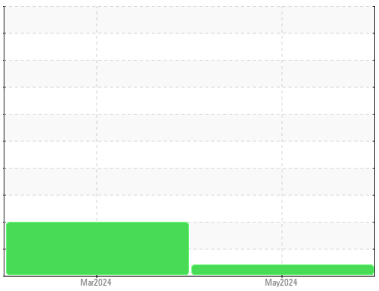
OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS

Machine Id
BONE CANNON 2
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (--- 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		**USP0011889**	USP0007454	---
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**	ABNORMAL	---

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	**<1**	0	---
Copper	ppm	ASTM D5185m	>20	**7**	0	---
Tin	ppm	ASTM D5185m	>20	**<1**	0	---
Vanadium	ppm	ASTM D5185m		**<1**	0	---
Cadmium	ppm	ASTM D5185m		**<1**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	**0**	0	---
Barium	ppm	ASTM D5185m	5	**0**	1	---
Molybdenum	ppm	ASTM D5185m	5	**<1**	0	---
Manganese	ppm	ASTM D5185m		**0**	0	---
Magnesium	ppm	ASTM D5185m	25	**1**	2	---
Calcium	ppm	ASTM D5185m	200	**39**	42	---
Phosphorus	ppm	ASTM D5185m	300	**377**	335	---
Zinc	ppm	ASTM D5185m	370	**425**	402	---
Sulfur	ppm	ASTM D5185m	2500	**973**	723	---

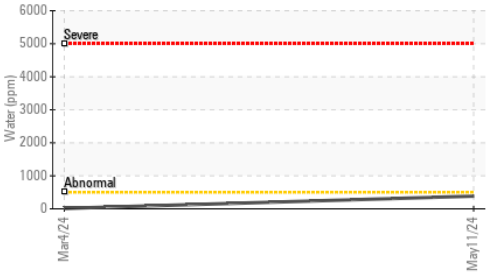
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**<1**	0	---
Sodium	ppm	ASTM D5185m		**9**	15	---
Potassium	ppm	ASTM D5185m	>20	**2**	0	---
Water	%	ASTM D6304	>0.05	**0.038**	0.001	---
ppm Water	ppm	ASTM D6304	>500	**385**	12	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**---**	▲ 84793	---
Particles >6µm		ASTM D7647	>1300	**---**	▲ 33493	---
Particles >14µm		ASTM D7647	>160	**---**	▲ 2244	---
Particles >21µm		ASTM D7647	>40	**---**	▲ 349	---
Particles >38µm		ASTM D7647	>10	**---**	2	---
Particles >71µm		ASTM D7647	>3	**---**	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**---**	▲ 24/22/18	---

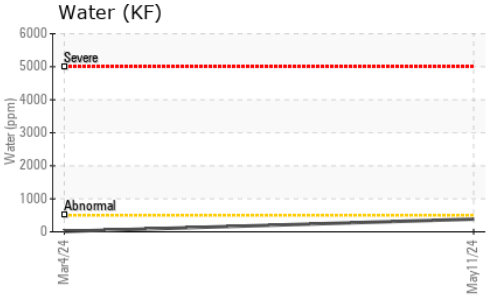
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	**0.43**	0.43	---

OIL ANALYSIS REPORT

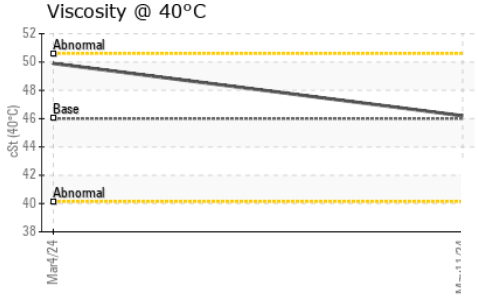
Water (KF)



Water (KF)

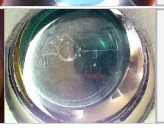


Viscosity @ 40°C



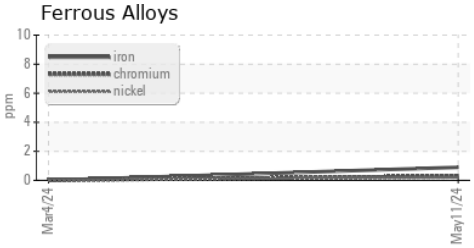
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	▲ **MODER**	NONE	---
Sand/Dirt	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	46	**46.2**	49.9	---

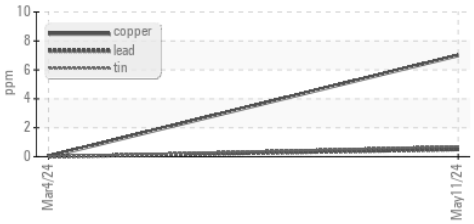
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

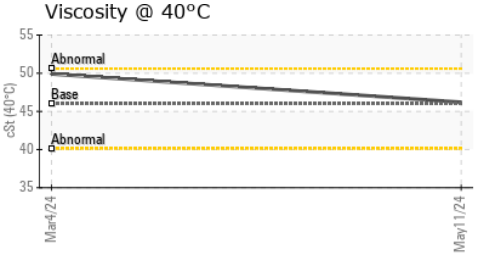
Ferrous Alloys



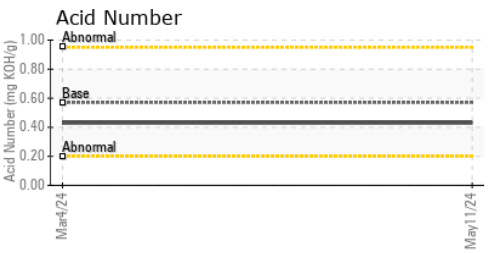
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0011889
Lab Number : 06180204
Unique Number : 11031530
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: