

OIL ANALYSIS REPORT

Gerdau - 888078 AG272

Component **Hydraulic System**

SHELL ECOSAFE S3 DU 46 (--- GAL)

Sample Rating Trend **WATER**

DIAGNOSIS

Recommendation

The water content is higher than the recommended level of 300 ppm.

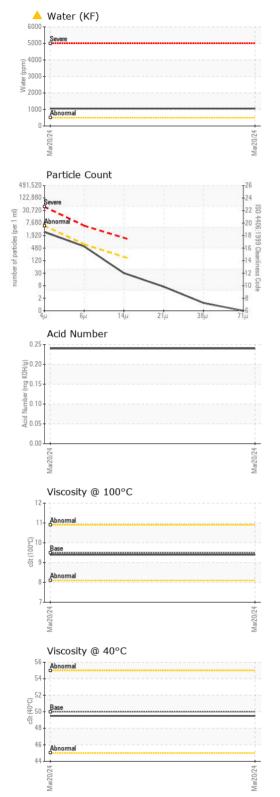
Contamination

Water and ppm water contamination levels are abnormal.

				Mar2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine ID		Client Info		Turret Tote		
Department		Client Info		Sales		
Sample From		Client Info		Tote		
Production Stage		Client Info		Virgin		
Sent to WC		Client Info		03/21/2024		
Sample Number		Client Info		E30001727		
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	0		
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)		0		
Calcium	ppm	ASTM D5185(m)		0		
Phosphorus	ppm	ASTM D5185(m)		639		
Zinc	ppm	ASTM D5185(m)		1		
Sulfur Lithium	ppm	ASTM D5185(m)		2833		
	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	<1		
Water	%	ASTM D6304*	>0.05	▲ 0.105		
ppm Water	ppm	ASTM D6304*	>500	<u> </u>		



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FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	2483		
Particles >6µm		ASTM D7647	>640	513		
Particles >14μm		ASTM D7647	>160	27		
Particles >21µm		ASTM D7647	>40	6		
Particles >38µm		ASTM D7647	>10	1		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/16/14	18/16/12		
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 PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	50.0	49.5		
Visc @ 100°C	cSt	ASTM D7279(m)	9.5	9.4		
Viscosity Index (VI)	Scale	ASTM D2270*	178	176		
SAMPLE IMAGES	3	method	limit/base	current	history1	history2
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CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

: E30001727 Lab Number : 02624237

Tested Unique Number : 5749356 Diagnosed

To discuss this sample report, contact Customer Service at 1-905-372-2251.

Test Package: IND 2 (Additional Tests: KF, KV100, VI)

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.

Received

: 25 Mar 2024

: 26 Mar 2024

: 27 Mar 2024 - Tatiana Sorkina

Environmental 360 Solutions Ltd.

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