OIL ANALYSIS REPORT

Sample Rating Trend

OFF SPEC

Area
Gerdau - 888078
Machine Id
AG277-R
Component
Unknown Component
Fluid
SHELL OMALA S4 GX 220 (--- GAL)

DIAGNOSIS

Recommendation
We certify this oil to be clean and dry.

Fluid Condition
Visc @ 100°C is abnormally low. Viscosity Index (VI) is abnormally low.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Machine ID		Client Info		**Stage 11 Gearbo**	---	---
Department		Client Info		**Sales**	---	---
Sample From		Client Info		**Machine**	---	---
Production Stage		Client Info		**Lab Reclaim**	---	---
Sent to WC		Client Info		**04/01/2024**	---	---
Sample Number		Client Info		**E30001774**	---	---
Sample Date		Client Info		**28 Mar 2024**	---	---
Machine Age	hrs	Client Info		**0**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**ABNORMAL**	---	---

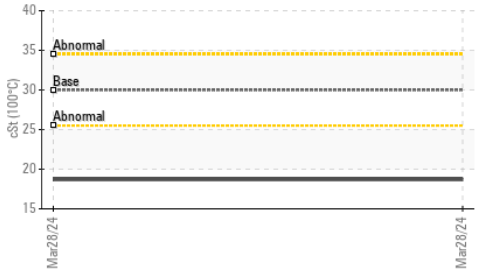
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)		**7**	---	---
Chromium	ppm	ASTM D5185(m)		**<1**	---	---
Nickel	ppm	ASTM D5185(m)		**0**	---	---
Titanium	ppm	ASTM D5185(m)		**0**	---	---
Silver	ppm	ASTM D5185(m)		**0**	---	---
Aluminum	ppm	ASTM D5185(m)		**0**	---	---
Lead	ppm	ASTM D5185(m)		**0**	---	---
Copper	ppm	ASTM D5185(m)		**<1**	---	---
Tin	ppm	ASTM D5185(m)		**0**	---	---
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)		**3**	---	---
Barium	ppm	ASTM D5185(m)		**0**	---	---
Molybdenum	ppm	ASTM D5185(m)		**<1**	---	---
Manganese	ppm	ASTM D5185(m)		**0**	---	---
Magnesium	ppm	ASTM D5185(m)		**3**	---	---
Calcium	ppm	ASTM D5185(m)		**12**	---	---
Phosphorus	ppm	ASTM D5185(m)		**238**	---	---
Zinc	ppm	ASTM D5185(m)		**17**	---	---
Sulfur	ppm	ASTM D5185(m)		**7566**	---	---
Lithium	ppm	ASTM D5185(m)		**<1**	---	---

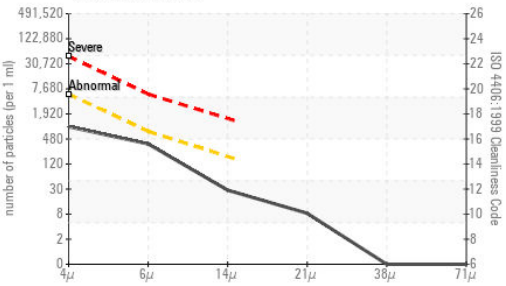
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		**0**	---	---
Sodium	ppm	ASTM D5185(m)		**3**	---	---
Potassium	ppm	ASTM D5185(m)	>20	**<1**	---	---
Water	%	ASTM D6304*		**0.001**	---	---
ppm Water	ppm	ASTM D6304*		**7**	---	---

OIL ANALYSIS REPORT

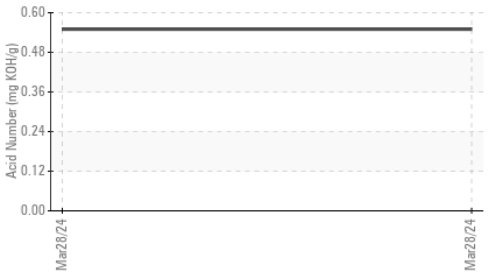
Viscosity @ 100°C



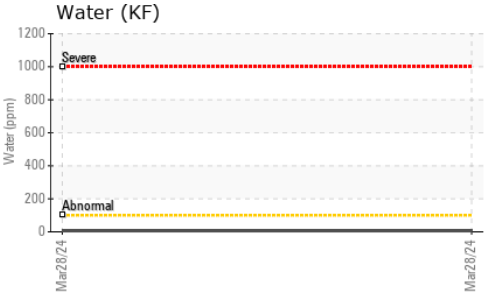
Particle Count



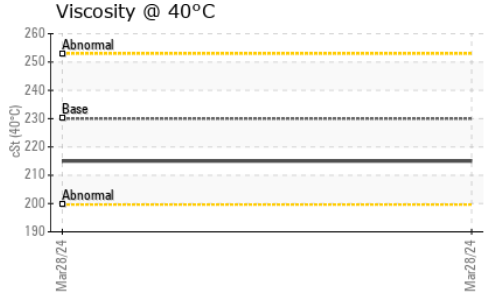
Acid Number



Water (KF)



Viscosity @ 40°C



FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**831**	---	---
Particles >6µm		ASTM D7647	>640	**321**	---	---
Particles >14µm		ASTM D7647	>160	**25**	---	---
Particles >21µm		ASTM D7647	>40	**7**	---	---
Particles >38µm		ASTM D7647	>10	**0**	---	---
Particles >71µm		ASTM D7647	>3	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/16/14	**17/16/12**	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.55**	---	---

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)	230	**215**	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	30	▲ **18.7**	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	160	▲ **96**	---	---

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

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30001774 **Received** : 02 Apr 2024
Lab Number : 02626154 **Tested** : 04 Apr 2024
Unique Number : 5759286 **Diagnosed** : 05 Apr 2024 - Tatiana Sorkina
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, TAN Man, VI)

To discuss this sample report, contact Customer Service at 1-905-372-2251.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

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