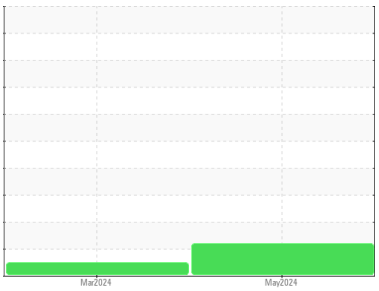
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
BONE CANNON 3
Component
Hydraulic System
Fluid
{not provided} (--- 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
The copper level is abnormal. All other 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		**USP0011890**	USP0007455	---
Sample Date		Client Info		**11 May 2024**	04 Mar 2024	---
Machine Age	hrs	Client Info		**0**	0	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	N/A	---
Sample Status				**ABNORMAL**	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**1**	0	---
Chromium	ppm	ASTM D5185m	>20	**<1**	0	---
Nickel	ppm	ASTM D5185m	>20	**<1**	0	---
Titanium	ppm	ASTM D5185m		**<1**	0	---
Silver	ppm	ASTM D5185m		**<1**	0	---
Aluminum	ppm	ASTM D5185m	>20	**2**	0	---
Lead	ppm	ASTM D5185m	>20	**2**	<1	---
Copper	ppm	ASTM D5185m	>20	▲ **27**	20	---
Tin	ppm	ASTM D5185m	>20	**1**	<1	---
Vanadium	ppm	ASTM D5185m		**<1**	0	---
Cadmium	ppm	ASTM D5185m		**<1**	0	---

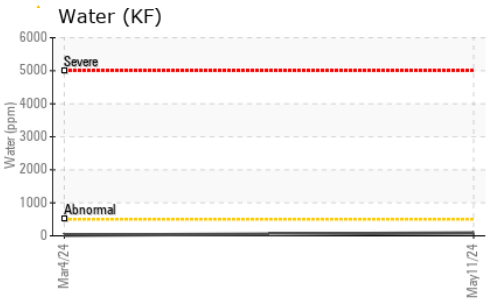
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	---
Barium	ppm	ASTM D5185m		**0**	2	---
Molybdenum	ppm	ASTM D5185m		**<1**	0	---
Manganese	ppm	ASTM D5185m		**0**	0	---
Magnesium	ppm	ASTM D5185m		**1**	2	---
Calcium	ppm	ASTM D5185m		**24**	24	---
Phosphorus	ppm	ASTM D5185m		**215**	186	---
Zinc	ppm	ASTM D5185m		**176**	168	---
Sulfur	ppm	ASTM D5185m		**3376**	2705	---

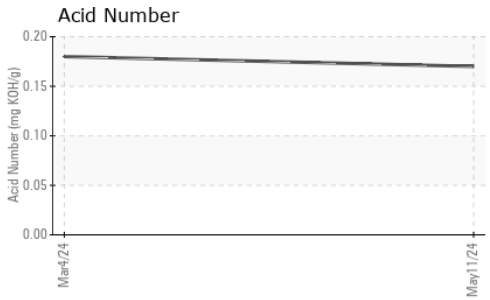
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**1**	0	---
Sodium	ppm	ASTM D5185m		**9**	14	---
Potassium	ppm	ASTM D5185m	>20	**2**	0	---
Water	%	ASTM D6304	>0.05	**0.008**	0.002	---
ppm Water	ppm	ASTM D6304	>500	**88**	18	---

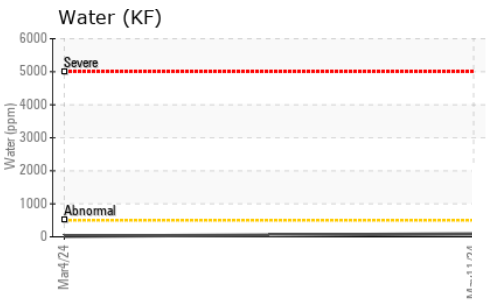
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**---**	4504	---
Particles >6µm		ASTM D7647	>1300	**---**	491	---
Particles >14µm		ASTM D7647	>160	**---**	22	---
Particles >21µm		ASTM D7647	>40	**---**	4	---
Particles >38µm		ASTM D7647	>10	**---**	0	---
Particles >71µm		ASTM D7647	>3	**---**	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**---**	19/16/12	---

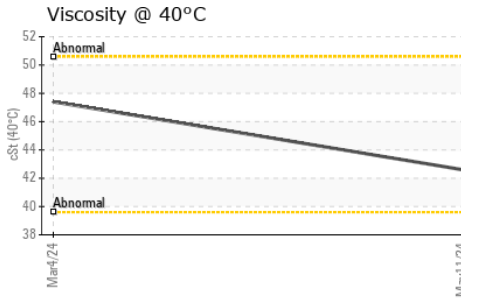
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.17**	0.18	---

OIL ANALYSIS REPORT



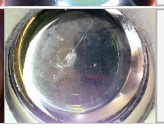




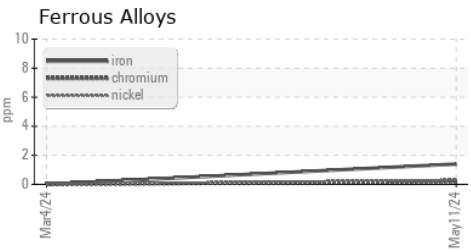


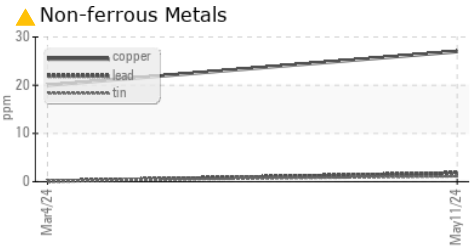
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	▲ **MODER**	NONE	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.05	**NEG**	NEG	---
Free Water	scalar	*Visual		**NEG**	NEG	---

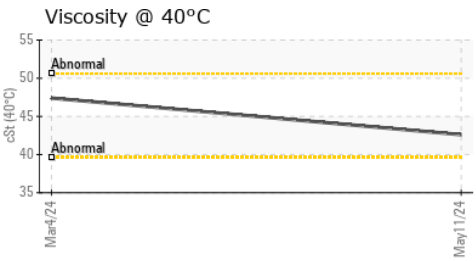
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**42.6**	47.4	---

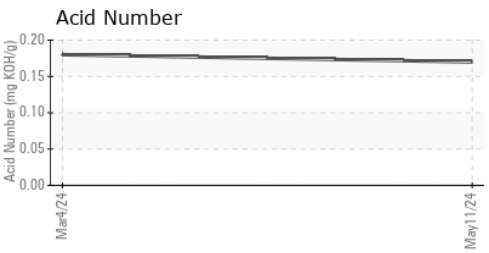
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS









Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0011890
Lab Number : 06180205
Unique Number : 11031531
Test Package : IND 2

Received : 15 May 2024
Tested : 18 May 2024
Diagnosed : 18 May 2024 - Jonathan Hester

SMITHFIELD FOOD - TARHEEL
15855 HWY. 87 WEST
TARHEEL, NC
US 28392
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: