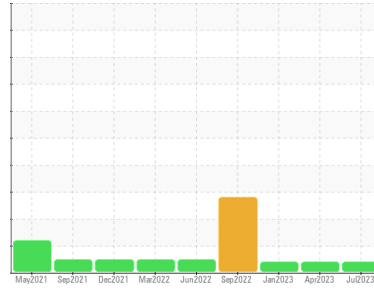




# PROBLEM SUMMARY

Sample Rating Trend



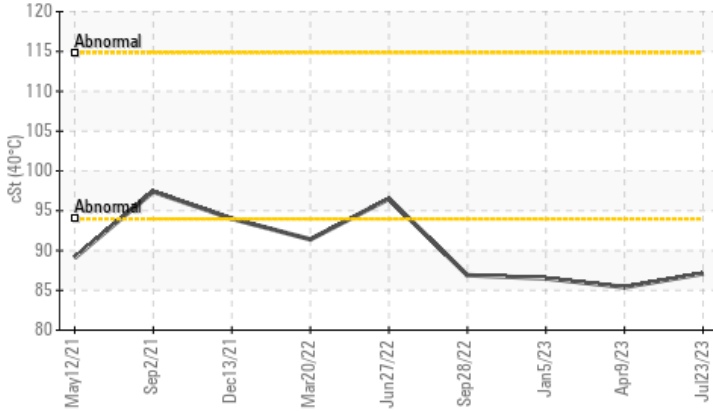
## VISCOSITY



Machine Id  
**B137 BUTT CV TOP (S/N 5600164)**  
 Component  
**Pump**  
 Fluid  
**USPI MAX FG VAC 100 (--- GAL)**

### COMPONENT CONDITION SUMMARY

▲ Viscosity @ 40°C



### RECOMMENDATION

Resample at the next service interval to monitor.

### PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	ATTENTION	ATTENTION
Visc @ 40°C	cSt	ASTM D445	▲ 87.1	▲ 85.4	▲ 86.5

Customer Id: FARDEN  
 Sample No.: USPM5905489  
 Lab Number: 05905489  
 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

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 09 Apr 2023 Diag: Doug Bogart

#### VISCOSITY



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The oil viscosity is lower than normal. Confirmed. The AN level is acceptable for this fluid.

view report



### 05 Jan 2023 Diag: Jonathan Hester

#### VISCOSITY



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The oil viscosity is lower than normal. The AN level is acceptable for this fluid.

view report



### 28 Sep 2022 Diag: Doug Bogart

#### WATER



We advise that you follow the water drain-off procedure for this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. Free water present. There is a trace of moisture present in the oil. A decrease in the viscosity is noted. Confirmed. The AN level is acceptable for this fluid.

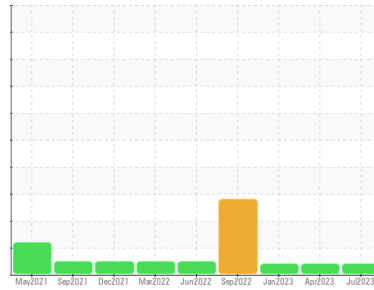
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



## VISCOSITY



Machine Id  
**B137 BUTT CV TOP (S/N 5600164)**

Component  
**Pump**  
Fluid  
**USPI MAX FG 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 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>USPM5905489</b>	USPM28610	USP05732316
Sample Date	Client Info	<b>23 Jul 2023</b>	09 Apr 2023	05 Jan 2023
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>ATTENTION</b>	ATTENTION	ATTENTION

### WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >90	<b>0</b>	<1	<1
Chromium	ppm	ASTM D5185m >5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >7	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m >12	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >30	<b>3</b>	4	3
Tin	ppm	ASTM D5185m >9	<b>0</b>	0	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	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>&lt;1</b>	1	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	<b>0</b>	0	<1
Calcium	ppm	ASTM D5185m	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>92</b>	119	139
Zinc	ppm	ASTM D5185m	<b>0</b>	<1	2
Sulfur	ppm	ASTM D5185m	<b>396</b>	472	342

### CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >60	<b>25</b>	30	27
Sodium	ppm	ASTM D5185m	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0
Water	%	ASTM D6304	<b>0.016</b>	0.005	0.00
ppm Water	ppm	ASTM D6304 >.1	<b>162.1</b>	52.3	0.00

### FLUID CLEANLINESS

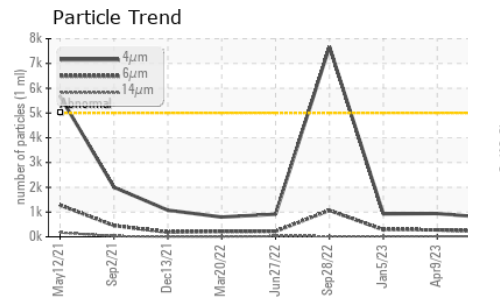
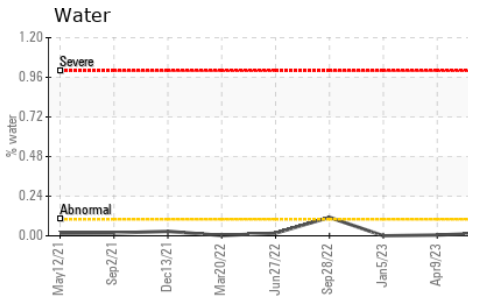
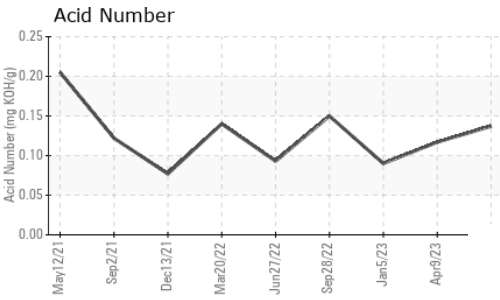
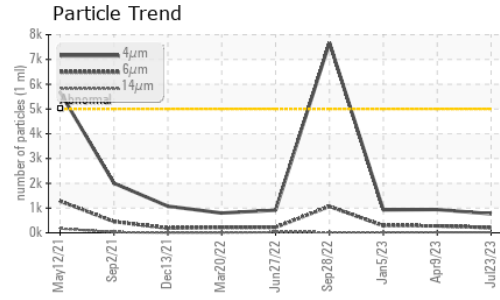
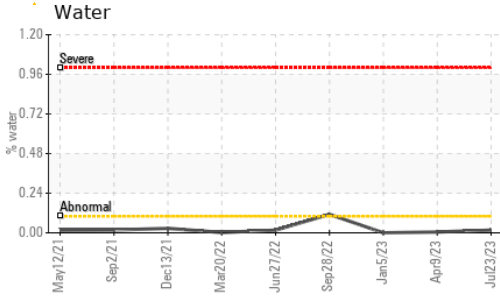
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>766</b>	940	926
Particles >6µm	ASTM D7647 >1300	<b>207</b>	280	288
Particles >14µm	ASTM D7647 >160	<b>23</b>	23	22
Particles >21µm	ASTM D7647 >40	<b>3</b>	5	4
Particles >38µm	ASTM D7647 >10	<b>0</b>	0	1
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>17/15/12</b>	17/15/12	17/15/12

### FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.137</b>	0.117	0.09



# OIL ANALYSIS REPORT



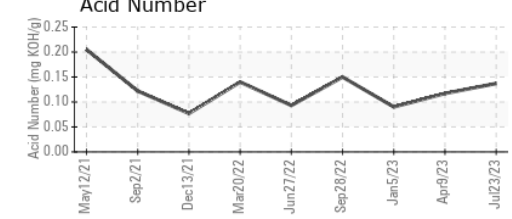
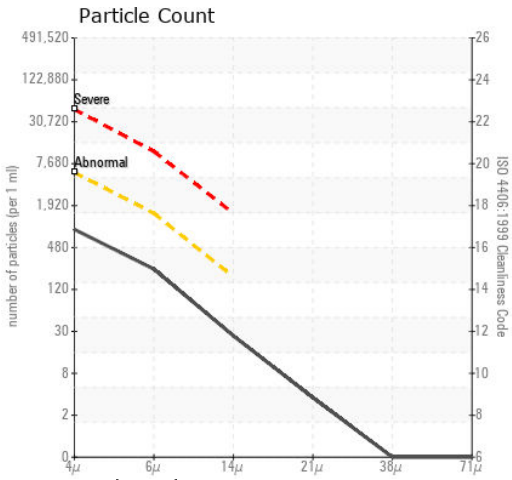
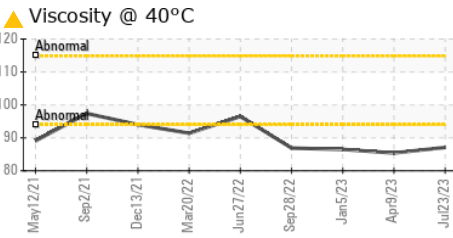
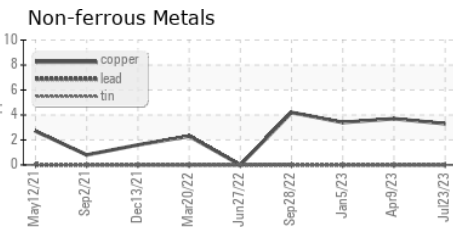
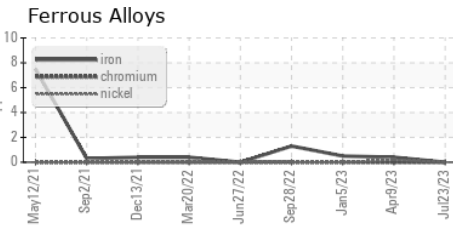
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	▲ 87.1	▲ 85.4	▲ 86.5

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.** : USPM5905489 **Received** : 24 Jul 2023  
**Lab Number** : 05905489 **Diagnosed** : 25 Jul 2023  
**Unique Number** : 10566845 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**SMITHFIELD - DENISON - SMIDENIOW**  
 800 INDUSTRIAL ROAD  
 DENISON, IA  
 US 51442  
 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: (712)263-7414  
 F: (712)263-7314