



OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area
Gerdau - 888078
 Machine Id
AG271
 Component
Hydraulic System
 Fluid
SHELL ECOSAFE S3 DU 46 (--- GAL)

DIAGNOSIS

- Recommendation**
 The sample submitted is 2 times dirtier than the ISO dirt count recommendation of 19/16/14.
- Contamination**
 Water and ppm water contamination levels are abnormal.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Machine ID	Client Info	Turret Tank	---	---
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	E30001726	---	---
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		ABNORMAL	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185(m)	>20	0	---	---
Chromium ppm ASTM D5185(m)	>20	0	---	---
Nickel ppm ASTM D5185(m)	>20	0	---	---
Titanium ppm ASTM D5185(m)		0	---	---
Silver ppm ASTM D5185(m)		0	---	---
Aluminum ppm ASTM D5185(m)	>20	0	---	---
Lead ppm ASTM D5185(m)	>20	0	---	---
Copper ppm ASTM D5185(m)	>20	<1	---	---
Tin ppm ASTM D5185(m)	>20	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	---	---

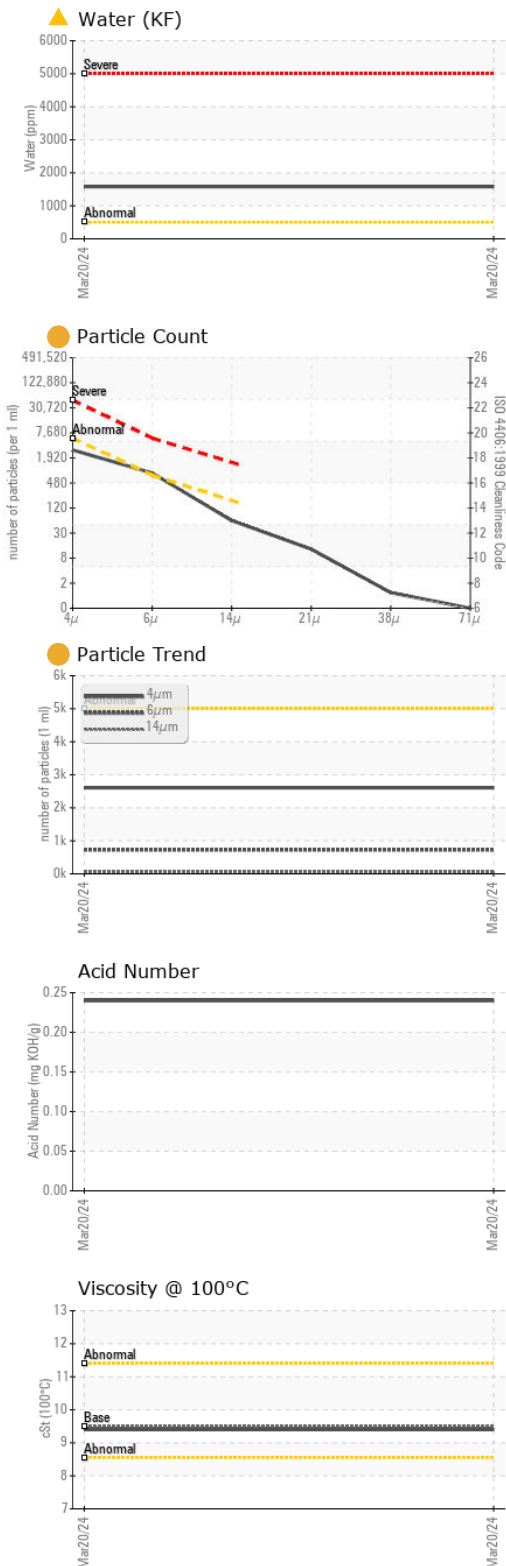
ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185(m)		1	---	---
Barium ppm ASTM D5185(m)		0	---	---
Molybdenum ppm ASTM D5185(m)		0	---	---
Manganese ppm ASTM D5185(m)		0	---	---
Magnesium ppm ASTM D5185(m)		<1	---	---
Calcium ppm ASTM D5185(m)		0	---	---
Phosphorus ppm ASTM D5185(m)		634	---	---
Zinc ppm ASTM D5185(m)		2	---	---
Sulfur ppm ASTM D5185(m)		2809	---	---
Lithium ppm ASTM D5185(m)		<1	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185(m)	>15	0	---	---
Sodium ppm ASTM D5185(m)		<1	---	---
Potassium ppm ASTM D5185(m)	>20	0	---	---
Water % ASTM D6304*	>0.05	▲ 0.157	---	---
ppm Water ppm ASTM D6304*	>500	▲ 1580	---	---

OIL ANALYSIS REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	2604	---	---
Particles >6µm	ASTM D7647	>640	728	---	---
Particles >14µm	ASTM D7647	>160	53	---	---
Particles >21µm	ASTM D7647	>40	11	---	---
Particles >38µm	ASTM D7647	>10	1	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/16/14	19/17/13	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.24	---	---

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*	>0.05	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	50.0	49.7	---
Visc @ 100°C	cSt	ASTM D7279(m)	9.5	9.4	---
Viscosity Index (VI)	Scale	ASTM D2270*	178	175	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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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. : E30001726 **Received** : 25 Mar 2024
Lab Number : **02624230** **Tested** : 26 Mar 2024
Unique Number : 5749349 **Diagnosed** : 27 Mar 2024 - Tatiana Sorkina
Test Package : IND 2 (Additional Tests: KF, KV100, 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.

Environmental 360 Solutions Ltd.
 640 Victoria Street
 Cobourg, ON
 CA K9A 5H5
 Contact: Jake Debruyne
 jdebruyne@e360s.ca
 T:
 F: (905)373-4950