

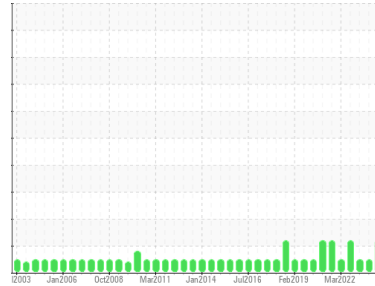


# OIL ANALYSIS REPORT

Sample Rating Trend

VISUAL METAL

Area  
**EQR [152262]**  
 Machine Id  
**ALBAGEN2BRGTHR**  
 Component  
**Thrust Bearing**  
 Fluid  
**SHELL TURBO T ISO 68 (534 LTR)**



## DIAGNOSIS

### Recommendation

We advise that you check for visible metal particles in the oil. We recommend an early resample to monitor this condition.

### Wear

Light concentration of visible metal present. Bearing wear is indicated.

### Contamination

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

### Fluid Condition

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0779180</b>	WC0779135	WC0779122
Sample Date	Client Info		<b>12 Mar 2024</b>	14 Sep 2023	14 Mar 2023
Machine Age	hrs	Client Info	<b>167646</b>	166783	164151
Oil Age	hrs	Client Info	<b>262</b>	23783	21151
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>85	<b>1</b>	8	7
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>40	<b>1</b>	1	1
Lead	ppm	ASTM D5185(m)	>60	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>7	<b>0</b>	0	0
Tin	ppm	ASTM D5185(m)	>40	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		<b>0</b>	0	0
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Calcium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Phosphorus	ppm	ASTM D5185(m)		<b>&lt;1</b>	4	3
Zinc	ppm	ASTM D5185(m)		<b>&lt;1</b>	2	<1
Sulfur	ppm	ASTM D5185(m)		<b>&lt;1</b>	28	30
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Sodium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	0	<1

## FLUID CLEANLINESS

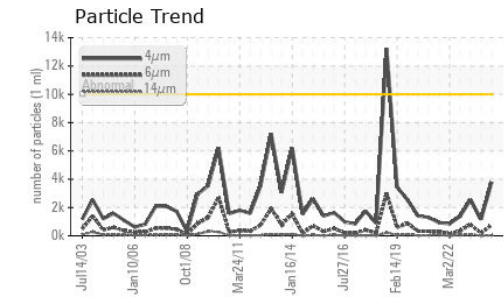
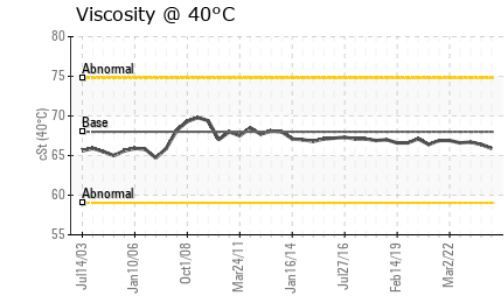
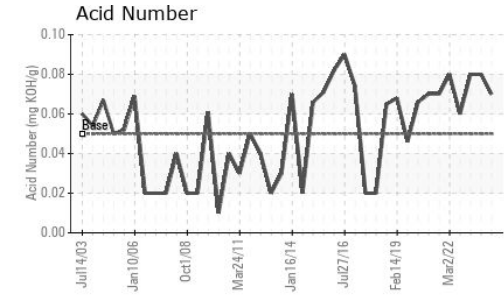
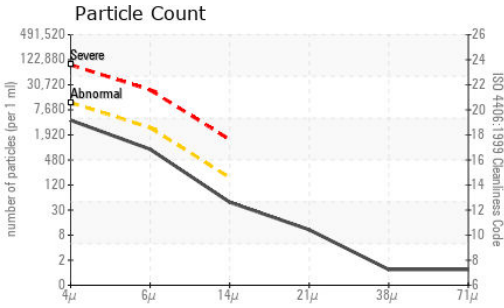
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>3780</b>	1162	2533
Particles >6µm	ASTM D7647	>2500	<b>761</b>	185	782
Particles >14µm	ASTM D7647	>160	<b>41</b>	15	83
Particles >21µm	ASTM D7647	>40	<b>9</b>	6	23
Particles >38µm	ASTM D7647	>10	<b>1</b>	0	1
Particles >71µm	ASTM D7647	>3	<b>1</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/14	<b>19/17/13</b>	17/15/11	19/17/14

Particle Filter (Magn: 100 x)





# OIL ANALYSIS REPORT



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0779180  
**Lab Number** : 02622360  
**Unique Number** : 5747479  
**Test Package** : IND 2 ( Additional Tests: BottomAnalysis, FilterPatch, PrtFilter, TALSOL)

**ALGONQUIN POWER SYSTEMS INC.**  
 354 DAVIS ROAD  
 OAKVILLE, ON  
 CA L6J 2X1  
 T: (905)465-7065  
 F: x:

Received : 15 Mar 2024  
 Tested : 18 Mar 2024  
 Diagnosed : 18 Mar 2024 - Kevin Marson  
 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.

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	.05	<b>0.07</b>	0.08	0.08

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	▲ VLITE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>2	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	68	<b>65.9</b>	66.4	66.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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