

PROBLEM SUMMARY

BAK02-034 OVEN #2

Gearbox Fluid SHELL OMALA 220 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Sample Rating Trend WEAR

PROBLEMATIC TEST RESULTS							
Sample Status				ATTENTION	ATTENTION	NORMAL	
Iron	ppm	ASTM D5185(m)	>200	<u> </u>	2 26	182	

Customer Id: FUR173MIS Sample No.: WC0818891 Lab Number: 02560682 Test Package: IND 2



To manage this report scan the QR code

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RECOMMENDED A	CTIONS			
Action	Status	Date	Done By	Description
Information Required			?	NOTE: Please and micron rati

provide information regarding reservoir capacity, filter type micron rating with next sample.

HISTORICAL DIAGNOSIS





We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Iron ppm levels are noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. All other component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report

27 Nov 2022 Diag: Wes Davis

service.







14 Aug 2022 Diag: Kevin Marson

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Iron ppm levels are abnormal. A sharp increase in the iron level is noted. Gear wear is indicated. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.







OIL ANALYSIS REPORT

Sample Rating Trend



BAK02-034 OVEN #2

Gearbox Fluid SHELL OMALA 220 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

🔺 Wear

Iron ppm levels are noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0818891	WC0791562	WC0764510
Sample Date		Client Info		28 May 2023	19 Feb 2023	27 Nov 2022
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				ATTENTION	ATTENTION	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		13	25	8
Iron	ppm	ASTM D5185(m)	>200	<u> </u>	A 226	182
Chromium	ppm	ASTM D5185(m)	>15	1	1	1
Nickel	ppm	ASTM D5185(m)	>15	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	0	0	0
Lead	ppm	ASTM D5185(m)	>100	0	0	0
Copper	ppm	ASTM D5185(m)	>200	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>25	0	0	0
Antimony	ppm	ASTM D5185(m)	>5	<1	0	<1
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)	4.4	2	2	2
Barium	ppm	ASTM D5185(m)	0.0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		2	2	2
Magnesium	ppm	ASTM D5185(m)	0	0	0	0
Calcium	ppm	ASTM D5185(m)	0	1	2	3
Phosphorus	ppm	ASTM D5185(m)	215	336	309	309
Zinc	ppm	ASTM D5185(m)	0	4	5	6
Sulfur	ppm	ASTM D5185(m)	7039	9508	8534	8354
Lithium	ppm	ASTM D5185(m)		2	2	2
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	6	3	2
Sodium	ppm	ASTM D5185(m)		<1	0	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.37	0.28	0.27



OIL ANALYSIS REPORT







VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220	217	218	217
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						

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Submitted By: Bob Melanson

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