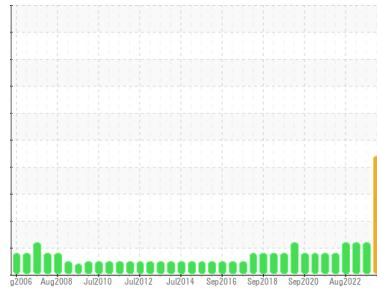




PROBLEM SUMMARY

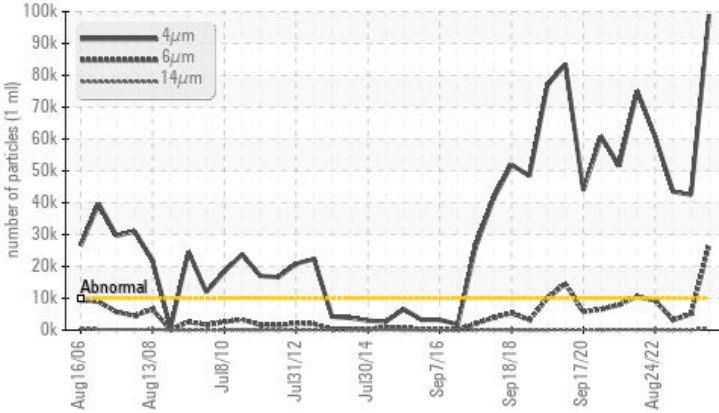
Area
WCR [100000107834]
 Machine Id
DIXNGEN2BRGNDE
 Component
Non-Drive End Bearing
 Fluid
MOBIL DTE OIL HVY MEDIUM (25 LTR)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. The oil change at the time of sampling has been noted. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	ABNORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>10000	▲ 98986	▲ 42512	▲ 43480
Particles >6µm	ASTM D7647	>2500	▲ 26683	▲ 5091	● 3159
Particles >14µm	ASTM D7647	>160	▲ 682	47	11
Particles >21µm	ASTM D7647	>40	▲ 105	7	2
Oil Cleanliness	ISO 4406 (c)	>20/18/14	▲ 24/22/17	▲ 23/20/13	▲ 23/19/11

Customer Id: ALGMIS
 Sample No.: WC0908346
 Lab Number: 02627017
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

To change component or sample information:
 Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Dirt Access	---	---	?	We advise that you check all areas where contaminants can enter the system.

HISTORICAL DIAGNOSIS

ISO



17 Oct 2023 Diag: Kevin Marson

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report



ISO



03 Apr 2023 Diag: Kevin Marson

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report



ISO



24 Aug 2022 Diag: Kevin Marson

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. Particles >4µm are abnormally high. Particles >6µm and oil cleanliness are abnormally high. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

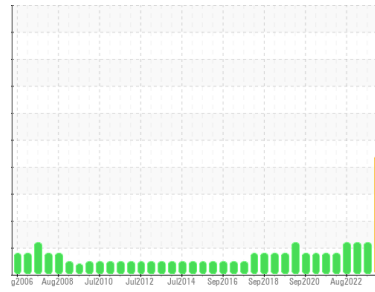
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
WCR [100000107834]
 Machine Id
DIXNGEN2BRGNDE
 Component
Non-Drive End Bearing
 Fluid
MOBIL DTE OIL HVY MEDIUM (25 LTR)

DIAGNOSIS

▲ Recommendation

We advise that you check all areas where contaminants can enter the system. The oil change at the time of sampling has been noted. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of particulates (2 to 100 microns in size) present in the oil. The water content is negligible.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0908346	WC0794338	WC0794330
Sample Date	Client Info		12 Mar 2024	17 Oct 2023	03 Apr 2023
Machine Age	hrs	Client Info	160143	157318	153431
Oil Age	hrs	Client Info	6712	3887	3415
Oil Changed	Client Info		Changed	Filtered	Changed
Sample Status			SEVERE	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m) >20	0	0	<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	0	0	<1
Lead	ppm	ASTM D5185(m) >20	0	<1	<1
Copper	ppm	ASTM D5185(m) >20	7	5	5
Tin	ppm	ASTM D5185(m) >20	<1	<1	<1
Antimony	ppm	ASTM D5185(m)	0	<1	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	0
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)	<1	0	0
Calcium	ppm	ASTM D5185(m)	<1	1	2
Phosphorus	ppm	ASTM D5185(m)	131	135	141
Zinc	ppm	ASTM D5185(m)	89	91	92
Sulfur	ppm	ASTM D5185(m)	1394	1409	1047
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

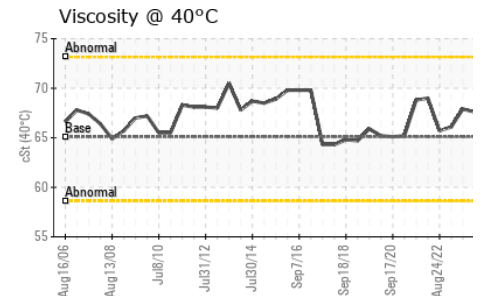
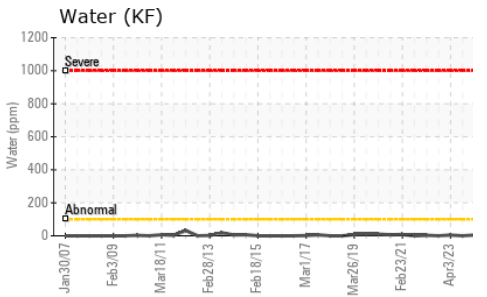
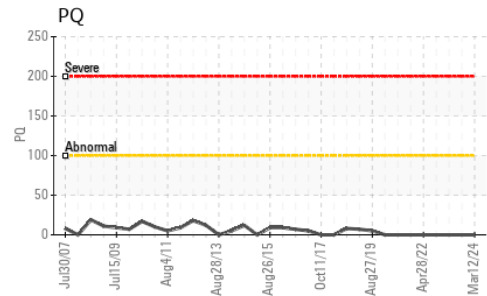
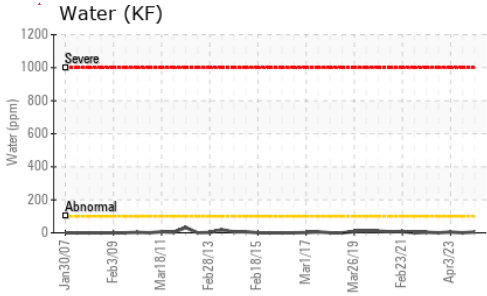
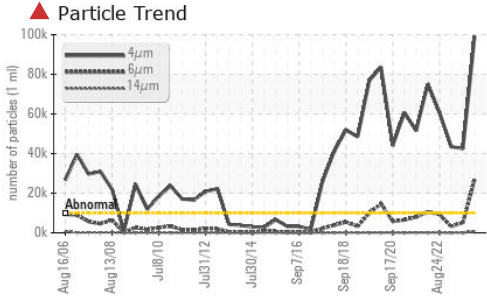
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	1	2	1
Sodium	ppm	ASTM D5185(m)	<1	<1	0
Potassium	ppm	ASTM D5185(m) >20	0	0	0
Water	%	ASTM D6304* >2	0.001	0.00	0.001
ppm Water	ppm	ASTM D6304*	5	0.00	4.7

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 98986	▲ 42512	▲ 43480
Particles >6µm	ASTM D7647	>2500	▲ 26683	▲ 5091	● 3159
Particles >14µm	ASTM D7647	>160	▲ 682	47	11
Particles >21µm	ASTM D7647	>40	▲ 105	7	2
Particles >38µm	ASTM D7647	>10	4	1	0
Particles >71µm	ASTM D7647	>3	1	1	0

Oil Cleanliness	ISO 4406 (c)	>20/18/14	▲ 24/22/17	▲ 23/20/13	▲ 23/19/11
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OIL ANALYSIS REPORT

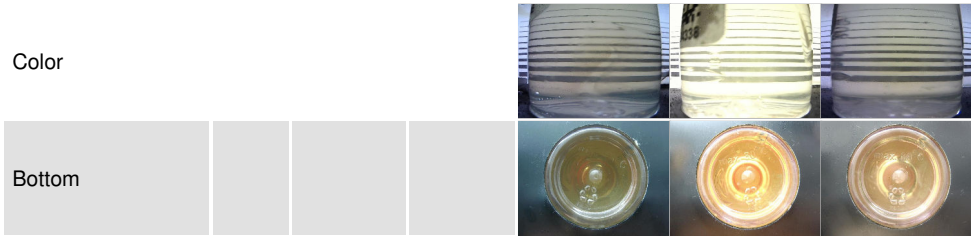


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.12	0.12	0.11

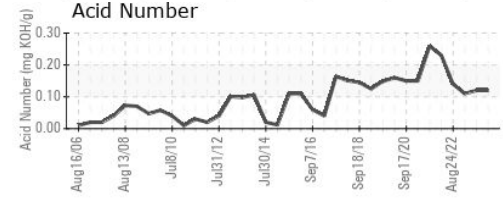
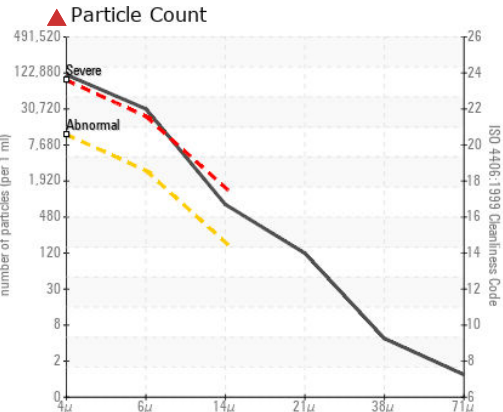
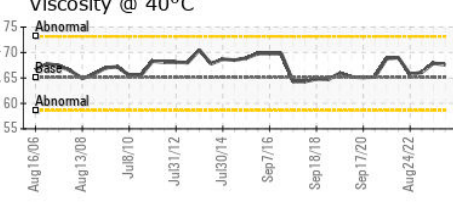
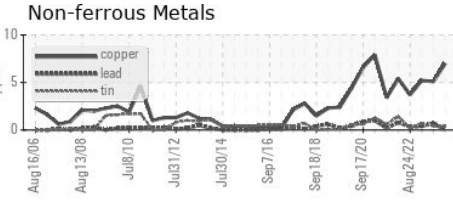
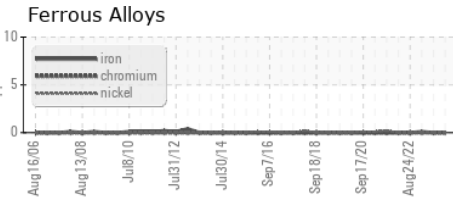
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	VLITE	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)	65.1	67.6	67.9	66.1

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0908346
Lab Number : 02627017
Unique Number : 5760149
Test Package : IND 2 (Additional Tests: KF, PQ, PrtCount, TAN Man)

ALGONQUIN POWER SYSTEMS INC.
 354 DAVIS ROAD
 OAKVILLE, ON
 CA L6J 2X1

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.

Contact: Antonino Champ Fernando
 antoninoChamp.fernando@algonquinpower.com
 T: (905)465-7065
 F: x: