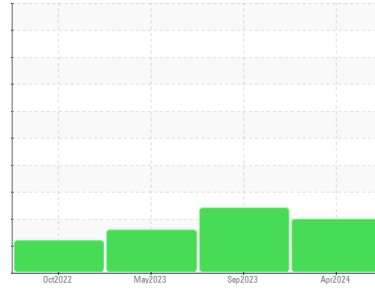




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

## LOG UPSTREAM LIFTING (S/N MARK 1/P0835)

Component

Gearbox

Fluid

USPI FG GEAR 460 (--- GAL)

### DIAGNOSIS

#### Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is a high amount of particulates 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>USPM36599</b>	USPM29662	USPM28856
Sample Date	Client Info	<b>02 Apr 2024</b>	18 Sep 2023	31 May 2023
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

### WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >200	<b>84</b>	68	64
Chromium	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m >15	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>3</b>	3	0
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >200	<b>&lt;1</b>	0	<1
Tin	ppm	ASTM D5185m >25	<b>&lt;1</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>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185m	<b>4</b>	<1	<1
Phosphorus	ppm	ASTM D5185m	<b>656</b>	399	542
Zinc	ppm	ASTM D5185m	<b>&lt;1</b>	0	2
Sulfur	ppm	ASTM D5185m	<b>553</b>	715	916

### CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	<b>5</b>	4	6
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	2	0
Potassium	ppm	ASTM D5185m >20	<b>2</b>	<1	<1
Water	%	ASTM D6304 >0.2	<b>0.002</b>	0.005	0.001
ppm Water	ppm	ASTM D6304 >2000	<b>22</b>	51.5	6.7

### FLUID CLEANLINESS

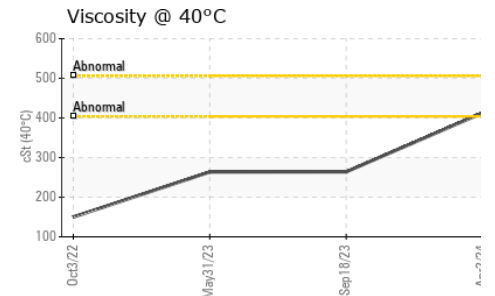
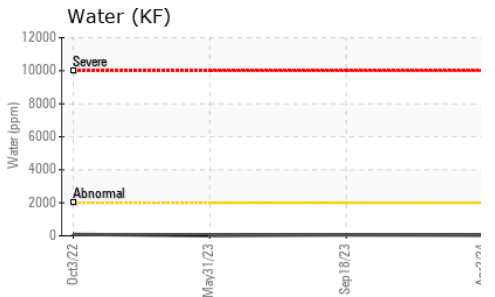
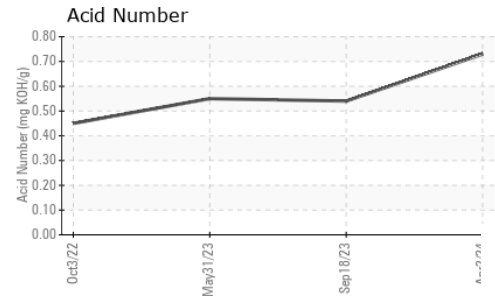
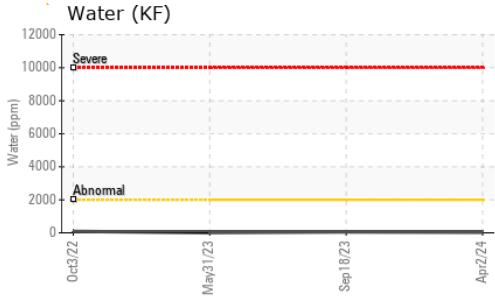
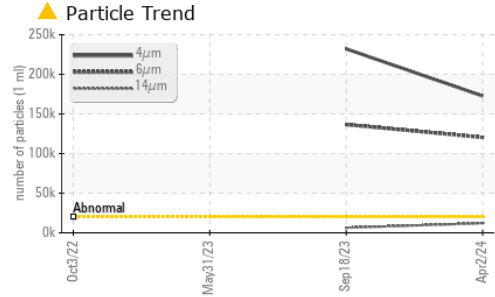
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	<b>▲ 172677</b>	▲ 232142	---
Particles >6µm	ASTM D7647 >5000	<b>▲ 120406</b>	▲ 136630	---
Particles >14µm	ASTM D7647 >640	<b>▲ 12089</b>	▲ 6424	---
Particles >21µm	ASTM D7647 >160	<b>▲ 1901</b>	▲ 868	---
Particles >38µm	ASTM D7647 >40	<b>15</b>	12	---
Particles >71µm	ASTM D7647 >10	<b>1</b>	1	---
Oil Cleanliness	ISO 4406 (c) >21/19/16	<b>▲ 25/24/21</b>	▲ 25/24/20	---

### FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.73</b>	0.54	0.55



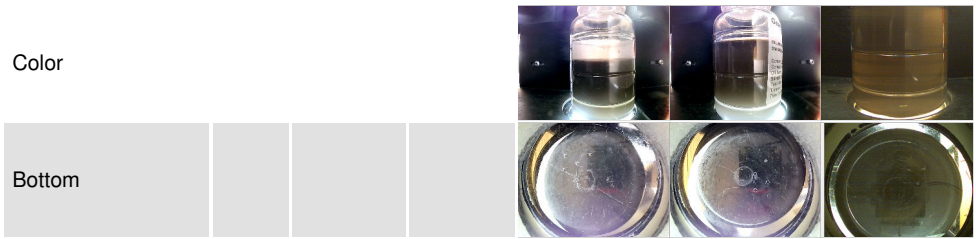
# OIL ANALYSIS REPORT



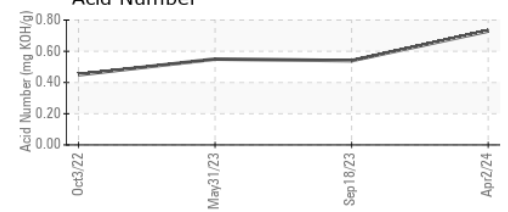
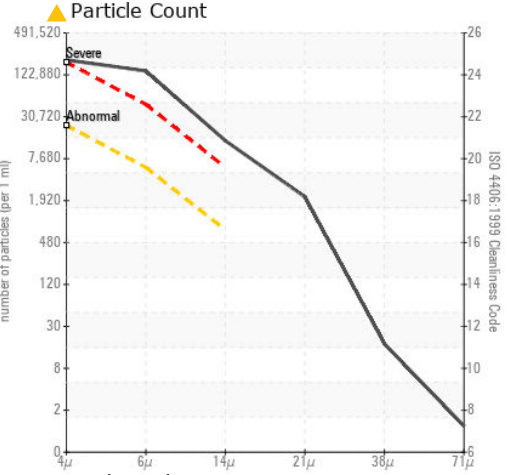
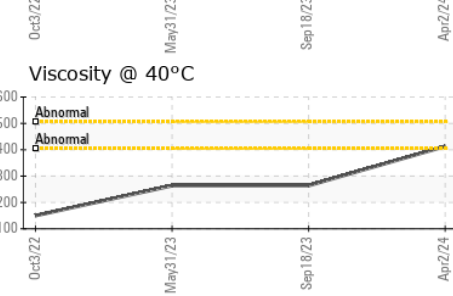
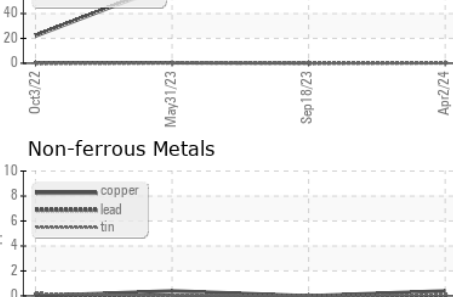
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	▲ MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	413	264	263.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USPM36599  
**Lab Number** : 06136430  
**Unique Number** : 10955895  
**Test Package** : IND 2  
**Received** : 02 Apr 2024  
**Tested** : 03 Apr 2024  
**Diagnosed** : 04 Apr 2024 - Doug Bogart

**SMITHFIELD FOODS - KINSTON**  
 KINSTON, NC  
 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)