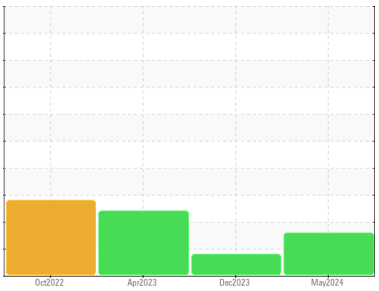
OIL ANALYSIS REPORT

Area
HOTLINE/120 MILL
Machine Id
120 MILL MTR STAND 2A NORTH BRG 1415-034-0211
Component
North Bearing
Fluid
ROYAL PURPLE SYNFILM GT 68 (30 GAL)

Sample Rating Trend



WEAR

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
The lead level is abnormal. All other component wear rates are normal.

Contamination
There is a high amount of silt (particulates < 14 microns in size) 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		**KFS0004811**	KFS0003072	KFS0003399
Sample Date		Client Info		**10 May 2024**	20 Dec 2023	17 Apr 2023
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>2	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**2**	4	6
Chromium	ppm	ASTM D5185m	>20	**0**	<1	0
Nickel	ppm	ASTM D5185m	>20	**1**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**<1**	2	<1
Lead	ppm	ASTM D5185m	>20	▲ **38**	▲ 47	▲ 45
Copper	ppm	ASTM D5185m	>20	**<1**	<1	<1
Tin	ppm	ASTM D5185m	>20	**2**	1	2
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	0
Barium	ppm	ASTM D5185m		**<1**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	0	<1
Magnesium	ppm	ASTM D5185m	90	**59**	78	84
Calcium	ppm	ASTM D5185m		**2**	2	2
Phosphorus	ppm	ASTM D5185m		**7**	34	7
Zinc	ppm	ASTM D5185m		**10**	0	16
Sulfur	ppm	ASTM D5185m		**21654**	21418	22525

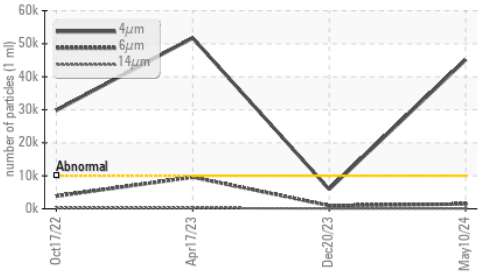
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**<1**	1	<1
Sodium	ppm	ASTM D5185m		**1**	<1	1
Potassium	ppm	ASTM D5185m	>20	**2**	<1	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	▲ **45080**	5901	▲ 51723
Particles >6µm		ASTM D7647	>2500	**1463**	968	▲ 9598
Particles >14µm		ASTM D7647	>160	**85**	92	● 226
Particles >21µm		ASTM D7647	>40	**23**	34	36
Particles >38µm		ASTM D7647	>10	**1**	4	2
Particles >71µm		ASTM D7647	>3	**0**	1	0
Oil Cleanliness		ISO 4406 (c)	>20/18/14	▲ **23/18/14**	20/17/14	▲ 23/20/15

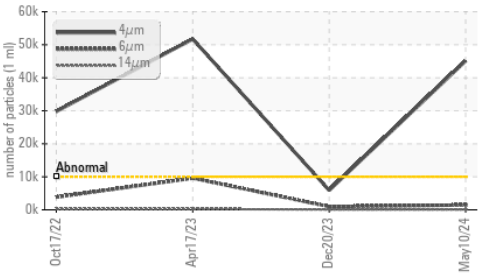
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.40**	0.38	0.39

OIL ANALYSIS REPORT

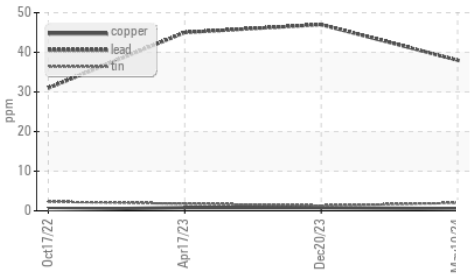
Particle Trend



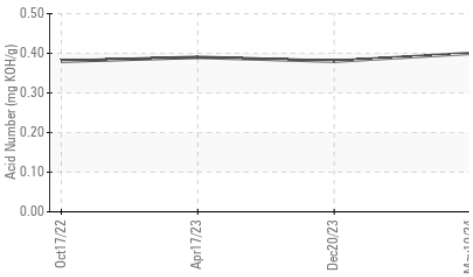
Particle Trend



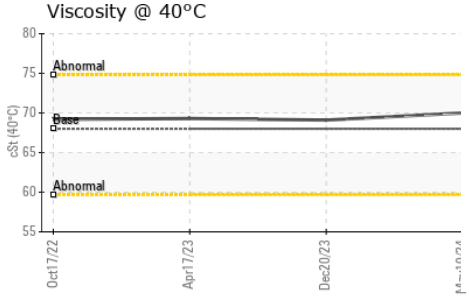
Non-ferrous Metals



Acid Number

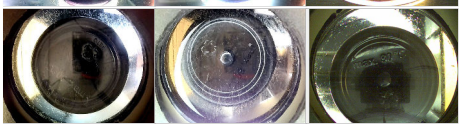


Viscosity @ 40°C



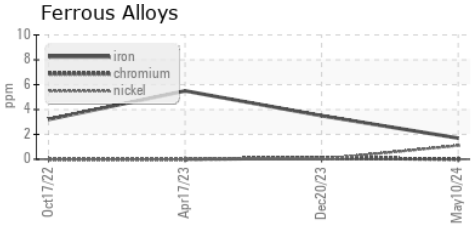
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>2	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	68	**70.0**	69.1	69.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

Ferrous Alloys



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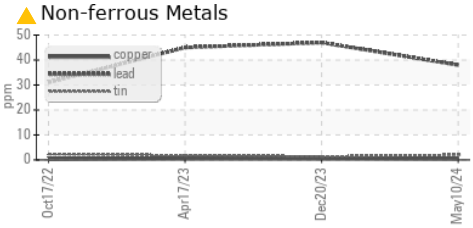

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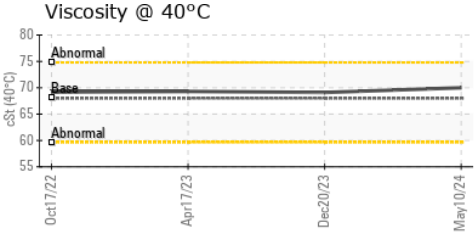
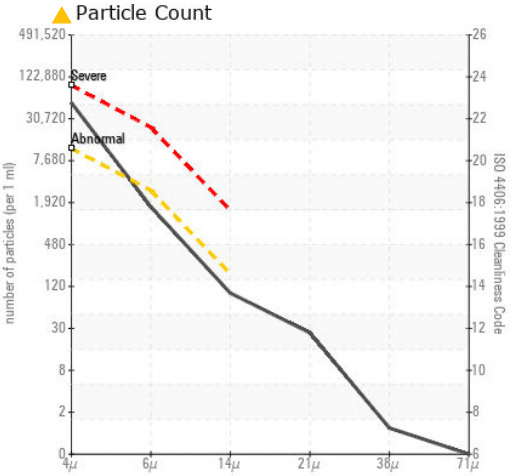
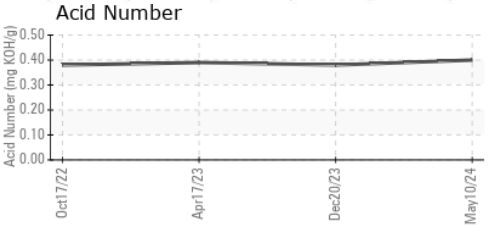


Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0004811 **Received** : 14 May 2024
Lab Number : 06179338 **Tested** : 16 May 2024
Unique Number : 11030664 **Diagnosed** : 16 May 2024 - Angela Borella
Test Package : IND 2 (Additional Tests: PrtCount)

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)

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