

PROBLEM SUMMARY

Sample Rating Trend

VISCOSITY

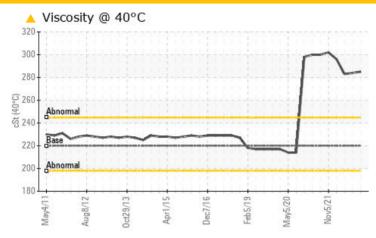


GC01 Machine Id GC01 Three Roll Lufkin

Component **Gearbox**

SHELL OMALA S2 GX 220 (100 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC	FIESTRI	ESULIS					
Sample Status				ABNORMAL	ABNORMAL	NORMAL	
Visc @ 40°C	cSt	ASTM D7279(m)	220	<u> </u>	<u>^</u> 284	283	

Customer Id: GOONAP Sample No.: WC0873605 Lab Number: 02602413 Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data: Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

30 Aug 2023 Diag: Kevin Marson

VISCOSITY



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 320 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



05 Feb 2023 Diag: Kevin Marson

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 320 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

View report

27 Oct 2022 Diag: Kevin Marson

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 320 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend





Gearbox

SHELL OMALA S2 GX 220 (100 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

▲ Fluid Condition

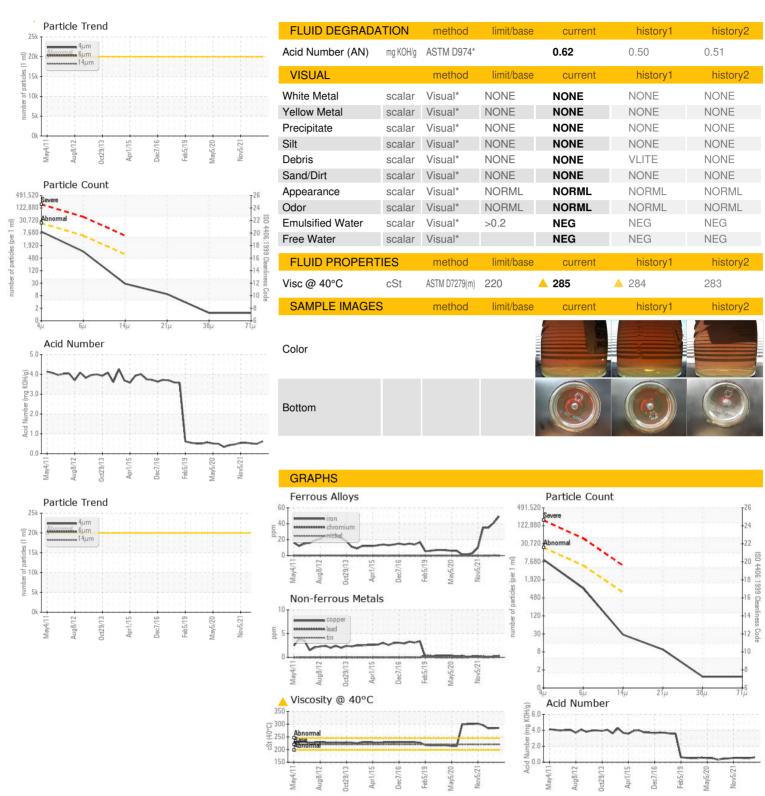
Viscosity of sample indicates oil is within ISO 320 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SIS REPORT	Jampio Halling Holla	
SIS REPURI		
	1/2011 Aug/2012 Oc/2013 Ap/2015 Dec/2016 Feb/2019 May/2020 Nov/2021	
SAMPLE INFORMATION	method limit/base current	his

Sample Number		Client Info		WC0873605	WC0841277	WC0754402
Sample Date		Client Info		05 Nov 2023	30 Aug 2023	05 Feb 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>200	49	41	35
Chromium	ppm	ASTM D5185(m)	>15	0	<1	0
Nickel	ppm	ASTM D5185(m)	>15	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		<1	0	0
Aluminum	ppm	ASTM D5185(m)		<1	<1	<1
Lead	ppm	ASTM D5185(m)	>100	<1	0	<1
Copper	ppm	ASTM D5185(m)		<1	<1	0
Tin	ppm	ASTM D5185(m)	>25	0	0	0
Antimony	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	6.2	2	2	2
Barium	ppm	ASTM D5185(m) ASTM D5185(m)	6.2 0.0	2 0	2	2
Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	6.2	2 0 2	2 0 <1	2 0 3
Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	6.2 0.0 0	2 0 2 0	2 0 <1 <1	2 0 3 <1
Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	6.2 0.0 0	2 0 2 0 <1	2 0 <1 <1 0	2 0 3 <1 <1
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m)	6.2 0.0 0 0 0	2 0 2 0 <1 14	2 0 <1 <1 0	2 0 3 <1 <1 12
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185(m)	6.2 0.0 0 0 0.0 290	2 0 2 0 <1 14 256	2 0 <1 <1 0 13 273	2 0 3 <1 <1 12 286
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	6.2 0.0 0 0 0 0.0 290 3.8	2 0 2 0 <1 14 256	2 0 <1 <1 0 13 273	2 0 3 <1 <1 12 286 8
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	6.2 0.0 0 0 0.0 290	2 0 2 0 <1 14 256 8 9681	2 0 <1 <1 0 13 273 8 9955	2 0 3 <1 <1 12 286 8 10053
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	6.2 0.0 0 0 0.0 290 3.8 8167	2 0 2 0 <1 14 256	2 0 <1 <1 0 13 273	2 0 3 <1 <1 12 286 8
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	6.2 0.0 0 0 0 0.0 290 3.8	2 0 2 0 <1 14 256 8 9681	2 0 <1 <1 0 13 273 8 9955	2 0 3 <1 <1 12 286 8 10053
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	6.2 0.0 0 0 0.0 290 3.8 8167	2 0 2 0 <1 14 256 8 9681 <1	2 0 <1 <1 0 13 273 8 9955 <1	2 0 3 <1 <1 12 286 8 10053
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	6.2 0.0 0 0.0 290 3.8 8167 Iimit/base	2 0 2 0 <1 14 256 8 9681 <1	2 0 <1 <1 0 13 273 8 9955 <1 history1 3	2 0 3 <1 <1 12 286 8 10053 <1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	6.2 0.0 0 0 0.0 290 3.8 8167	2 0 2 0 <1 14 256 8 9681 <1 current	2 0 <1 <1 0 13 273 8 9955 <1 history1	2 0 3 <1 <1 12 286 8 10053 <1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	6.2 0.0 0 0.0 290 3.8 8167 Iimit/base	2 0 2 0 <1 14 256 8 9681 <1 current 2	2 0 <1 <1 0 13 273 8 9955 <1 history1 3	2 0 3 <1 <1 12 286 8 10053 <1 history2 2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) MASTM D5185(m) ASTM D5185(m)	6.2 0.0 0 0 0.0 290 3.8 8167 limit/base >50 limit/base >20000	2 0 2 0 <1 14 256 8 9681 <1 current 2 1 0	2 0 <1 <1 0 13 273 8 9955 <1 history1 3 <1 0	2 0 3 <1 <1 12 286 8 10053 <1 history2 2 <1 0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) MASTM D5185(m) MASTM D5185(m) ASTM D7647	6.2 0.0 0 0.0 290 3.8 8167 limit/base >50 limit/base >20000 >5000	2 0 2 0 <1 14 256 8 9681 <1 current 2 1 0 current 7833 879	2 0 <1 <1 0 13 273 8 9955 <1 history1 3 <1 0	2 0 3 <1 <1 12 286 8 10053 <1 history2 2 <1 0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) MASTM D5185(m) MASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647	6.2 0.0 0 0.0 290 3.8 8167 limit/base >50 >20 limit/base >20000 >5000 >640	2 0 2 0 <1 14 256 8 9681 <1 current 2 1 0 current 7833 879 25	2 0 <1 <1 0 13 273 8 9955 <1 history1 3 <1 0	2 0 3 <1 <1 12 286 8 10053 <1 history2 2 <1 0 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	6.2 0.0 0 0.0 290 3.8 8167 limit/base >50 limit/base >20000 >5000	2 0 2 0 <1 14 256 8 9681 <1 current 2 1 0 current 7833 879	2 0 <1 <1 0 13 273 8 9955 <1 history1 3 <1 0	2 0 3 <1 <1 12 286 8 10053 <1 history2 2 <1 0 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) MASTM D5185(m) MASTM D5185(m) MASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	6.2 0.0 0 0.0 290 3.8 8167 limit/base	2 0 2 0 <1 14 256 8 9681 <1 current 2 1 0 current 7833 879 25 8	2 0 <1 <1 0 13 273 8 9955 <1 history1 3 <1 0 history1	2 0 3 <1 <1 12 286 8 10053 <1 history2 2 <1 0 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	6.2 0.0 0 0.0 290 3.8 8167 limit/base	2 0 2 0 <1 14 256 8 9681 <1 current 2 1 0 current 7833 879 25 8	2 0 <1 <1 0 13 273 8 9955 <1 history1 3 <1 0 history1	2 0 3 <1 <1 12 286 8 10053 <1 history2 2 <1 0 history2



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited

Laboratory Sample No. Lab Number **Unique Number**

: WC0873605

: 02602413

: 5695498

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 11 Dec 2023 Diagnosed : 12 Dec 2023 Diagnostician : Kevin Marson

Test Package : IND 2 (Additional Tests: TAN Man)

To discuss this sample report, contact Customer Service at 1-800-268-2131. 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.

Goodyear Napanee

388 Goodyear Road Napanee, ON CA K7R 3L2

Contact: Mohammad Waleed Mohammad_Waleed@goodyear.com

T: (613)354-7709 F: (613)354-9377