



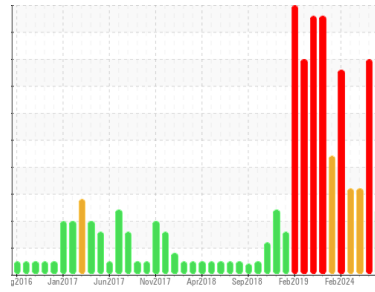
PROBLEM SUMMARY

Machine Id
HIGH FIRMNESS

Component
Hydraulic System

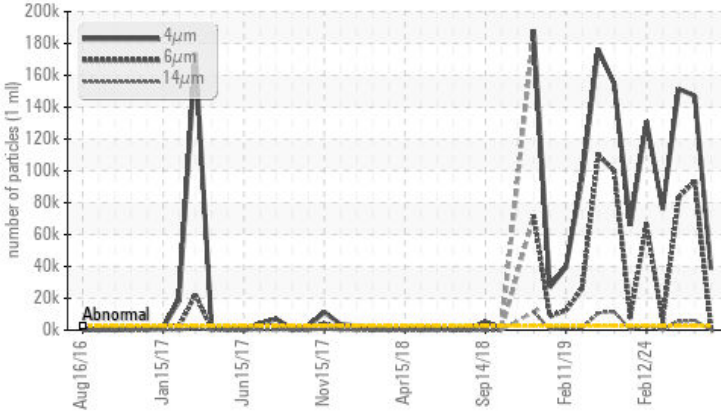
Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Check seals and/or filters for points of contaminant entry. 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 in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	SEVERE	ABNORMAL
Particles >4µm	ASTM D7647	>2500	▲ 38554	▲ 147042	▲ 151484
Particles >6µm	ASTM D7647	>640	▲ 2046	▲ 93617	▲ 83499
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 22/18/14	▲ 24/24/20	▲ 24/24/20

Customer Id: WOOLIT
Sample No.: WC0859526
Lab Number: 06212309
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:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Alert	---	---	?	Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.
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 Seals	---	---	?	Check seals and/or filters for points of contaminant entry.

HISTORICAL DIAGNOSIS

ISO



13 May 2024 Diag: Wes Davis

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. 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. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is a high amount of particulates (2 to 100 microns in size) present in the oil. 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](#)



CONTAMINANT



12 Apr 2024 Diag: Don Baldrige

We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. Appearance is hazy. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



WATER



13 Mar 2024 Diag: Don Baldrige

We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. 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.

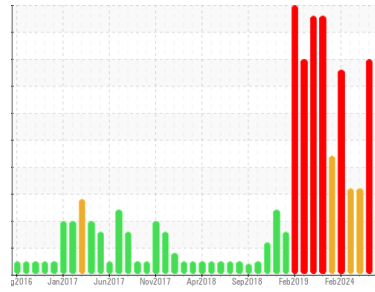
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
HIGH FIRMNESS

Component
Hydraulic System

Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Check seals and/or filters for points of contaminant entry. 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 in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code.

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			WC0859526	WC0859524	WC0859522
Sample Date	Client Info			12 Jun 2024	13 May 2024	12 Apr 2024
Machine Age	wks	Client Info		0	0	0
Oil Age	wks	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.05	NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	0	<1
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>20	0	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>20	0	0	2
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	<1	<1	<1
Tin	ppm	ASTM D5185m	>20	0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	<1	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	0	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	25	0	0	1
Calcium	ppm	ASTM D5185m	200	30	43	49
Phosphorus	ppm	ASTM D5185m	300	338	326	339
Zinc	ppm	ASTM D5185m	370	440	396	458
Sulfur	ppm	ASTM D5185m	2500	987	968	900

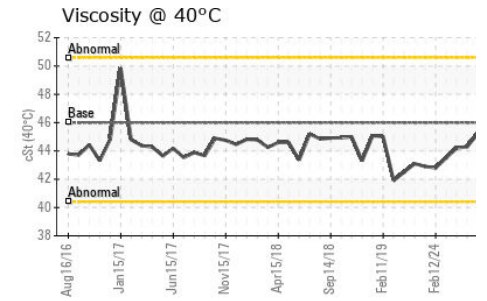
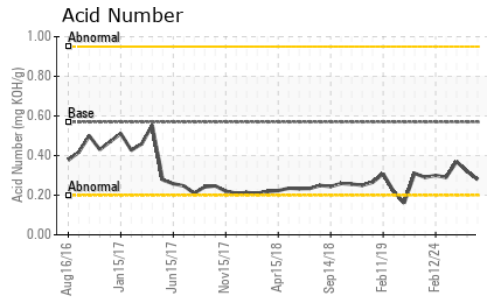
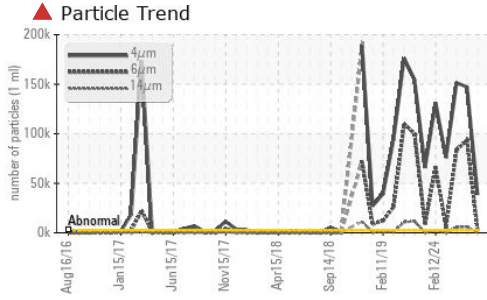
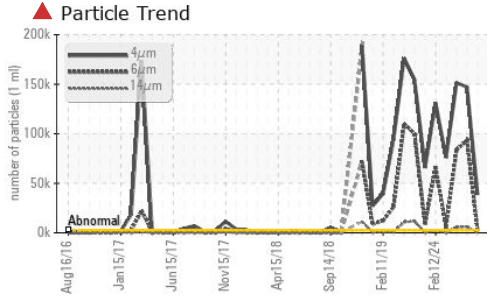
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	<1	<1
Sodium	ppm	ASTM D5185m		1	<1	0
Potassium	ppm	ASTM D5185m	>20	0	0	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	▲ 38554	▲ 147042	▲ 151484
Particles >6µm		ASTM D7647	>640	▲ 2046	▲ 93617	▲ 83499
Particles >14µm		ASTM D7647	>80	● 100	▲ 6190	▲ 5364
Particles >21µm		ASTM D7647	>20	19	▲ 668	▲ 864
Particles >38µm		ASTM D7647	>4	0	▲ 11	▲ 8
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	▲ 22/18/14	▲ 24/24/20	▲ 24/24/20

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.28	0.32	0.37



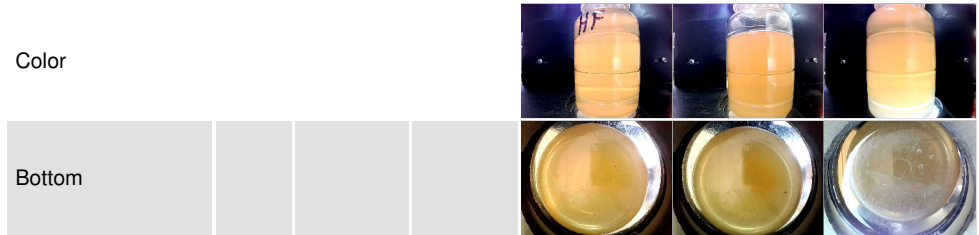
OIL ANALYSIS REPORT



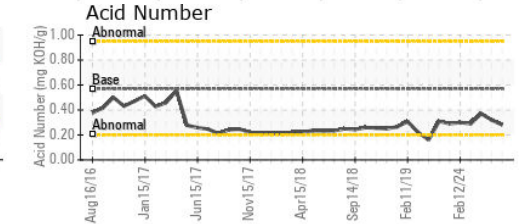
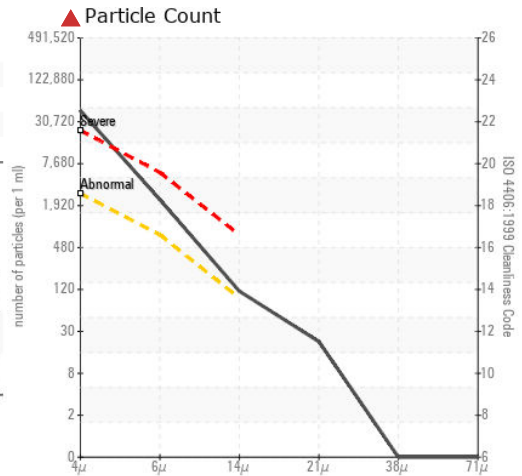
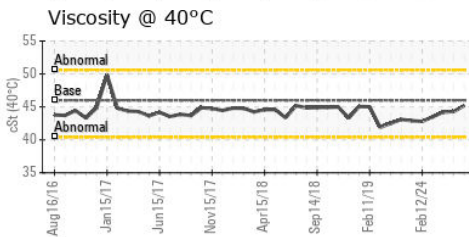
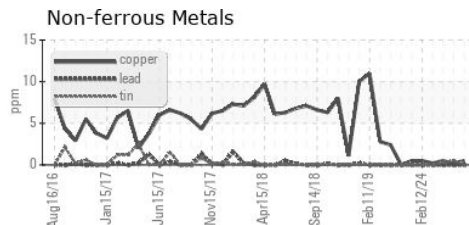
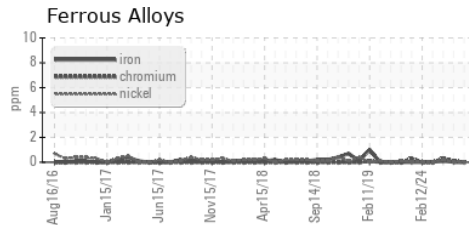
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	45.2	44.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0859526
Lab Number : 06212309
Unique Number : 11085173
Test Package : IND 2

Received : 17 Jun 2024
Tested : 19 Jun 2024
Diagnosed : 19 Jun 2024 - Wes Davis

WOODBRIIDGE CORPORATION
 2399 SOUTH STONE MOUNTAIN
 LITHONIA, GA
 US 30058
 Contact: MIKE FRYER
 mike_fryer@woodbridgeworks.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)