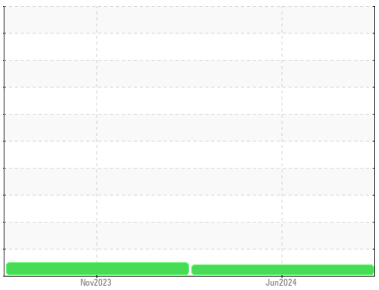
OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS

Machine Id
HT-503 (S/N J30545)
Component
Refrigeration Compressor
Fluid
M & M 717 (--- 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		**USP0013037**	USP0003849	---
Sample Date		Client Info		**17 Jun 2024**	27 Nov 2023	---
Machine Age	hrs	Client Info		**26194**	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	>8	**2**	2	---
Chromium	ppm	ASTM D5185m	>2	**<1**	<1	---
Nickel	ppm	ASTM D5185m		**0**	<1	---
Titanium	ppm	ASTM D5185m		**0**	0	---
Silver	ppm	ASTM D5185m	>2	**0**	0	---
Aluminum	ppm	ASTM D5185m	>3	**0**	<1	---
Lead	ppm	ASTM D5185m	>2	**0**	<1	---
Copper	ppm	ASTM D5185m	>8	**0**	<1	---
Tin	ppm	ASTM D5185m	>4	**0**	<1	---
Vanadium	ppm	ASTM D5185m		**0**	0	---
Cadmium	ppm	ASTM D5185m		**0**	<1	---

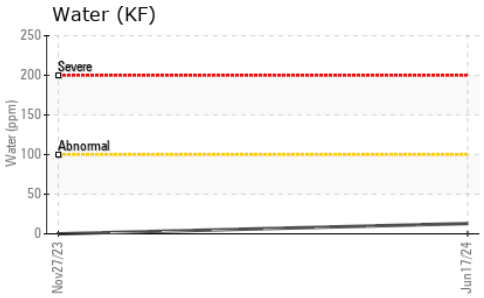
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	---
Barium	ppm	ASTM D5185m		**0**	<1	---
Molybdenum	ppm	ASTM D5185m		**0**	<1	---
Manganese	ppm	ASTM D5185m		**0**	<1	---
Magnesium	ppm	ASTM D5185m		**<1**	0	---
Calcium	ppm	ASTM D5185m		**0**	0	---
Phosphorus	ppm	ASTM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

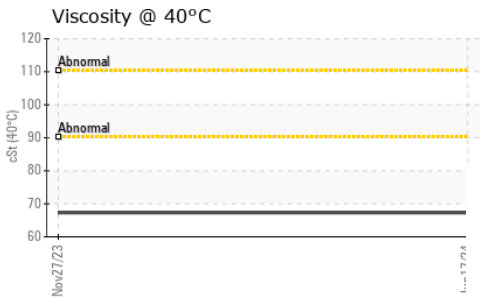
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**<1**	2	---
Sodium	ppm	ASTM D5185m		**0**	0	---
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	---
Water	%	ASTM D6304	>0.01	**0.001**	0.001	---
ppm Water	ppm	ASTM D6304	>100	**13**	0	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**---**	7909	---
Particles >6µm		ASTM D7647	>2500	**---**	1375	---
Particles >14µm		ASTM D7647	>320	**---**	20	---
Particles >21µm		ASTM D7647	>80	**---**	3	---
Particles >38µm		ASTM D7647	>20	**---**	1	---
Particles >71µm		ASTM D7647	>4	**---**	0	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**---**	20/18/11	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974		**0.014**	0.014	---

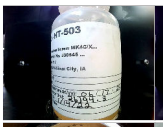
OIL ANALYSIS REPORT



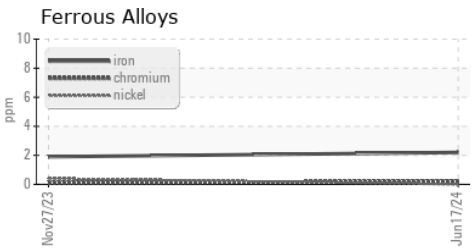


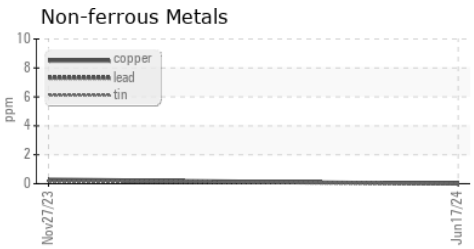
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	▲ **MODER**	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.01	**NEG**	NEG	---
Free Water	scalar	*Visual		**NEG**	NEG	---

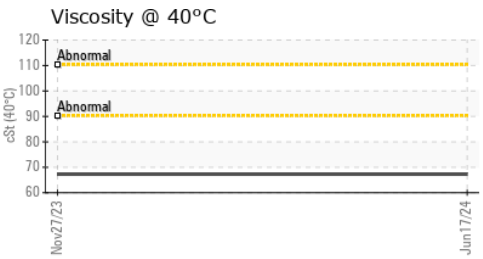
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**67.3**	67.3	---

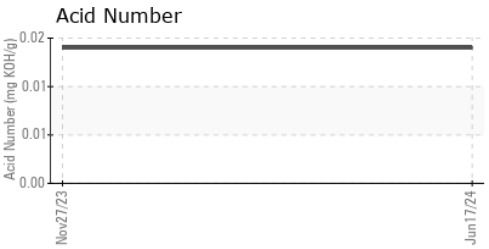
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS









Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0013037
Lab Number : 06221287
Unique Number : 11099484
Test Package : IND 2

Received : 26 Jun 2024
Tested : 28 Jun 2024
Diagnosed : 28 Jun 2024 - Doug Bogart

SMITHFIELD - SIOUX CITY
1000 CUNNINGHAM DR
SIOUX CITY, IA
US 51106
Contact: D PEARSON

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: