



OIL ANALYSIS REPORT

Sample Rating Trend

OFF SPEC



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

DIAGNOSIS

▲ **Recommendation**
 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		Initial	---	---
Sent to WC	Client Info		03/21/2024	---	---
Sample Number	Client Info		E30001730	---	---
Sample Date	Client Info		24 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

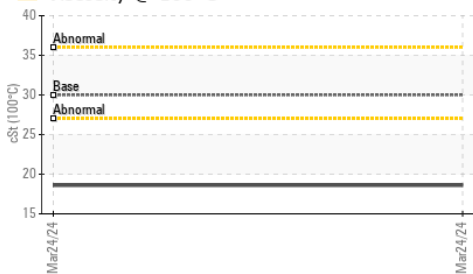
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	4	---	---
Barium	ppm	ASTM D5185(m)	0	---	---
Molybdenum	ppm	ASTM D5185(m)	<1	---	---
Manganese	ppm	ASTM D5185(m)	0	---	---
Magnesium	ppm	ASTM D5185(m)	3	---	---
Calcium	ppm	ASTM D5185(m)	13	---	---
Phosphorus	ppm	ASTM D5185(m)	247	---	---
Zinc	ppm	ASTM D5185(m)	18	---	---
Sulfur	ppm	ASTM D5185(m)	8143	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

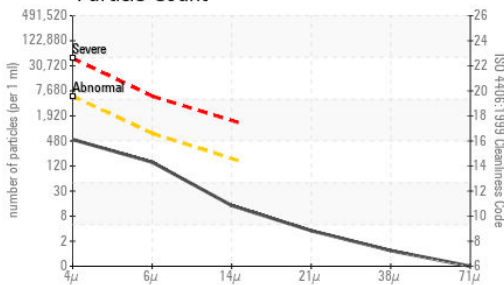
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	0	---	---
Sodium	ppm	ASTM D5185(m)	3	---	---
Potassium	ppm	ASTM D5185(m) >20	<1	---	---
Water	%	ASTM D6304*	0.003	---	---
ppm Water	ppm	ASTM D6304*	30	---	---

OIL ANALYSIS REPORT

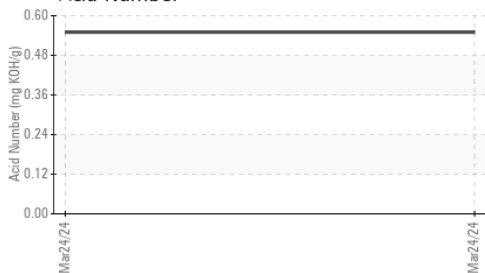
▲ Viscosity @ 100°C



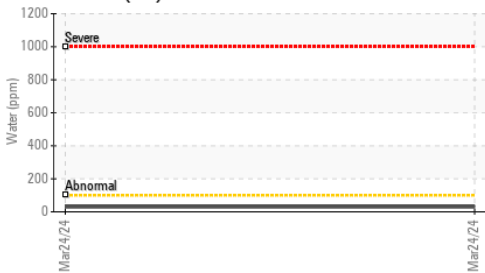
Particle Count



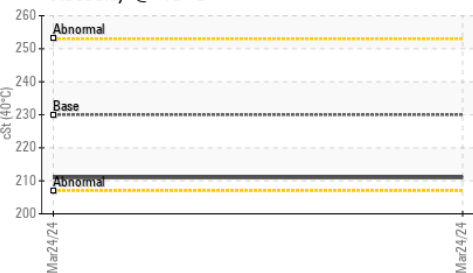
Acid Number



Water (KF)



Viscosity @ 40°C



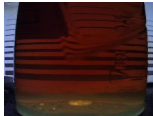

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	458	---	---
Particles >6µm	ASTM D7647	>640	131	---	---
Particles >14µm	ASTM D7647	>160	12	---	---
Particles >21µm	ASTM D7647	>40	3	---	---
Particles >38µm	ASTM D7647	>10	1	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/16/14	16/14/11	---	---

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	211	---
Visc @ 100°C	cSt	ASTM D7279(m)	30	▲ 18.6	---
Viscosity Index (VI)	Scale	ASTM D2270*	160	▲ 97	---

SAMPLE IMAGES

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



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30001730 **Received** : 25 Mar 2024
Lab Number : **02624377** **Tested** : 26 Mar 2024
Unique Number : 5749496 **Diagnosed** : 27 Mar 2024 - Tatiana Sorkina
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, TAN Man, VI)

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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.