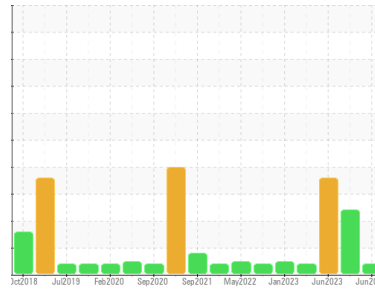




OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id
BUSCH 8 VACUUM (S/N S00311FMNLHGA03)
 Component
Pump
 Fluid
USPI MAX FG 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

Moderate 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	USPM36491	USPM30952	USP243714
Sample Date	Client Info	04 Jun 2024	08 Feb 2024	04 Jun 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	0	<1
Chromium	ppm	ASTM D5185m >5	0	0
Nickel	ppm	ASTM D5185m >5	0	<1
Titanium	ppm	ASTM D5185m >3	0	0
Silver	ppm	ASTM D5185m >3	0	0
Aluminum	ppm	ASTM D5185m >7	0	0
Lead	ppm	ASTM D5185m >12	0	0
Copper	ppm	ASTM D5185m >30	0	0
Tin	ppm	ASTM D5185m >9	0	0
Vanadium	ppm	ASTM D5185m	0	0
Cadmium	ppm	ASTM D5185m	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0
Barium	ppm	ASTM D5185m	0	0
Molybdenum	ppm	ASTM D5185m	0	0
Manganese	ppm	ASTM D5185m	0	<1
Magnesium	ppm	ASTM D5185m	<1	0
Calcium	ppm	ASTM D5185m	0	0
Phosphorus	ppm	ASTM D5185m	0	<1
Zinc	ppm	ASTM D5185m	1	0
Sulfur	ppm	ASTM D5185m	0	7
				13

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >60	11	13
Sodium	ppm	ASTM D5185m	0	<1
Potassium	ppm	ASTM D5185m >20	0	0
Water	%	ASTM D6304 >.1	0.039	0.007
ppm Water	ppm	ASTM D6304 >1000	394	76
				1050

FLUID CLEANLINESS

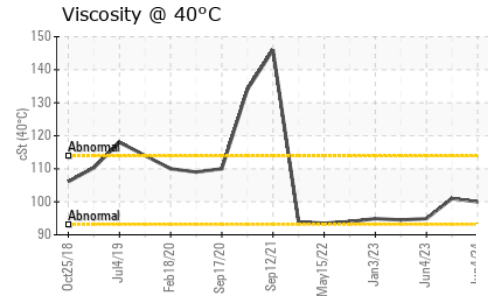
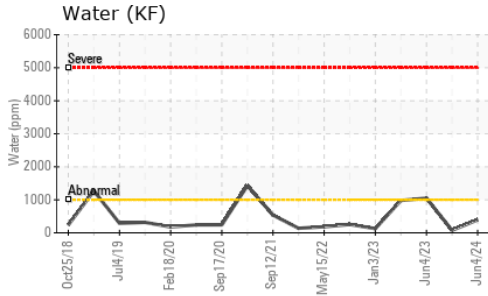
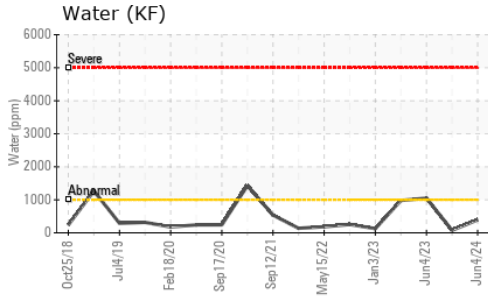
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	---	13184	---
Particles >6µm	ASTM D7647 >1300	---	3917	---
Particles >14µm	ASTM D7647 >160	---	428	---
Particles >21µm	ASTM D7647 >40	---	149	---
Particles >38µm	ASTM D7647 >10	---	12	---
Particles >71µm	ASTM D7647 >3	---	1	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	---	21/19/16	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.089	0.092
				0.09



OIL ANALYSIS REPORT



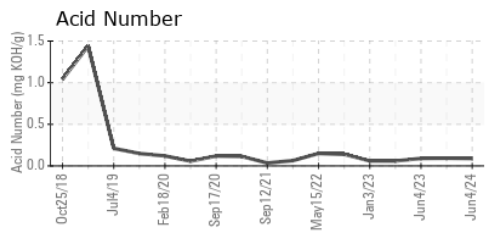
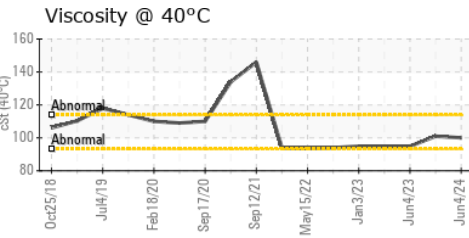
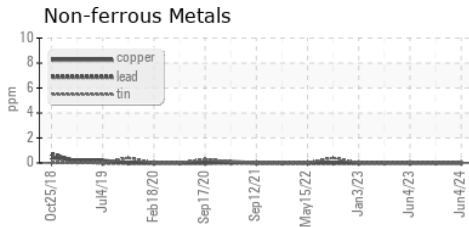
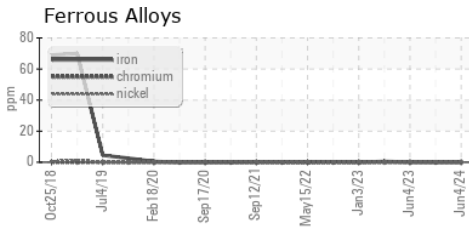
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	▲ MODER	LIGHT	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.1	NEG	▲ 0.2%
Free Water	scalar	*Visual		NEG	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	100	101	94.9

SAMPLE IMAGES

	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM36491 **Received** : 05 Jun 2024
Lab Number : **06200185** **Tested** : 10 Jun 2024
Unique Number : 11062308 **Diagnosed** : 10 Jun 2024 - Doug Bogart
Test Package : IND 2

SMITHFIELD FOODS-MIDDLESBORO
 MIDDLESBORO, KY
 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)