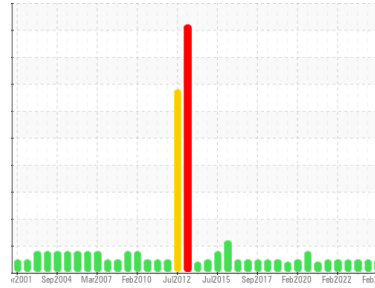




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
COR
Machine Id
LONGGEN2BRGUS
Component
Bearing
Fluid
SHELL TURBO T ISO 68 (25 LTR)

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		WC0790719	WC0790727	WC0681469
Sample Date	Client Info		29 Feb 2024	14 Sep 2023	22 Feb 2023
Machine Age	mths	Client Info	317	312	305
Oil Age	mths	Client Info	24	19	12
Oil Changed	Client Info		Not Changed	Not Changed	Not Changed
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m) >20	0	<1	<1
Chromium	ppm	ASTM D5185(m) >20	0	0	0
Nickel	ppm	ASTM D5185(m) >20	0	0	0
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	<1	0
Aluminum	ppm	ASTM D5185(m) >20	<1	0	<1
Lead	ppm	ASTM D5185(m) >20	0	0	0
Copper	ppm	ASTM D5185(m) >20	0	<1	0
Tin	ppm	ASTM D5185(m) >20	0	0	0
Antimony	ppm	ASTM D5185(m)	0	0	0
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	<1	<1
Barium	ppm	ASTM D5185(m)	0	<1	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)	<1	2	1
Zinc	ppm	ASTM D5185(m)	<1	<1	<1
Sulfur	ppm	ASTM D5185(m)	34	84	44
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

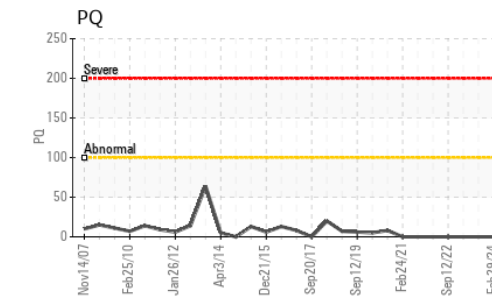
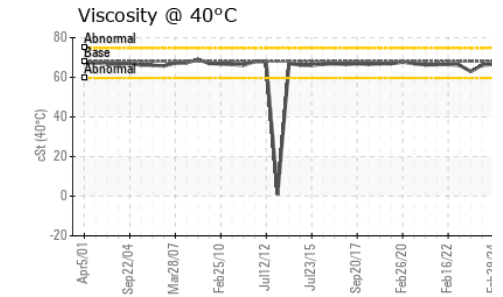
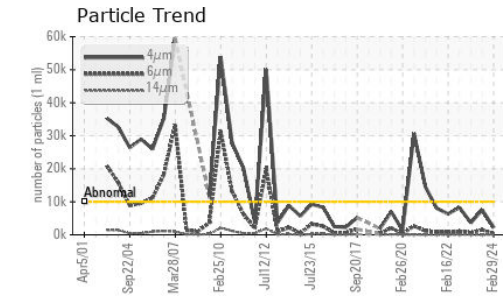
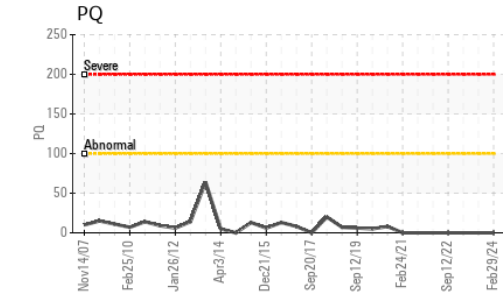
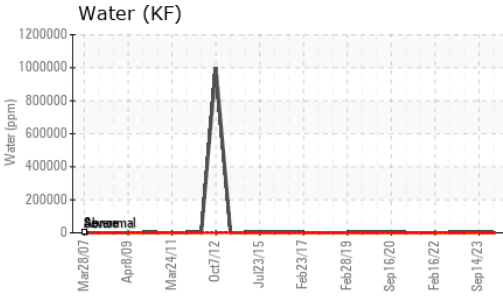
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<1	<1	<1
Sodium	ppm	ASTM D5185(m)	0	0	<1
Potassium	ppm	ASTM D5185(m) >20	<1	0	<1
Water	%	ASTM D6304* >2	0.002	0.001	0.001
ppm Water	ppm	ASTM D6304*	20	12.7	7.7

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	2186	7537	3661
Particles >6µm	ASTM D7647	>2500	357	1532	636
Particles >14µm	ASTM D7647	>160	19	50	45
Particles >21µm	ASTM D7647	>40	6	9	15
Particles >38µm	ASTM D7647	>10	1	1	1
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/14	18/16/11	20/18/13	19/16/13



OIL ANALYSIS REPORT

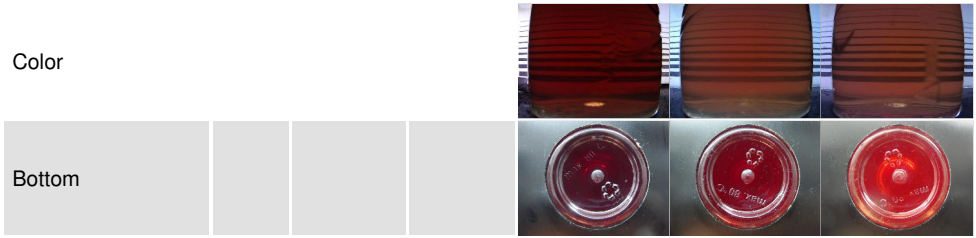


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	.05	0.05	0.08	0.05

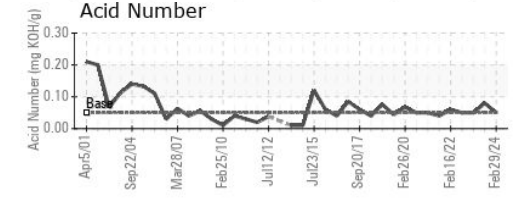
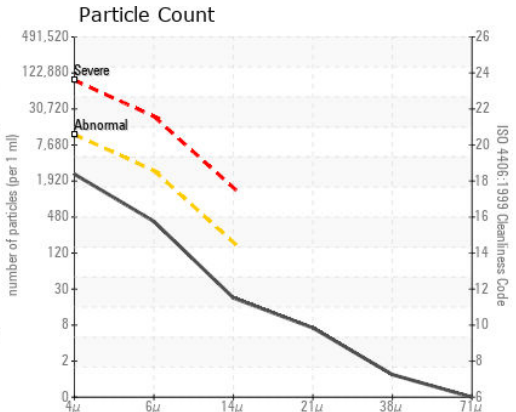
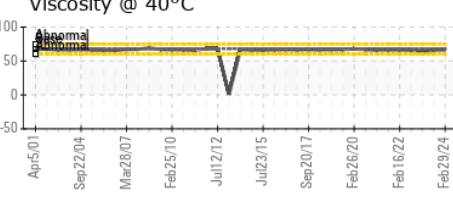
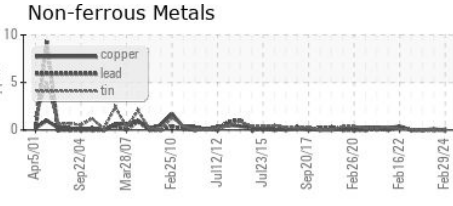
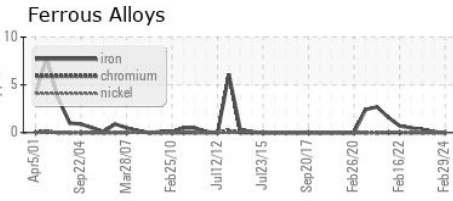
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>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	66.5	66.2	62.9

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
 Sample No. : WC0790719
 Lab Number : 02622364
 Unique Number : 5747483
 Test Package : IND 2 (Additional Tests: KF, PQ, PrtCount, TAN Man)

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:

Received : 15 Mar 2024
 Tested : 18 Mar 2024
 Diagnosed : 18 Mar 2024 - Wes Davis
 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.