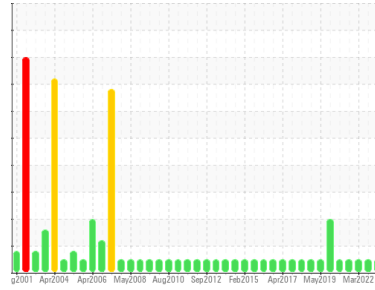




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
EQR [152304]
 Machine Id
LOUPGEN2BRGTHR
 Component
Thrust Bearing
 Fluid
SHELL TURBO T ISO 68 (60 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Light concentration of visible metal present. All other 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

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			WC0659854	WC0659847	WC0548049
Sample Date	Client Info			14 Mar 2024	13 Sep 2023	31 Mar 2022
Machine Age	mths	Client Info		338	332	116
Oil Age	mths	Client Info		140	134	116
Oil Changed	Client Info			Not Changed	Not Changed	Not Changed
Sample Status				NORMAL	NORMAL	NORMAL

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>85	<1	<1	0
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>40	<1	0	0
Lead	ppm	ASTM D5185(m)	>60	<1	<1	0
Copper	ppm	ASTM D5185(m)	>7	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>40	<1	<1	<1
Antimony	ppm	ASTM D5185(m)		0	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)		0	0	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		0	0	0
Calcium	ppm	ASTM D5185(m)		0	<1	0
Phosphorus	ppm	ASTM D5185(m)		0	0	0
Zinc	ppm	ASTM D5185(m)		<1	2	<1
Sulfur	ppm	ASTM D5185(m)		27	40	42
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

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

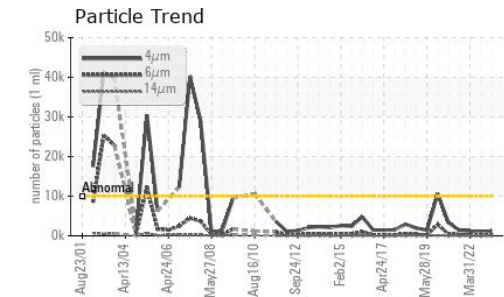
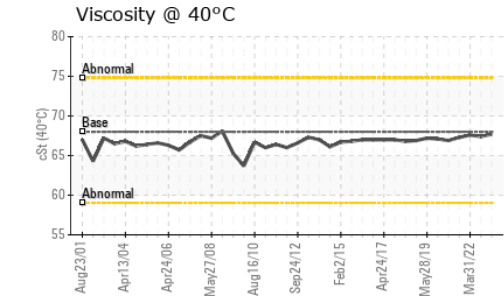
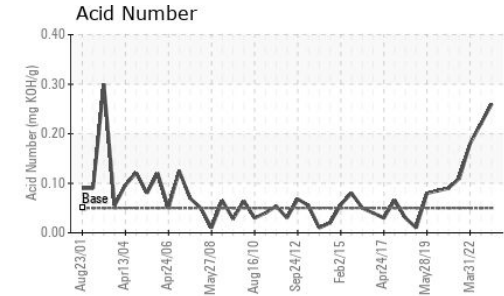
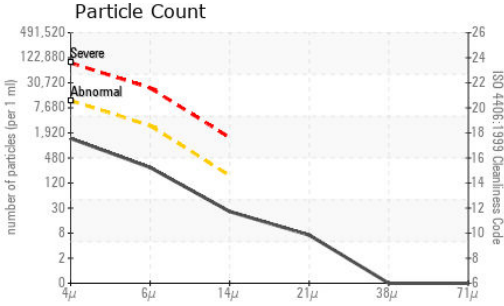
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	1241	1003	1178	
Particles >6µm	ASTM D7647	>2500	249	224	231	
Particles >14µm	ASTM D7647	>160	22	20	20	
Particles >21µm	ASTM D7647	>40	6	8	4	
Particles >38µm	ASTM D7647	>10	0	1	0	
Particles >71µm	ASTM D7647	>3	0	0	0	
Oil Cleanliness	ISO 4406 (c)	>20/18/14	17/15/12	17/15/11	17/15/11	

Particle Filter (Magn: 200 x)





OIL ANALYSIS REPORT

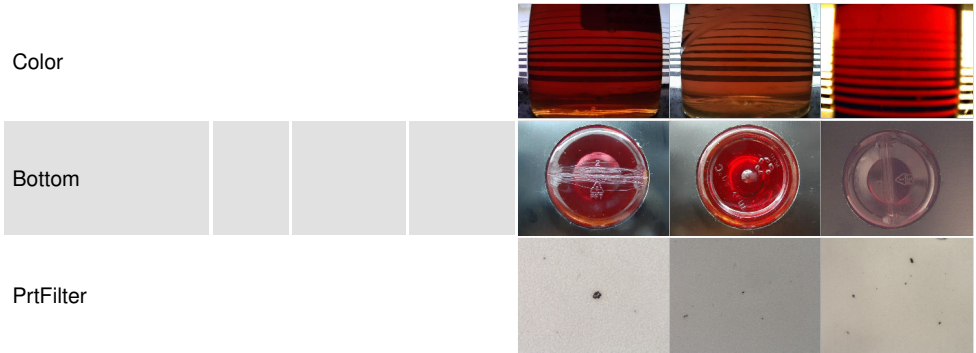


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	.05	0.26	0.22	0.18

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	VLITE	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*	>2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	68	67.7	67.4	67.6

SAMPLE IMAGES



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **ALGONQUIN POWER SYSTEMS INC.**
Sample No. : WC0659854 **Received** : 18 Mar 2024 354 DAVIS ROAD
Lab Number : **02622725** **Tested** : 19 Mar 2024 OAKVILLE, ON
Unique Number : 5747844 **Diagnosed** : 19 Mar 2024 - Kevin Marson CA L6J 2X1
Test Package : IND 2 (Additional Tests: BottomAnalysis, FilterPatch, PrtCount, PrtColor, PrtMetal, PrtWater, PrtAcid, PrtVisc, PrtWater, PrtAcid, PrtVisc, PrtWater, PrtAcid, PrtVisc)
 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.