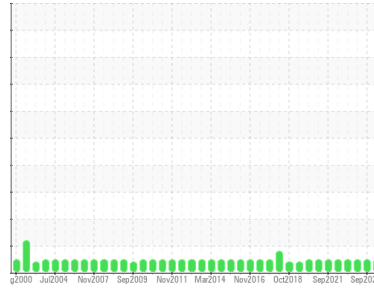




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**WQR [10000152035]**  
 Machine Id  
**CATHGEN10BRGLOW (S/N 218012-3)**  
 Component  
**Lower Bearing**  
 Fluid  
**MOBIL TERESSTIC 68 (11 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. 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>WC0429477</b>	WC0312814	WC0779217
Sample Date	Client Info		<b>06 Mar 2024</b>	14 Sep 2023	06 Mar 2023
Machine Age	hrs	Client Info	<b>138569</b>	134542	130200
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>0</b>	0	0
Iron	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >20	<b>0</b>	0	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) >20	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	0
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>0</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>&lt;1</b>	0	0
Calcium	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Phosphorus	ppm	ASTM D5185(m)	<b>0</b>	0	0
Zinc	ppm	ASTM D5185(m)	<b>&lt;1</b>	1	<1
Sulfur	ppm	ASTM D5185(m)	<b>1669</b>	1622	1627
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

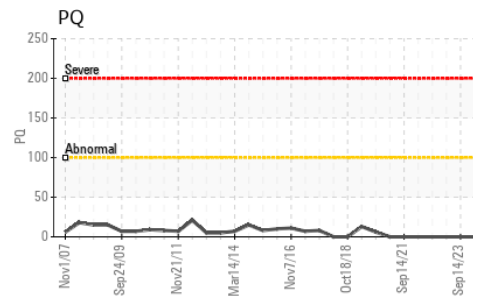
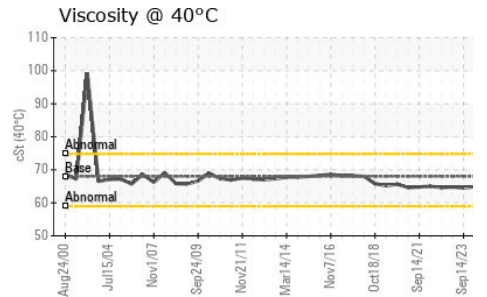
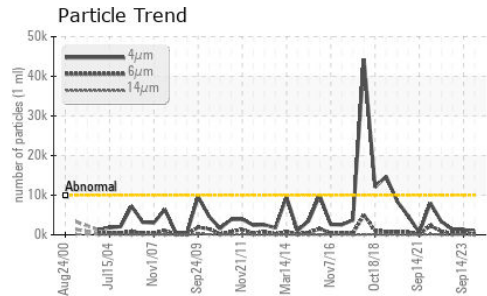
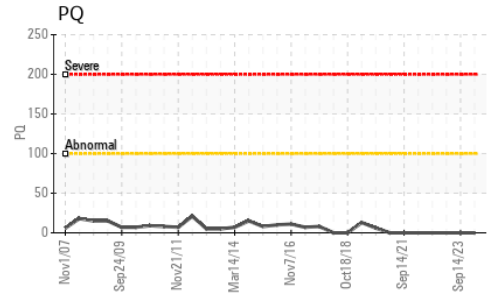
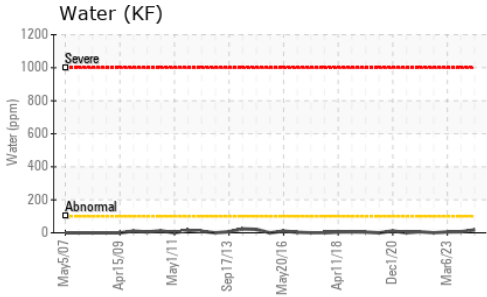
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<b>4</b>	4	3
Sodium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Water	%	ASTM D6304* >2	<b>0.002</b>	0.001	0.001
ppm Water	ppm	ASTM D6304*	<b>18</b>	6.3	5.2

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>886</b>	1305	1348
Particles >6µm	ASTM D7647	>2500	<b>211</b>	365	330
Particles >14µm	ASTM D7647	>160	<b>18</b>	23	21
Particles >21µm	ASTM D7647	>40	<b>5</b>	6	4
Particles >38µm	ASTM D7647	>10	<b>1</b>	1	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/14	<b>17/15/11</b>	18/16/12	18/16/12

# OIL ANALYSIS REPORT

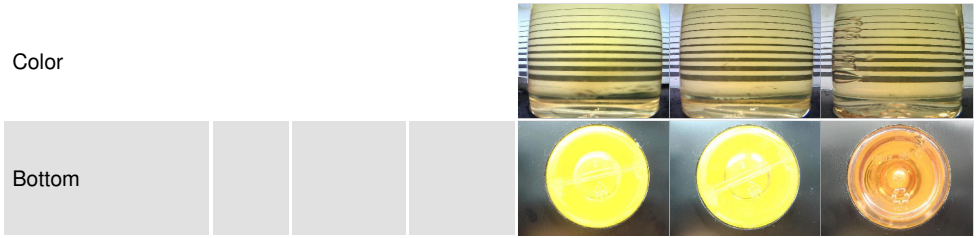


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.06	<b>0.06</b>	0.04	0.03

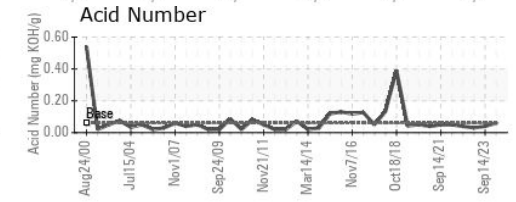
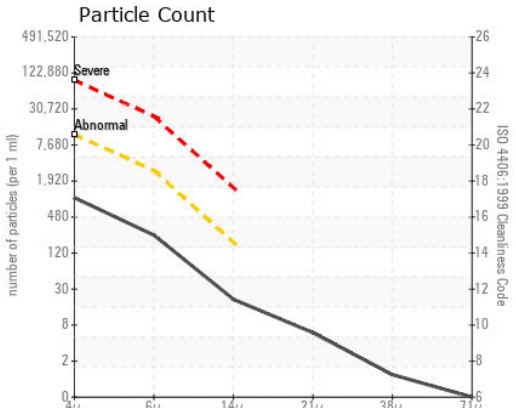
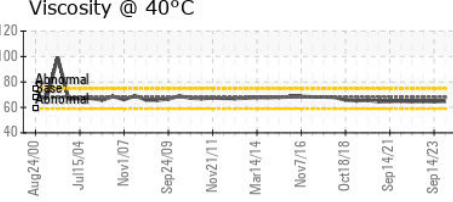
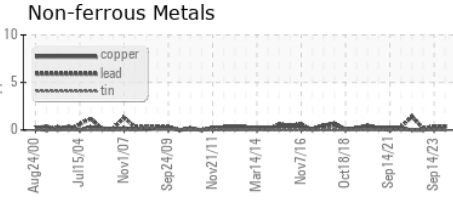
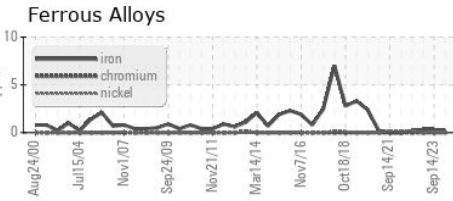
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	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)	68.0	<b>64.9</b>	64.5	64.8

SAMPLE IMAGES		method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0429477  
**Lab Number** : **02620865**  
**Unique Number** : 5745984  
**Test Package** : IND 2 ( Additional Tests: KF, PQ, PrtCount, TAN Man )  
**Received** : 08 Mar 2024  
**Tested** : 11 Mar 2024  
**Diagnosed** : 11 Mar 2024 - Wes Davis

**ALGONQUIN POWER SYSTEMS INC.**  
 354 DAVIS ROAD  
 OAKVILLE, ON  
 CA L6J 2X1  
 Contact: Antonino Champ Fernando  
 antoninoChamp.fernando@algonquinpower.com  
 T: (905)465-7065  
 F: x:

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.