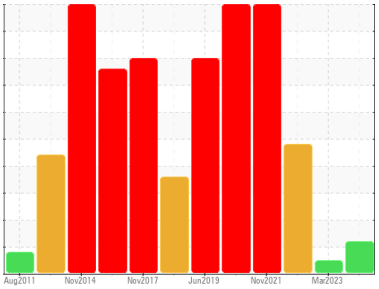
PROBLEM SUMMARY

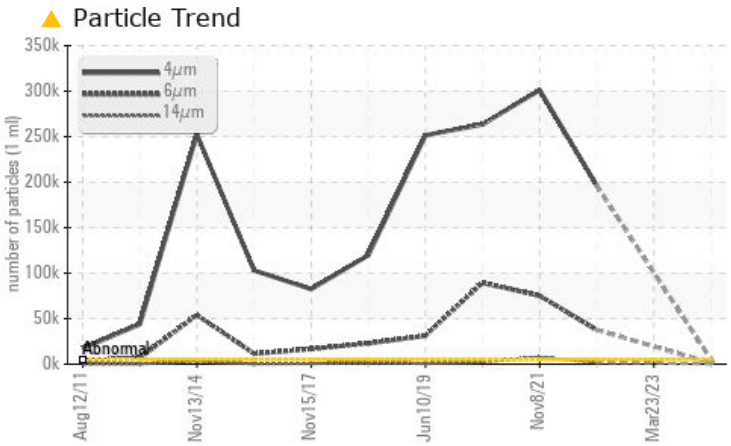
Area
(ZONE3) BRUCE A/4/34710
Machine Id
4-34710-P1-P IB Brg
Component
Inboard Bearing
Fluid
MOBIL DTE 732 (--- GAL)

Sample Rating Trend



ISO

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	NORMAL	SEVERE
Particles >4µm		ASTM D7647	>5000	▲ **5238**	---	⬢ 196131
Particles >6µm		ASTM D7647	>1300	▲ **1333**	---	⬢ 37601
Oil Cleanliness		ISO 4406 (c)	>19/17/15	▲ **20/18/14**	---	⬢ 25/22/18

Customer Id: BRUTIV
Sample No.: WC0815680
Lab Number: 02603832
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
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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.
Information Required	---	---	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

HISTORICAL DIAGNOSIS

23 Mar 2023 Diag: Kevin Marson

NORMAL

Due to this condition we recommend the following action... We advise an early resample to confirm this situation.{not applicable} Insufficient sample was received to conduct all the routine laboratory tests. {not applicable}

view report

16 Jun 2022 Diag: Kevin Marson

ISO

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. 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. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. The direct-reading & analytical ferrographic results are normal indicating no abnormal wear in the system. Particles >6µm are severely high. Oil Cleanliness are severely high. Particles >4µm are severely high. Particles >38µm are abnormally high. Particles >14µm are abnormally high. Particles >21µm are abnormally high. The water content is negligible. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code. 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

08 Nov 2021 Diag: Kevin Marson

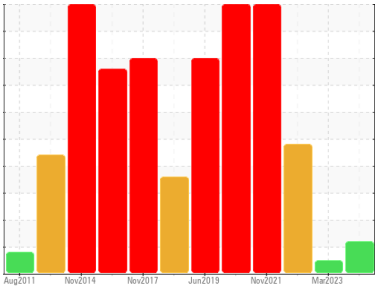
ISO

Check seals and/or filters for points of contaminant entry. We advise that you check all areas where contaminants can enter the system. 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 advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. The direct-reading & analytical ferrographic results are normal indicating no abnormal wear in the system. Particles >14µm are severely high. Particles >21µm are severely high. Particles >6µm are severely high. Particles >4µm are severely high. Particles >4µm are severely high.. ppm Water and water, water and water contamination levels are abnormal. Particles >38µm are abnormally high. There is a moderate concentration of water present in the oil. Free water present. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code. 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
(ZONE3) BRUCE A/4/34710
Machine Id
4-34710-P1-P IB Brg
Component
Inboard Bearing
Fluid
MOBIL DTE 732 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

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		**WC0815680**	WC	WC0696837
Sample Date		Client Info		**27 Sep 2023**	23 Mar 2023	16 Jun 2022
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	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>10	**<1**	3	2
Chromium	ppm	ASTM D5185(m)	>5	**0**	<1	0
Nickel	ppm	ASTM D5185(m)	>5	**<1**	<1	0
Titanium	ppm	ASTM D5185(m)	>5	**0**	<1	0
Silver	ppm	ASTM D5185(m)		**<1**	0	0
Aluminum	ppm	ASTM D5185(m)	>5	**<1**	<1	<1
Lead	ppm	ASTM D5185(m)	>5	**<1**	<1	<1
Copper	ppm	ASTM D5185(m)	>5	**<1**	2	<1
Tin	ppm	ASTM D5185(m)	>5	**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

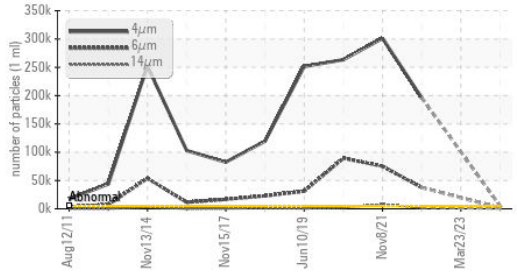
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**<1**	<1	0
Barium	ppm	ASTM D5185(m)		**<1**	0	0
Molybdenum	ppm	ASTM D5185(m)		**0**	0	0
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)		**<1**	1	<1
Calcium	ppm	ASTM D5185(m)		**<1**	0	0
Phosphorus	ppm	ASTM D5185(m)		**<1**	0	<1
Zinc	ppm	ASTM D5185(m)		**<1**	<1	<1
Sulfur	ppm	ASTM D5185(m)		**54**	415	411
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>5	**0**	1	<1
Sodium	ppm	ASTM D5185(m)	>5	**0**	<1	0
Potassium	ppm	ASTM D5185(m)	>20	**0**	0	0
Water	%	ASTM D6304*	>0.005	**0.004**	---	0.001
ppm Water	ppm	ASTM D6304*	>50	**48**	---	13.9

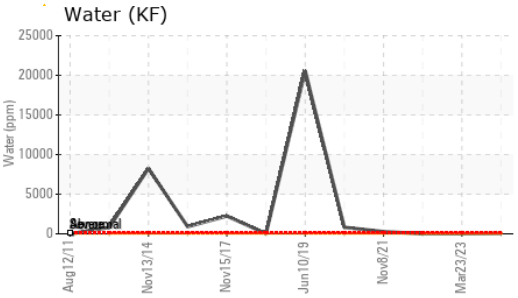
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **5238**	---	⬢ 196131
Particles >6µm		ASTM D7647	>1300	▲ **1333**	---	⬢ 37601
Particles >14µm		ASTM D7647	>320	**128**	---	▲ 1845
Particles >21µm		ASTM D7647	>80	**38**	---	▲ 419
Particles >38µm		ASTM D7647	>20	**2**	---	▲ 72
Particles >71µm		ASTM D7647	>4	**0**	---	3
Oil Cleanliness		ISO 4406 (c)	>19/17/15	▲ **20/18/14**	---	⬢ 25/22/18

OIL ANALYSIS REPORT

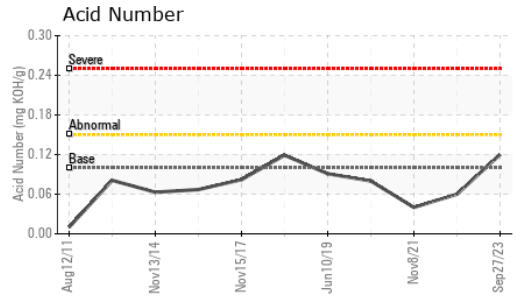
Particle Trend



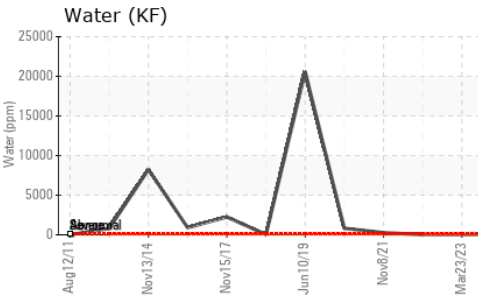
Water (KF)



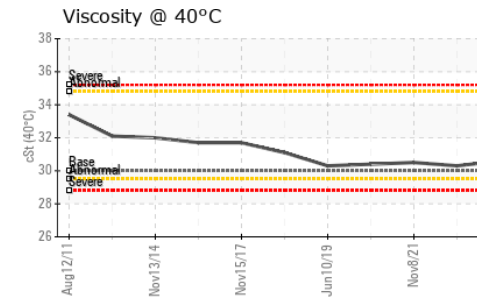
Acid Number



Water (KF)



Viscosity @ 40°C

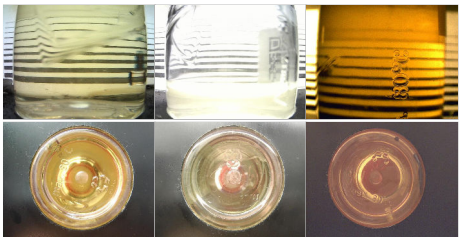


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.10	**0.12**	---	0.06

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**VLITE**	VLITE	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	VLITE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	VLITE
Appearance	scalar	Visual*	NORML	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>0.005	**.5%**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

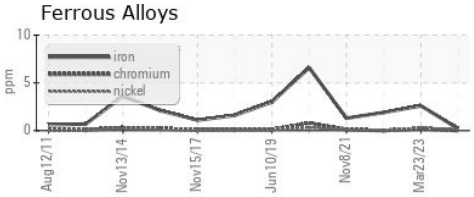
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	30.0	**30.6**	---	30.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

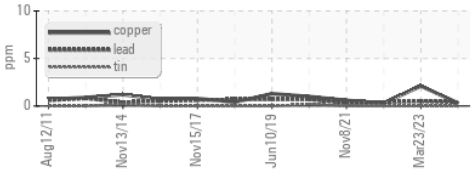


GRAPHS

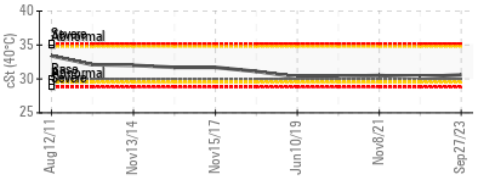
Ferrous Alloys



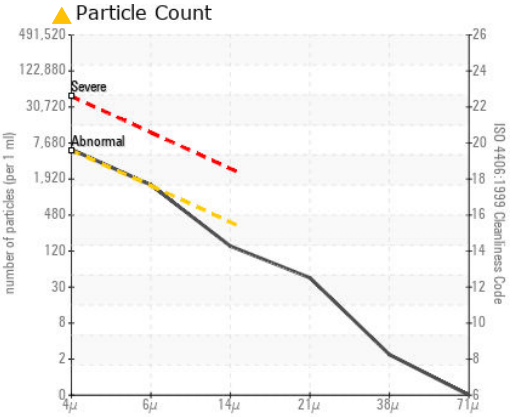
Non-ferrous Metals



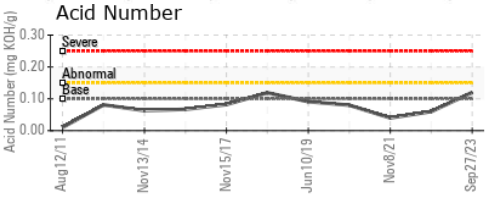
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0815680 **Recieved** : 18 Dec 2023
Lab Number : 02603832 **Diagnosed** : 20 Dec 2023
Unique Number : 5696917 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

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.

Bruce Power - Bruce A PdM
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