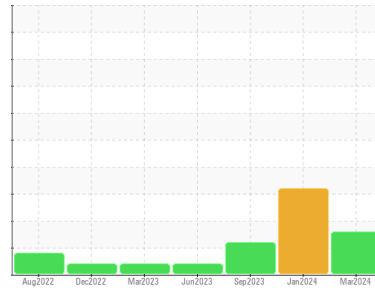




# OIL ANALYSIS REPORT

Sample Rating Trend



## VISCOSITY



Machine Id  
**BUSCH VP-10C (S/N 5599800)**  
 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 a moderate amount of silt (particulates < 14 microns in size) present in the oil.

#### Fluid Condition

The oil viscosity is lower than normal. Confirmed.  
The AN level is acceptable for this fluid.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>USPM36561</b>	USPM30555	USPM29772
Sample Date	Client Info		<b>31 Mar 2024</b>	07 Jan 2024	23 Sep 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>ATTENTION</b>	ABNORMAL	ABNORMAL

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>0</b>	4	<1
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>0</b>	2	4
Lead	ppm	ASTM D5185m >20	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >20	<b>2</b>	13	<1
Tin	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	<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>	<1	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Calcium	ppm	ASTM D5185m 0	<b>0</b>	1	<1
Phosphorus	ppm	ASTM D5185m 1800	<b>729</b>	573	843
Zinc	ppm	ASTM D5185m 0	<b>0</b>	32	0
Sulfur	ppm	ASTM D5185m 0	<b>488</b>	592	34

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>3</b>	2	2
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>2</b>	<1	2
Water	%	ASTM D6304 >.1	<b>0.028</b>	▲ 0.170	0.063
ppm Water	ppm	ASTM D6304 >1000	<b>281</b>	▲ 1700	630.0

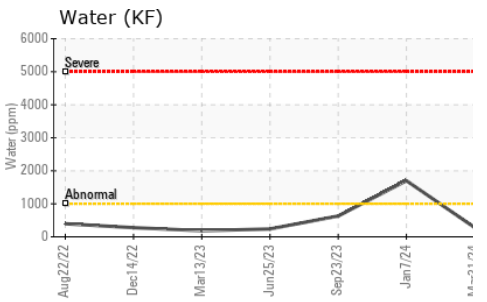
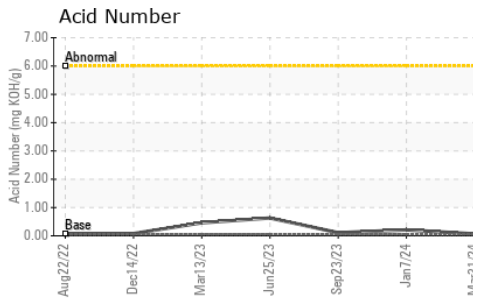
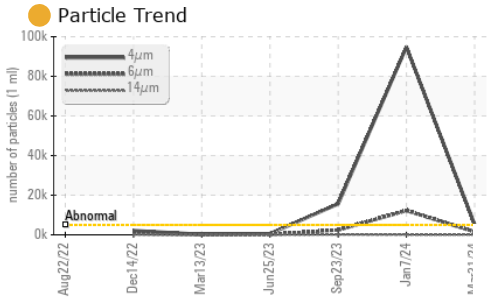
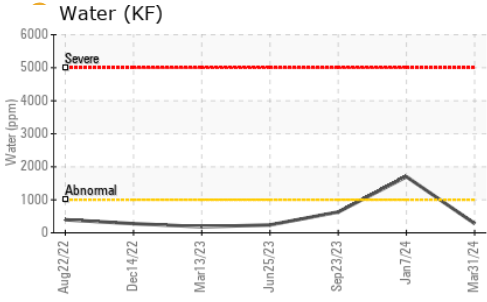
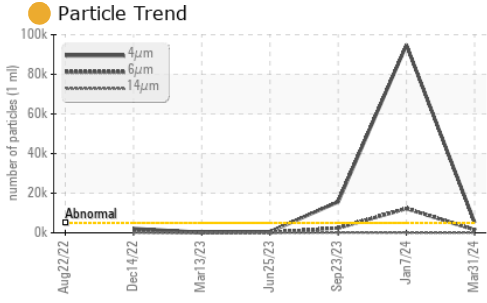
### FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	● <b>5229</b>	▲ 94803	▲ 15620
Particles >6µm	ASTM D7647	>1300	● <b>1542</b>	▲ 12265	● 2453
Particles >14µm	ASTM D7647	>160	<b>141</b>	78	100
Particles >21µm	ASTM D7647	>40	<b>36</b>	12	23
Particles >38µm	ASTM D7647	>10	<b>1</b>	0	3
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	1
Oil Cleanliness	ISO 4406 (c)	>19/17/14	● <b>20/18/14</b>	▲ 24/21/13	▲ 21/18/14

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.05	<b>0.07</b>	0.21	0.11

# OIL ANALYSIS REPORT

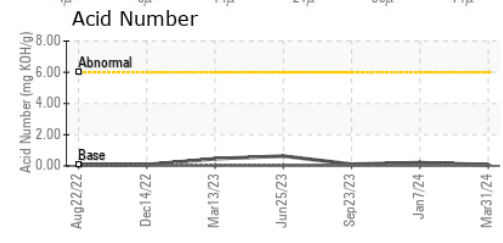
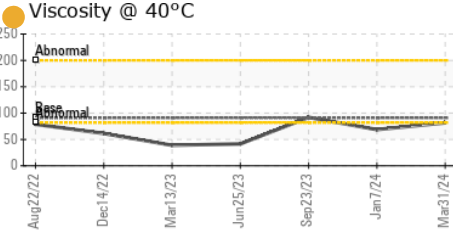
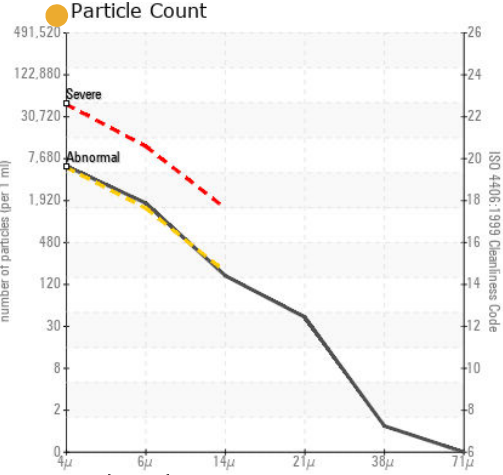
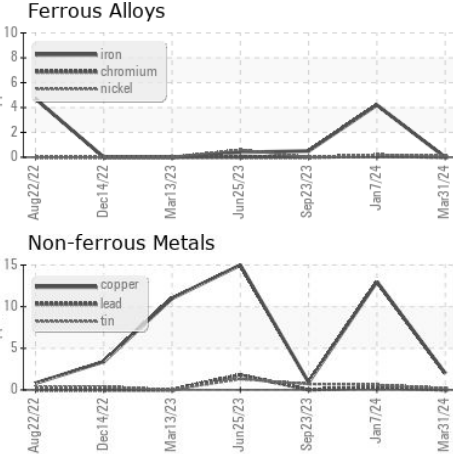


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.1	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	91	81.5	68.72	91.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USPM36561 **Received** : 01 Apr 2024  
**Lab Number** : 06134948 **Tested** : 04 Apr 2024  
**Unique Number** : 10954413 **Diagnosed** : 04 Apr 2024 - Doug Bogart  
**Test Package** : IND 2

**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)