



OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area
WALPOLE
 Machine Id
137 - WALPOLE
 Component
Rear Differential
 Fluid
GEAR OIL SAE 80 (--- GAL)



DIAGNOSIS

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

Wear
 All 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	WC0900849	---	---
Sample Date	Client Info	01 Mar 2024	---	---
Machine Age	mls	Client Info	39911	---
Oil Age	mls	Client Info	0	---
Oil Changed	Client Info	N/A	---	---
Sample Status		ABNORMAL	---	---

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >500	125	---	---
Chromium	ppm	ASTM D5185m >10	1	---	---
Nickel	ppm	ASTM D5185m >10	0	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m >25	1	---	---
Lead	ppm	ASTM D5185m >25	0	---	---
Copper	ppm	ASTM D5185m >100	2	---	---
Tin	ppm	ASTM D5185m >10	<1	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 400	204	---	---
Barium	ppm	ASTM D5185m 200	0	---	---
Molybdenum	ppm	ASTM D5185m 12	<1	---	---
Manganese	ppm	ASTM D5185m	6	---	---
Magnesium	ppm	ASTM D5185m 12	50	---	---
Calcium	ppm	ASTM D5185m 150	5	---	---
Phosphorus	ppm	ASTM D5185m 1650	1654	---	---
Zinc	ppm	ASTM D5185m 125	12	---	---
Sulfur	ppm	ASTM D5185m 22500	29357	---	---

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >75	31	---	---
Sodium	ppm	ASTM D5185m	4	---	---
Potassium	ppm	ASTM D5185m >20	0	---	---
Water	%	ASTM D6304 >.2	0.039	---	---
ppm Water	ppm	ASTM D6304 >2000	398	---	---

FLUID CLEANLINESS

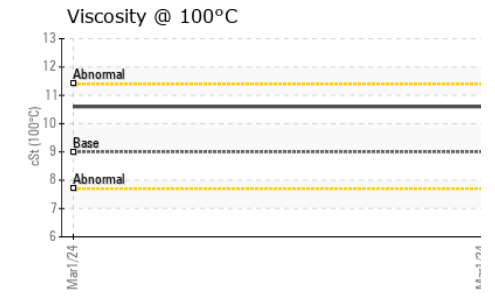
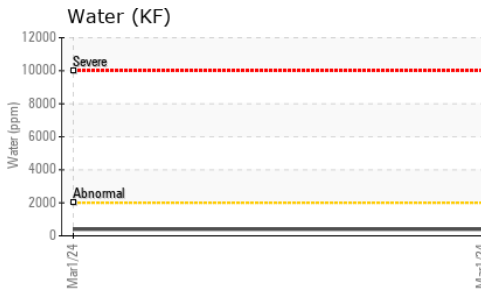
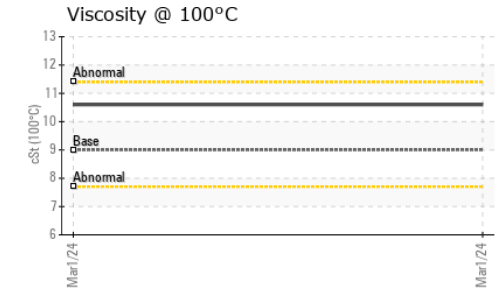
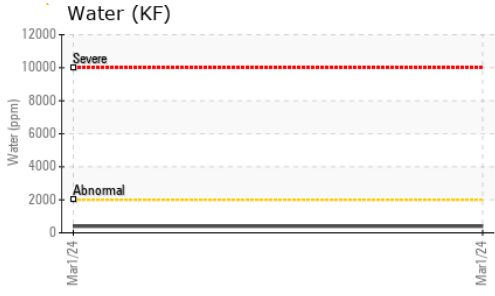
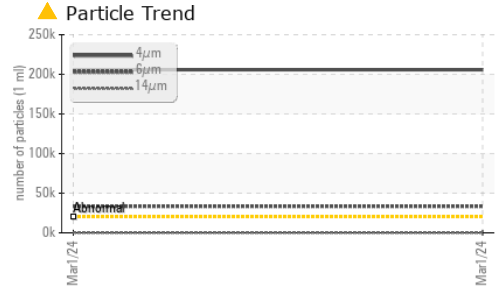
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	▲ 205764	---	---
Particles >6µm	ASTM D7647 >5000	▲ 33500	---	---
Particles >14µm	ASTM D7647 >640	186	---	---
Particles >21µm	ASTM D7647 >160	38	---	---
Particles >38µm	ASTM D7647 >40	1	---	---
Particles >71µm	ASTM D7647 >10	0	---	---
Oil Cleanliness	ISO 4406 (c) >21/19/16	▲ 25/22/15	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 2.00	2.12	---	---



OIL ANALYSIS REPORT



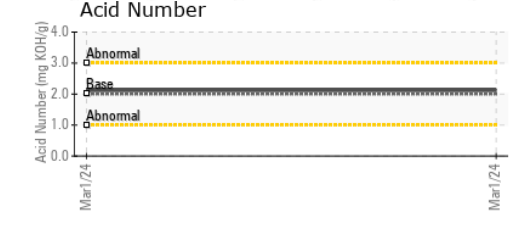
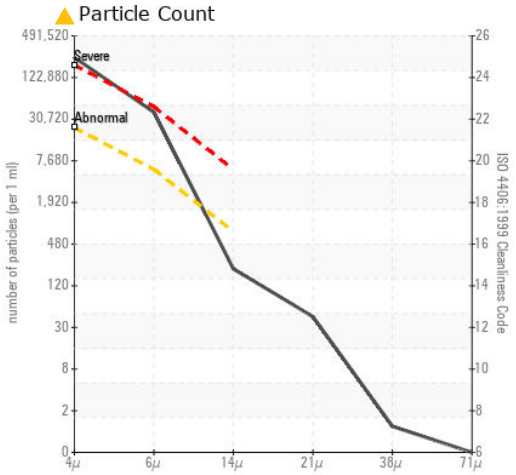
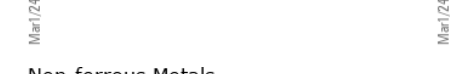
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	LIGHT	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	74	61.0	---	---
Visc @ 100°C	cSt	ASTM D445	9.0	10.6	---	---
Viscosity Index (VI)	Scale	ASTM D2270	94	164	---	---

SAMPLE IMAGES

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0900849 **Received** : 21 Mar 2024
Lab Number : **06124914** **Tested** : 22 Mar 2024
Unique Number : 10939065 **Diagnosed** : 26 Mar 2024 - Jonathan Hester
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

BASF - GIANNA CREDAROLI
 500 WHITE PLAINS RD
 TARRYTOWN, NY
 US 10591
 Contact: GIANNA CREDAROLI
 gianna.credaroli@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)