >14µm	ASTM D7647 >160	<b>9</b>	40	55
Particles >21µm	ASTM D7647 >40	<b>2</b>	12	15
Particles >38µm	ASTM D7647 >10	<b>1</b>	1	1
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>16/14/10</b>	17/16/12	19/17/13

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	<b>0.051</b>	0.10	0.083



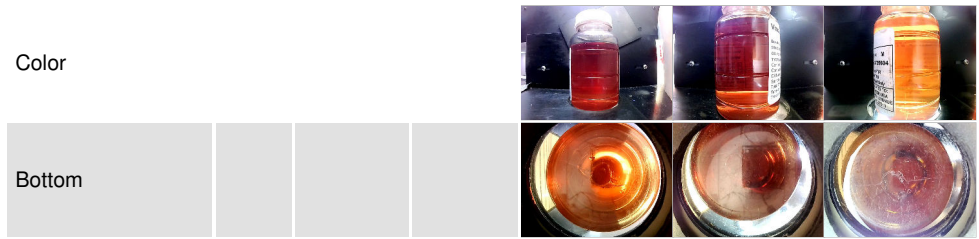
# OIL ANALYSIS REPORT



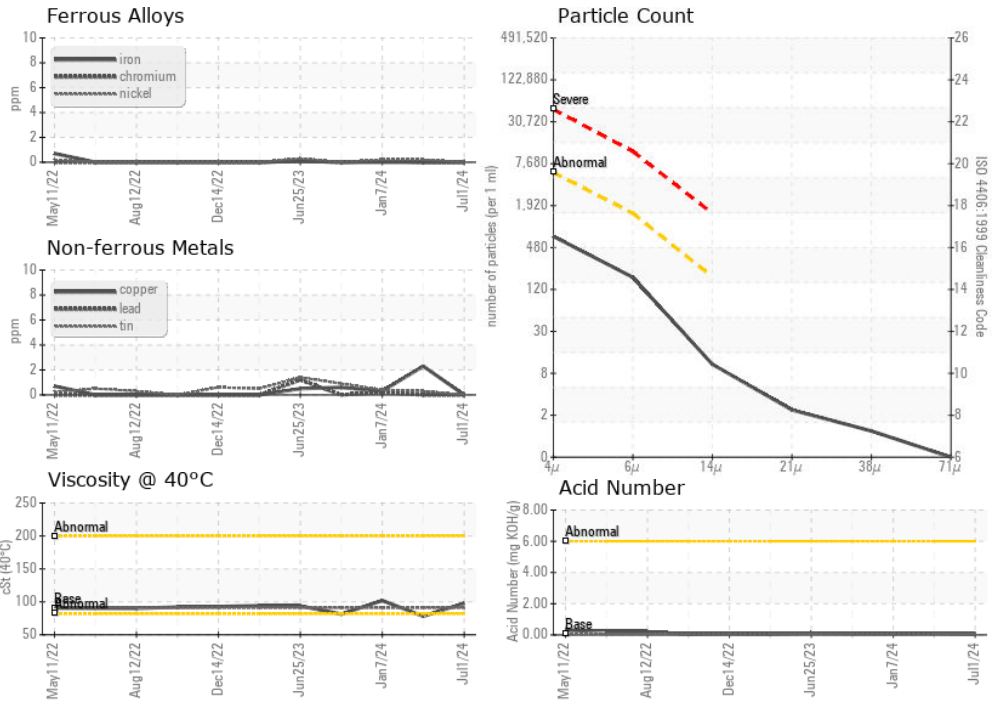
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	97.9	78.2	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. : USPM37999  
 Lab Number : 06236033  
 Unique Number : 11124867  
 Test Package : IND 2

Received : 15 Jul 2024  
 Tested : 16 Jul 2024  
 Diagnosed : 16 Jul 2024 - Doug Bogart

TYSON - AMARILLO-PRO

AMARILLO, TX  
 US

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:  
 F: