OIL ANALYSIS REPORT

Sample Rating Trend

Mar 2024

NORMAL
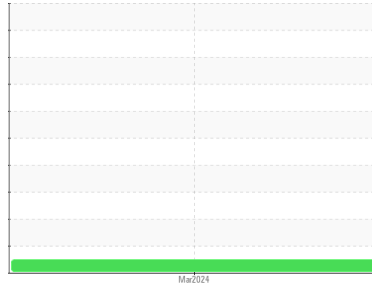
Area
Gerdau - 888078
Machine Id
AG275
Component
Unknown Component
Fluid
SHELL OMALA S4 GX 320 (--- GAL)

DIAGNOSIS

Recommendation

The sample submitted is 2 times dirtier than the ISO dirt count recommendation of 19/16/14.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Machine ID		Client Info		Stage 4 Gearbox	---	---
Department		Client Info		Sales	---	---
Sample From		Client Info		Machine	---	---
Production Stage		Client Info		Initial	---	---
Sent to WC		Client Info		03/21/2024	---	---
Sample Number		Client Info		E30001728	---	---
Sample Date		Client Info		20 Mar 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Sample Status				NORMAL	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)		1	---	---
Chromium	ppm	ASTM D5185(m)		0	---	---
Nickel	ppm	ASTM D5185(m)		0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)		0	---	---
Lead	ppm	ASTM D5185(m)		0	---	---
Copper	ppm	ASTM D5185(m)		0	---	---
Tin	ppm	ASTM D5185(m)		2	---	---
Antimony	ppm	ASTM D5185(m)		0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
Beryllium	ppm	ASTM D5185(m)		0	---	---
Cadmium	ppm	ASTM D5185(m)		0	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		30	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		<1	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)		6	---	---
Calcium	ppm	ASTM D5185(m)		19	---	---
Phosphorus	ppm	ASTM D5185(m)		399	---	---
Zinc	ppm	ASTM D5185(m)		12	---	---
Sulfur	ppm	ASTM D5185(m)		4673	---	---
Lithium	ppm	ASTM D5185(m)		<1	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		2	---	---
Sodium	ppm	ASTM D5185(m)		<1	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Water	%	ASTM D6304*		0.009	---	---
ppm Water	ppm	ASTM D6304*		99	---	---

OIL ANALYSIS REPORT

Particle Count

Acid Number

Water (KF)

Viscosity @ 100°C

Viscosity @ 40°C
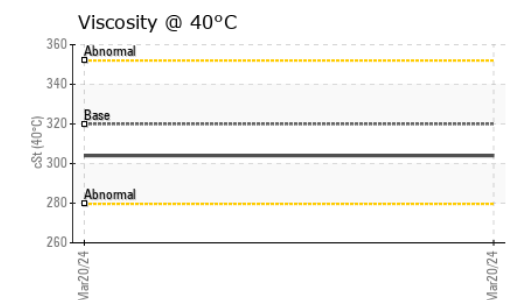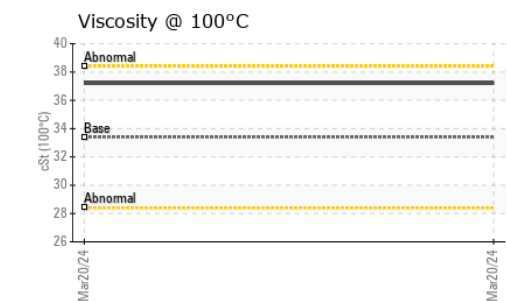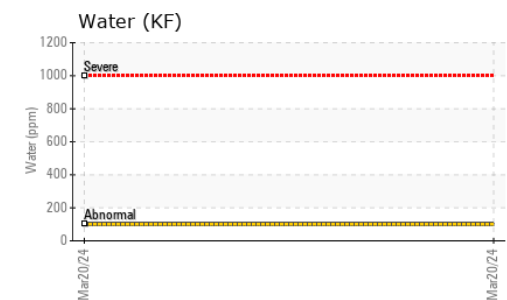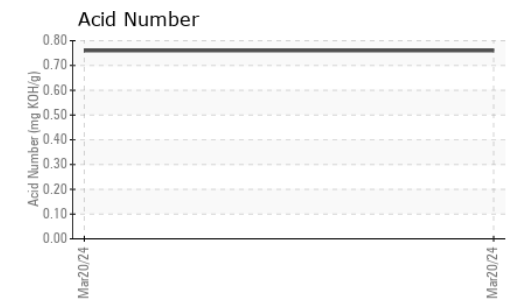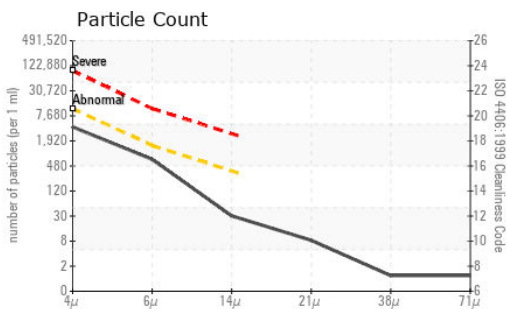
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	**3632**	---	---
Particles >6µm	ASTM D7647	>1300	**608**	---	---
Particles >14µm	ASTM D7647	>320	**27**	---	---
Particles >21µm	ASTM D7647	>80	**7**	---	---
Particles >38µm	ASTM D7647	>20	**1**	---	---
Particles >71µm	ASTM D7647	>4	**1**	---	---
Oil Cleanliness	ISO 4406 (c)	>20/17/15	**19/16/12**	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.76**	---	---

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	**NONE**	---	---
Sand/Dirt	scalar	Visual*	NONE	**NONE**	---	---
Appearance	scalar	Visual*	NORML	**NORML**	---	---
Odor	scalar	Visual*	NORML	**NORML**	---	---
Emulsified Water	scalar	Visual*		**NEG**	---	---
Free Water	scalar	Visual*		**NEG**	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	320	**304**	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	33.4	**37.2**	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	145	**172**	---	---

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