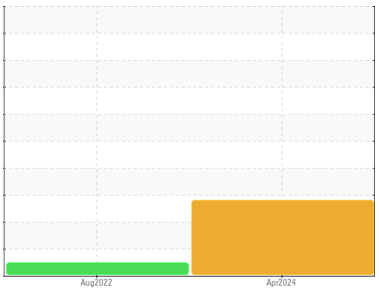
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
HOWARD SHEPPARD
Machine Id
2610 HOWARD SHEPPARD
Component
Front Differential
Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation
We recommend you service the filters on this component if applicable. We recommend an early resample to monitor this condition.

Wear
Gear wear is indicated.

Contamination
There is a high amount of particulates present in the oil.

Fluid Condition
The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0934576**	WC0771216	---
Sample Date		Client Info		**12 Apr 2024**	12 Aug 2022	---
Machine Age	mls	Client Info		**173135**	350	---
Oil Age	mls	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	>500	▲ **463**	1	---
Chromium	ppm	ASTM D5185m	>10	**2**	0	---
Nickel	ppm	ASTM D5185m	>10	**<1**	<1	---
Titanium	ppm	ASTM D5185m		**<1**	0	---
Silver	ppm	ASTM D5185m		**0**	0	---
Aluminum	ppm	ASTM D5185m	>25	**9**	<1	---
Lead	ppm	ASTM D5185m	>25	**<1**	<1	---
Copper	ppm	ASTM D5185m	>100	**3**	0	---
Tin	ppm	ASTM D5185m	>10	**<1**	0	---
Vanadium	ppm	ASTM D5185m		**0**	0	---
Cadmium	ppm	ASTM D5185m		**<1**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**269**	286	---
Barium	ppm	ASTM D5185m		**<1**	0	---
Molybdenum	ppm	ASTM D5185m		**<1**	0	---
Manganese	ppm	ASTM D5185m		**13**	<1	---
Magnesium	ppm	ASTM D5185m		**1**	2	---
Calcium	ppm	ASTM D5185m		**0**	<1	---
Phosphorus	ppm	ASTM D5185m		**1410**	1472	---
Zinc	ppm	ASTM D5185m		**9**	3	---
Sulfur	ppm	ASTM D5185m		**24631**	27122	---

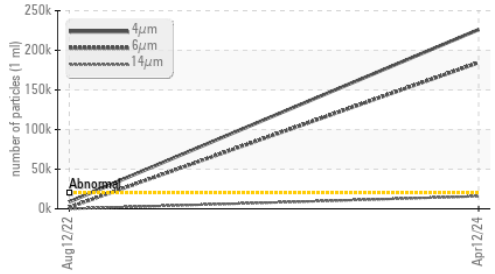
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	**60**	1	---
Sodium	ppm	ASTM D5185m		**2**	<1	---
Potassium	ppm	ASTM D5185m	>20	**2**	<1	---
Water	%	ASTM D6304	>.2	**0.016**	0.073	---
ppm Water	ppm	ASTM D6304	>2000	**166**	735.6	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **226199**	8758	---
Particles >6µm		ASTM D7647	>5000	▲ **184627**	1887	---
Particles >14µm		ASTM D7647	>640	▲ **15838**	91	---
Particles >21µm		ASTM D7647	>160	▲ **317**	21	---
Particles >38µm		ASTM D7647	>40	**3**	1	---
Particles >71µm		ASTM D7647	>10	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **25/25/21**	20/18/14	---

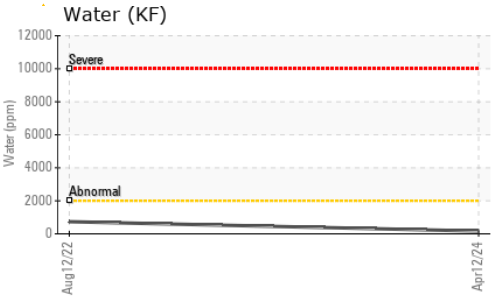
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**2.21**	2.43	---

OIL ANALYSIS REPORT

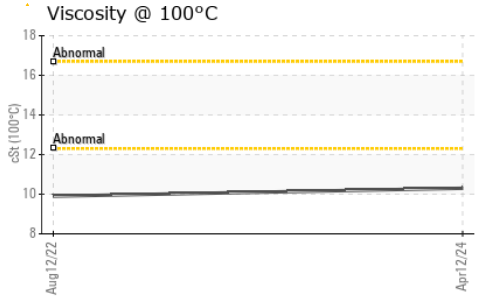
Particle Trend



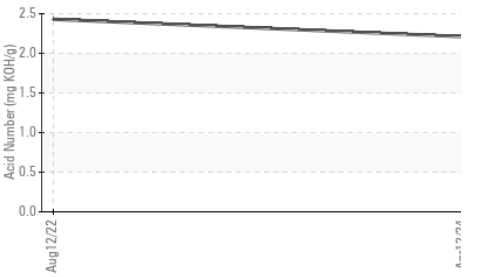
Water (KF)



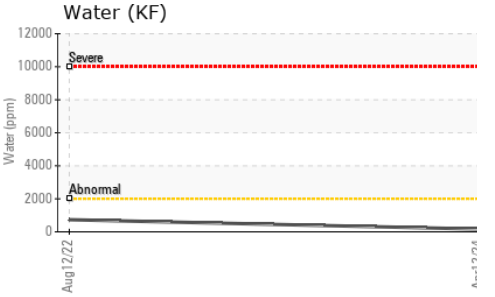
Viscosity @ 100°C



Acid Number

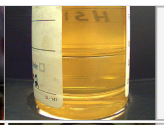
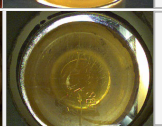


Water (KF)



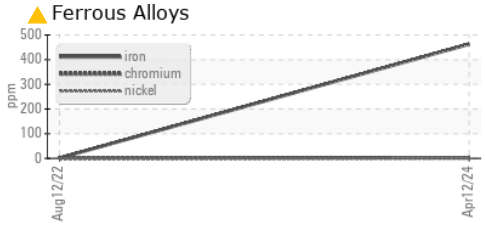
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**56.8**	53.9	---
Visc @ 100°C	cSt	ASTM D445		**10.3**	9.9	---
Viscosity Index (VI)	Scale	ASTM D2270		**172**	172	---

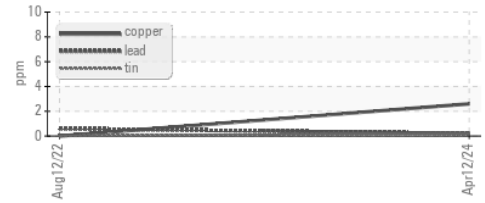
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

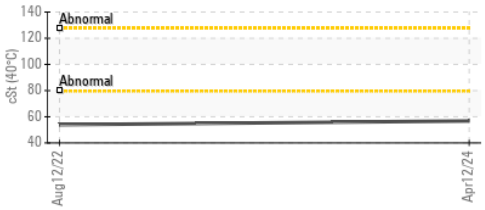
Ferrous Alloys



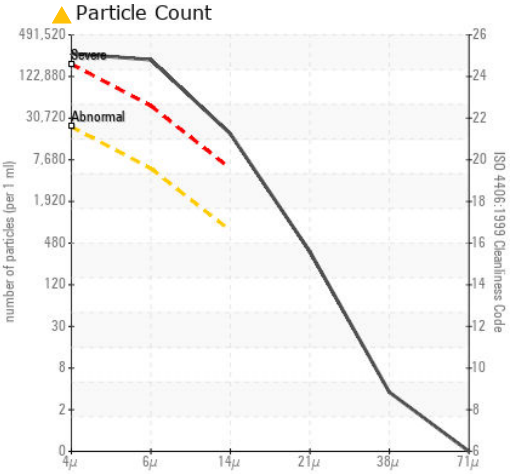
Non-ferrous Metals



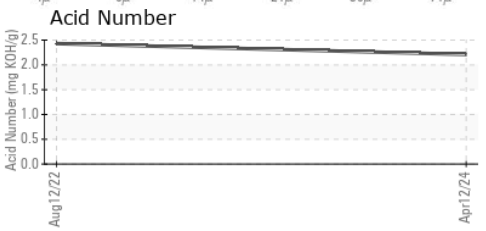
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0934576 **Received** : 06 Jun 2024
Lab Number : 06201505 **Tested** : 07 Jun 2024
Unique Number : 11063628 **Diagnosed** : 11 Jun 2024 - Doug Bogart
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

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)

BASF - GIANNA CREDAROLI
500 WHITE PLAINS RD
TARRYTOWN, NY
US 10591
Contact: MIKE BARRY
mike.barry@basf.com
T:
F:

Report Id: bastarhd [WUSCAR] 06201505 (Generated: 06/11/2024 10:47:09) Rev: 1
Contact/Location: MIKE BARRY - BASTARHD