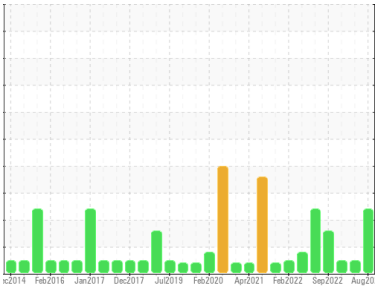
PROBLEM SUMMARY

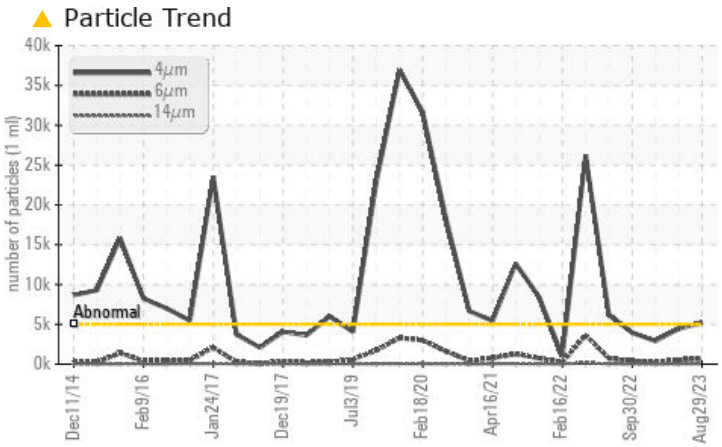
Sample Rating Trend

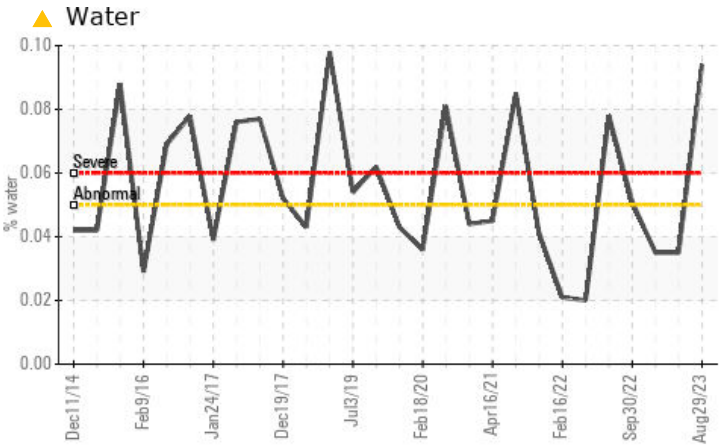


WATER

Area
BRUCE B/0B/54600
Machine Id
0B-54600-SG7-Avon Aux
Component
Tank Jet Turbine
Fluid
SHELL AEROSHELL 500 (--- GAL)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

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. We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	NORMAL	NORMAL
Water	%	ASTM D6304*	>0.05	▲ **0.094**	0.035	0.035
ppm Water	ppm	ASTM D6304*	>500	▲ **944.5**	352.7	356.5
Particles >4µm		ASTM D7647	>5000	▲ **5206**	4438	2915
Oil Cleanliness		ISO 4406 (c)	>19/17/15	▲ **20/17/12**	19/16/12	19/15/10
PrtFilter						

Customer Id: BRUTIV
Sample No.: WC0535186
Lab Number: 02580357
Test Package: IND2+

To manage this report scan the QR code

To discuss the diagnosis or test data:
Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

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
Change Filter	---	---	?	We recommend you service the filters on this component.
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.

HISTORICAL DIAGNOSIS

05 May 2023 Diag: Kevin Marson

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

05 Jan 2023 Diag: Kevin Marson

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

30 Sep 2022 Diag: Kevin Marson

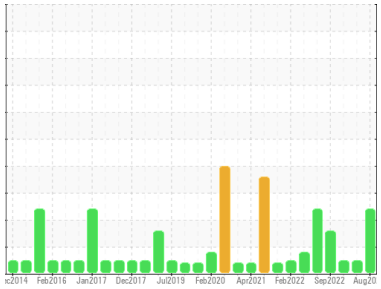
WATER

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 at the next service interval to monitor.All component wear rates are normal. There is a trace of moisture present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
BRUCE B/0B/54600
Machine Id
0B-54600-SG7-Avon Aux
Component
Tank Jet Turbine
Fluid
SHELL AEROSHELL 500 (--- GAL)

DIAGNOSIS

Recommendation

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. We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

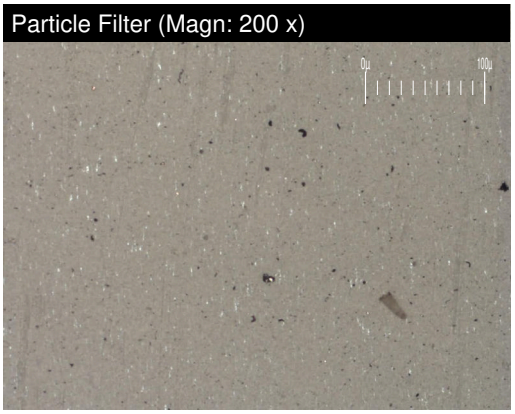
Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil. There is a trace of moisture present in the oil.

Fluid Condition

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

Particle Filter (Magn: 200 x)



SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0535186**	WC0548194	WC0535169
Sample Date		Client Info		**29 Aug 2023**	05 May 2023	05 Jan 2023
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ATTENTION**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>2	**1**	<1	<1
Chromium	ppm	ASTM D5185(m)	>1	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>1	**<1**	0	<1
Titanium	ppm	ASTM D5185(m)	>5	**0**	0	0
Silver	ppm	ASTM D5185(m)	>2	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>1	**0**	0	0
Lead	ppm	ASTM D5185(m)	>2	**0**	0	<1
Copper	ppm	ASTM D5185(m)	>1	**<1**	<1	0
Tin	ppm	ASTM D5185(m)	>1	**0**	0	0
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

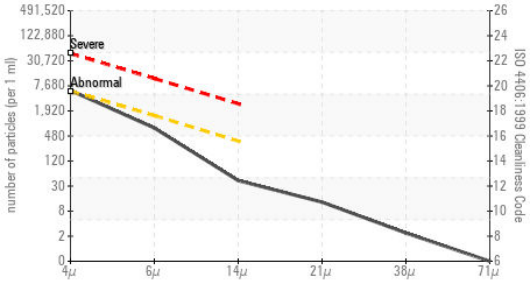
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	**<1**	0	<1
Barium	ppm	ASTM D5185(m)	0	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	0	**0**	0	0
Manganese	ppm	ASTM D5185(m)	0	**0**	0	0
Magnesium	ppm	ASTM D5185(m)	0	**0**	0	<1
Calcium	ppm	ASTM D5185(m)	0	**<1**	0	0
Phosphorus	ppm	ASTM D5185(m)	1000	**1085**	1070	1085
Zinc	ppm	ASTM D5185(m)	5	**1**	<1	<1
Sulfur	ppm	ASTM D5185(m)	0	**1**	<1	0
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>5	**1**	1	1
Sodium	ppm	ASTM D5185(m)	>5	**<1**	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	**<1**	0	<1
Water	%	ASTM D6304*	>0.05	▲ **0.094**	0.035	0.035
ppm Water	ppm	ASTM D6304*	>500	▲ **944.5**	352.7	356.5

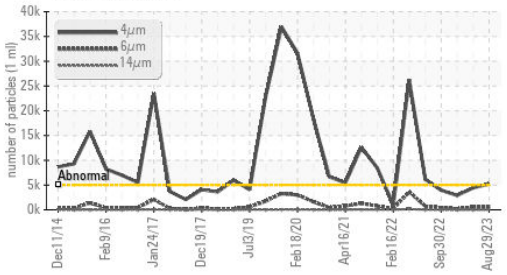
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **5206**	4438	2915
Particles >6µm		ASTM D7647	>1300	**656**	556	201
Particles >14µm		ASTM D7647	>320	**36**	30	7
Particles >21µm		ASTM D7647	>80	**11**	7	5
Particles >38µm		ASTM D7647	>20	**2**	0	3
Particles >71µm		ASTM D7647	>4	**0**	0	2
Oil Cleanliness		ISO 4406 (c)	>19/17/15	▲ **20/17/12**	19/16/12	19/15/10

OIL ANALYSIS REPORT

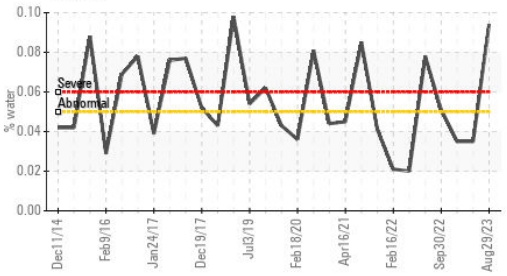
Particle Count



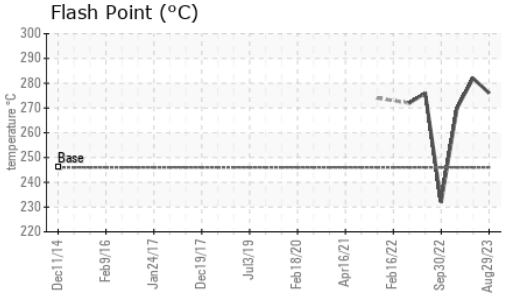
Particle Trend



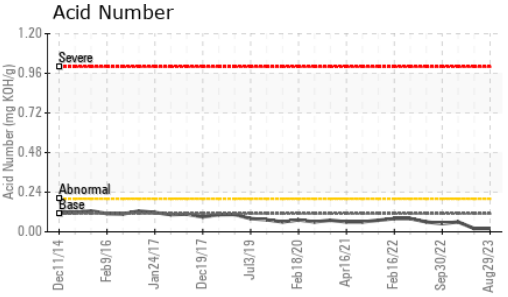
Water



Flash Point (°C)



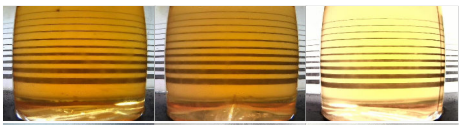
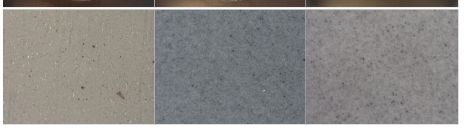
Acid Number



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.11	**0.02**	0.02	0.06

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*	>0.05	**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)	25.3	**25.1**	25.5	25.3
Visc @ 100°C	cSt	ASTM D7279(m)	5.2	**5.1**	5.1	5.2
Viscosity Index (VI)	Scale	ASTM D2270*	141	**135**	131	141
COC Flash Point	°C	ASTM D92*	246	**276**	282	270

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter					

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0535186 **Received** : 05 Sep 2023
Lab Number : 02580357 **Diagnosed** : 08 Sep 2023
Unique Number : 5633417 **Diagnostician** : Kevin Marson
Test Package : IND2+ (Additional Tests: BottomAnalysis, PrtFilter, Spat, VI, Visual)

Bruce Power - Bruce A PdM
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CA N0G 2T0
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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.