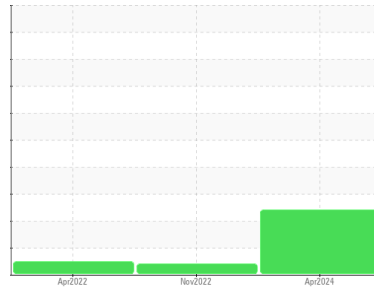




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
HOWARD SHEPPARD
 Machine Id
2566 HOWARD SHEPPARD
 Component
Front Differential
 Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

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. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0934659	WC0771210	WC0682441
Sample Date	Client Info		14 Apr 2024	02 Nov 2022	03 Apr 2022
Machine Age	mls	Client Info	210821	78226	1466
Oil Age	mls	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	▲ 511	248	5
Chromium	ppm	ASTM D5185m >10	3	2	<1
Nickel	ppm	ASTM D5185m >10	0	<1	<1
Titanium	ppm	ASTM D5185m	<1	<1	0
Silver	ppm	ASTM D5185m	0	0	<1
Aluminum	ppm	ASTM D5185m >25	14	3	<1
Lead	ppm	ASTM D5185m >25	0	0	0
Copper	ppm	ASTM D5185m >100	2	1	<1
Tin	ppm	ASTM D5185m >10	0	0	<1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	83	97	112
Barium	ppm	ASTM D5185m	1	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	0
Manganese	ppm	ASTM D5185m	13	8	<1
Magnesium	ppm	ASTM D5185m	151	148	191
Calcium	ppm	ASTM D5185m	4	3	0
Phosphorus	ppm	ASTM D5185m	1624	1539	1747
Zinc	ppm	ASTM D5185m	16	6	0
Sulfur	ppm	ASTM D5185m	26492	22289	22846

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	44	16	2
Sodium	ppm	ASTM D5185m	7	3	<1
Potassium	ppm	ASTM D5185m >20	1	1	0
Water	%	ASTM D6304 >.2	0.052	0.040	0.046
ppm Water	ppm	ASTM D6304 >2000	523	403.2	462.8

FLUID CLEANLINESS

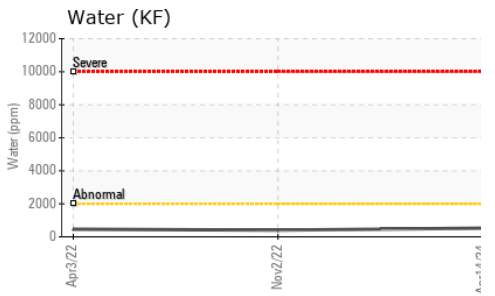
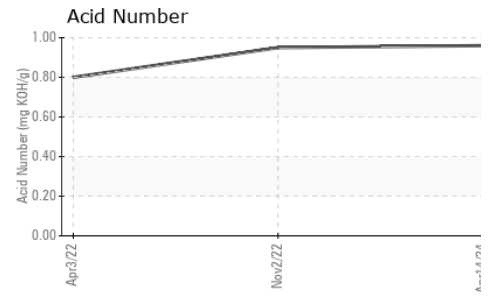
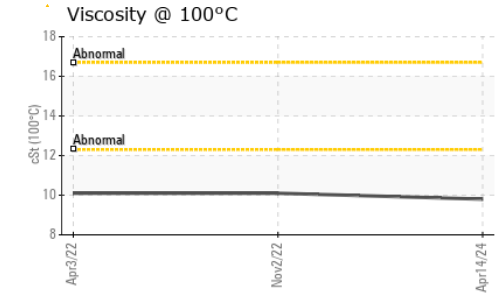
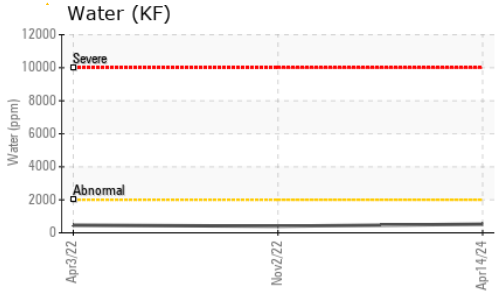
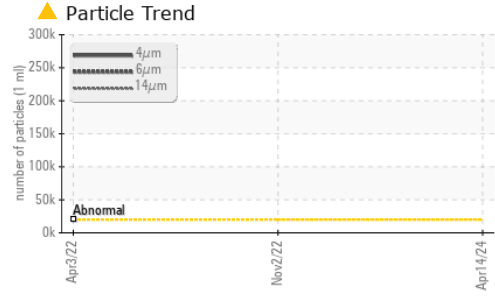
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 263471	---	---
Particles >6µm	ASTM D7647	>5000	▲ 80544	---	---
Particles >14µm	ASTM D7647	>640	▲ 801	---	---
Particles >21µm	ASTM D7647	>160	105	---	---
Particles >38µm	ASTM D7647	>40	2	---	---
Particles >71µm	ASTM D7647	>10	0	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 25/24/17	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.96	0.95	0.80



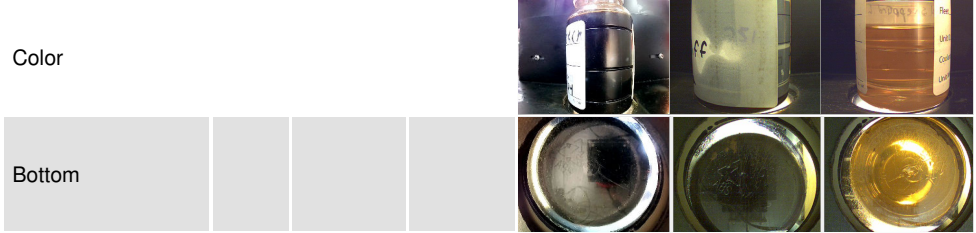
OIL ANALYSIS REPORT



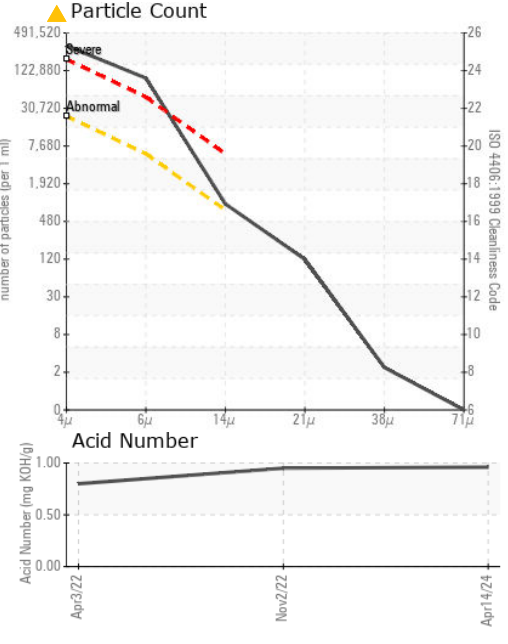
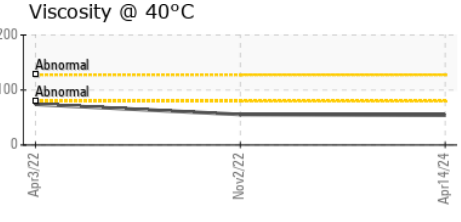
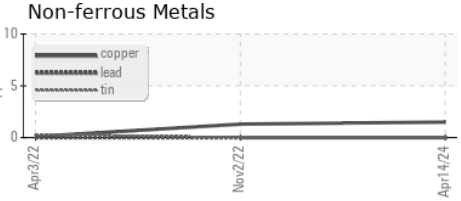
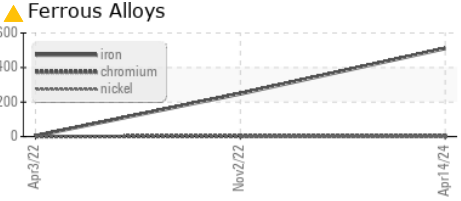
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	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	54.1	55.5	74
Visc @ 100°C	cSt	ASTM D445	9.8	10.1	10.1
Viscosity Index (VI)	Scale	ASTM D2270	168	171	118

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0934659 **Received** : 30 May 2024
Lab Number : 06195906 **Tested** : 02 Jun 2024
Unique Number : 11058029 **Diagnosed** : 02 Jun 2024 - Doug Bogart
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

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

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)