

PROBLEM SUMMARY

Sample Rating Trend

WATER

MELT SHOP BAG HOUSE (AOD141)

CHAIN CONVEYOR FORCE DRAFT COOLER (S/N 15-6400-1000-2080)

Component Gearbox

GEAR OIL ISO 220 (--- QTS)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of water entry. 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.

PROBLEMATIC TEST RESULTS									
Sample Status				SEVERE	SEVERE	SEVERE			
Water	%	ASTM D6304	>0.2	△ 0.798	△ 0.708	▲ 3.51			
ppm Water	ppm	ASTM D6304	>2000	7980	△ 7080	▲ 35100			
Silt	scalar	*Visual	NONE	▲ HEAVY	NONE	NONE			
Emulsified Water	scalar	*Visual	>0.2	0.2%	▲ 0.2%	▲ 0.2%			
Free Water	scalar	*Visual		2.0	1.0	NEG			

Customer Id: OUTCALAL **Sample No.:** RP0042734 Lab Number: 06130695 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS							
Action	Status	Date	Done By	Description			
Change Fluid			?	We recommend that you drain the oil from the component if this has not already been done.			
Resample			?	We recommend an early resample to monitor this condition.			
Check Water Access			?	We advise that you check for the source of water entry.			

HISTORICAL DIAGNOSIS

01 Sep 2022 Diag: Angela Borella

WATER



We advise that you check for the source of water entry. 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. The iron level is abnormal. There is a light concentration of water present in the oil. Free water present. Moderate concentration of visible dirt/debris present in the oil. The oil is no longer serviceable due to the presence of contaminants.



26 Jan 2022 Diag: Doug Bogart

WEAR



We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Appearance is milky. There is a high concentration of water present in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

view report

08 Apr 2021 Diag: Doug Bogart

WEAR



We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Appearance is milky. There is a high concentration of water present in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.





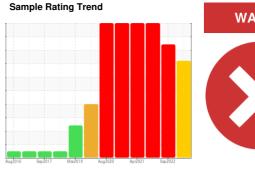
OIL ANALYSIS REPORT

MELT SHOP BAG HOUSE (AOD141)

CHAIN CONVEYOR FORCE DRAFT COOLER (S/N 15-6400-1000-2080)

Gearbox

GEAR OIL ISO 220 (--- QTS)





DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. 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.

Wear

All component wear rates are normal.

▲ Contamination

There is a moderate concentration of water present in the oil. Excessive free water present. There is a high amount of visible silt present in the sample.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

		Aug2016	Sep2017 Mar2019	Aug2020 Apr2021 S	ep 2022	
SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		RP0042734	RP0029719	RP0024416
Sample Date		Client Info		26 Mar 2024	01 Sep 2022	26 Jan 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				SEVERE	SEVERE	SEVERE
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		27	25	59
Iron	ppm	ASTM D5185m	>200	191	<u>^</u> 218	442
Chromium	ppm	ASTM D5185m	>15	2	2	4
Nicalial		AOTA DEADE	4.5	^	0	4

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PQ		ASTM D8184		27	25	59
Iron	ppm	ASTM D5185m	>200	191	<u></u> 218	442
Chromium	ppm	ASTM D5185m	>15	2	2	4
Nickel	ppm	ASTM D5185m	>15	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	<1	<1
Aluminum	ppm	ASTM D5185m	>25	1	1	<1
Lead	ppm	ASTM D5185m	>100	0	0	<1
Copper	ppm	ASTM D5185m	>200	0	<1	<1
Tin	ppm	ASTM D5185m	>25	0	0	<1
Antimony	ppm	ASTM D5185m	>5			<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

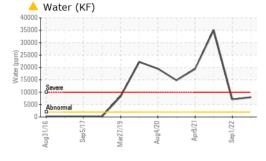
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	2	<1	19
Barium	ppm	ASTM D5185m	15	0	2	0
Molybdenum	ppm	ASTM D5185m	15	0	0	<1
Manganese	ppm	ASTM D5185m		<1	3	2
Magnesium	ppm	ASTM D5185m	50	2	<1	<1
Calcium	ppm	ASTM D5185m	50	28	31	96
Phosphorus	ppm	ASTM D5185m	350	262	188	316
Zinc	ppm	ASTM D5185m	100	17	8	12

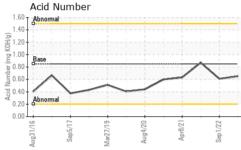
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	3	1	4
Sodium	ppm	ASTM D5185m		1	0	0
Potassium	ppm	ASTM D5185m	>20	<1	2	0
Water	%	ASTM D6304	>0.2	<u> </u>	△ 0.708	▲ 3.51
ppm Water	ppm	ASTM D6304	>2000	^ 7980	▲ 7080	▲ 35100
ELLUD DEODADA	TION	411	12 25 0		1000	

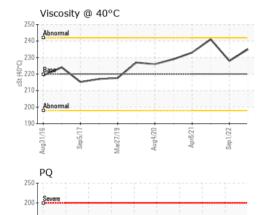
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	0.65	0.61	0.87



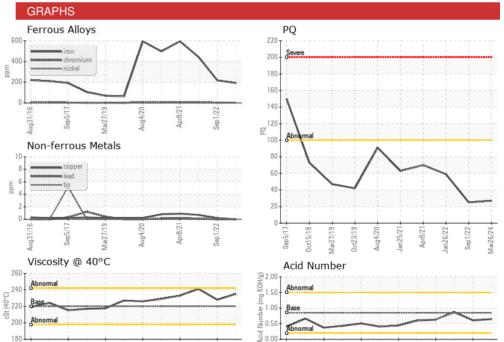
OIL ANALYSIS REPORT







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	▲ HEAVY	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	MILKY	MILKY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	0.2%	▲ 0.2%	▲ 0.2%
Free Water	scalar	*Visual		▲ 2.0	▲ 1.0	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	235	228	241
SAMPLE IMAGES	3	method	limit/base	current	history1	history2
Color						
Bottom						





150 Р0

100



Certificate L2367

Laboratory Sample No.

Lab Number : 06130695

180

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : RP0042734

Unique Number: 10950160

Received **Tested** Diagnosed

Test Package : IND 2 (Additional Tests: PQ)

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. **OUTOKUMPU STAINLESS USA**

HWY 43 N CALVERT, AL US 36513

Contact: MARIO JOHNSON Mario.johnson@outokumpu.com

> T: (251)321-4105 F: x:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Sep1/22

: 27 Mar 2024

: 28 Mar 2024

: 30 Mar 2024 - Don Baldridge