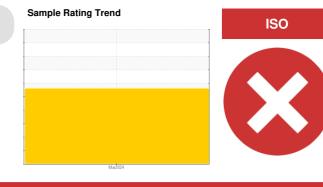


PROBLEM SUMMARY

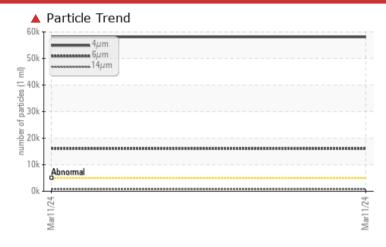
Machine Id ES013

Main Hydraulic System

AW HYDRAULIC OIL ISO 46 (--- GAL)



COMPONENT CONDITION SUMMARY



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. We advise that you check all areas where contaminants can enter the system. We advise that you check for visible metal particles in the oil. 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.

Customer Id: AMCMIS Sample No.: WC0914611 Lab Number: 02621478 Test Package: IND 2



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

PROBLEMATIC TEST RESULTS								
Sample Status				SEVERE				
Particles >4µm		ASTM D7647	>5000	▲ 58065				
Particles >6µm		ASTM D7647	>1300	16001				
Particles >14μm		ASTM D7647	>160	<u> </u>				
Particles >21µm		ASTM D7647	>40	153				
Oil Cleanliness		ISO 4406 (c)	>19/17/14	23/21/17				
White Metal	scalar	Visual*	NONE	▲ VLITE				
PrtFilter					no image	no image		

RECOMMENDED ACTIONS							
Action	Status	Date	Done By	Description			
Change Filter			?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.			
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 Dirt Access			?	We advise that you check all areas where contaminants can enter the system.			
Check For Visual Metal			?	We advise that you check for visible metal particles in the oil.			
Filter Fluid			?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.			

HISTORICAL DIAGNOSIS

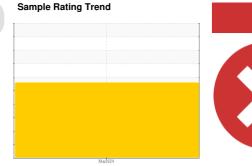


OIL ANALYSIS REPORT

ES013 Component

Main Hydraulic System

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. We advise that you check all areas where contaminants can enter the system. We advise that you check for visible metal particles in the oil. 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 rep 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 oil on your next sample.

Light concentration of visible metal present.

▲ Contamination

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

Fluid Condition

The AN level is acceptable for this fluid.

Particle Filter (Magn: 100 x)

olace	Chromium	ppm	ASTN
r	Nickel	ppm	ASTN
_	Titanium	ppm	ASTN
5	Silver	ppm	ASTN
у,	Aluminum	ppm	ASTN
,	Lead	ppm	ASTN
the	Copper	ppm	ASTN
	Tin	ppm	ASTN
	Antimony	ppm	ASTN
	Vanadium	ppm	ASTN
	Beryllium	ppm	ASTN
)	Cadmium	ppm	ASTN
	ADDITIVES		m
	Boron	ppm	ASTN
	Barium	ppm	ASTN
	Molybdenum	ppm	ASTN
	Manganese	ppm	ASTN
	Magnesium	ppm	ASTN
	Calcium	ppm	ASTN
	Phosphorus	ppm	ASTN
	Zinc	ppm	ASTN
	Sulfur	ppm	ASTN
	Lithium	ppm	ASTN
	CONTAMINANTS		m
300µ	Silicon	ppm	ASTN
	Sodium	ppm	ASTN
0.	Potassium	ppm	ASTN
366	FLUID CLEANLIN	ESS	m
	Particles >4µm		AST
	Particles >6um		AST

Oil Cleanliness

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0914611		
Sample Date		Client Info		11 Mar 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				SEVERE		
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1		
Chromium	ppm	ASTM D5185(m)	>20	0		
Nickel	ppm	ASTM D5185(m)	>20	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>20	<1		
Lead	ppm	ASTM D5185(m)	>20	<1		
Copper	ppm	ASTM D5185(m)	>20	3		
Tin	ppm	ASTM D5185(m)	>20	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185(m)	limit/base	current 0	history1	history2
	ppm		5		, in the second	,
Boron		ASTM D5185(m)	5	0		
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	5 5	0 13		
Boron Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5	0 13 0		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5	0 13 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 25	0 13 0 0		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200	0 13 0 0 0 7		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300	0 13 0 0 0 7 409		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300 370	0 13 0 0 0 7 409 476		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300 370	0 13 0 0 0 7 409 476 926		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300 370 2500	0 13 0 0 0 7 409 476 926 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300 370 2500	0 13 0 0 0 7 409 476 926 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m)	5 5 5 25 200 300 370 2500	0 13 0 0 0 7 409 476 926 <1 current		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300 370 2500	0 13 0 0 0 7 409 476 926 <1 current 0 0		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300 370 2500 limit/base >15 >20	0 13 0 0 0 7 409 476 926 <1 current 0 0		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) MASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 25 200 300 370 2500 limit/base >15 >20	0 13 0 0 0 7 409 476 926 <1 current 0 0 1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) MASTM D5185(m) ASTM D5185(m)	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000	0 13 0 0 0 7 409 476 926 <1 current 0 0	history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD ASTM D5185(m)	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000 >1300	0 13 0 0 0 7 409 476 926 <1 current 0 0 1 current ▲ 58065 ▲ 16001		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000 >1300 >160	0 13 0 0 0 7 409 476 926 <1 current 0 1 current ▲ 58065 ▲ 16001 ▲ 752 ▲ 153	history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD ASTM D5185(m) METHOD ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000 >1300 >160 >40	0 13 0 0 0 7 409 476 926 <1 current 0 0 1 current ▲ 58065 ▲ 16001 ▲ 752	history1	history2 history2

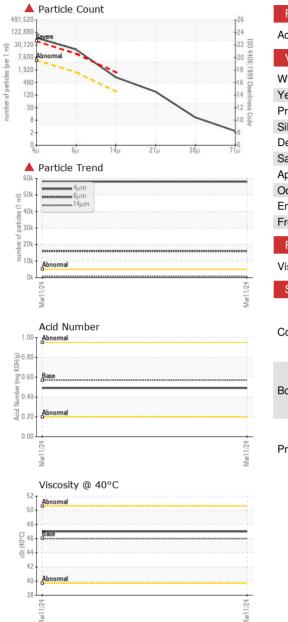
ISO 4406 (c) >19/17/14 **A 23/21/17**

Report Id: AMCMIS [WCAMIS] 02621478 (Generated: 03/15/2024 16:15:03) Rev: 2

Contact/Location: Sandip Patel - AMCMIS



OIL ANALYSIS REPORT



FLUID DEGRADA	NOITA	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	0.49		
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	▲ VLITE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Precipitate	scalar	Visual*	NONE	NONE		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*	>0.05	NEG		
Free Water	scalar	Visual*		NEG		
ELLID DDODEDT						
FLUID PROPERT	TES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	method ASTM D7279(m)	limit/base 46	current 47.0	history1	history2
	cSt				history1 history1	history2 history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	47.0		
Visc @ 40°C SAMPLE IMAGES	cSt	ASTM D7279(m)	46	47.0	history1	history2



CALA ISO 17025:2017 Accredited Laboratory

Report Id: AMCMIS [WCAMIS] 02621478 (Generated: 03/15/2024 16:15:03) Rev: 2

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Amcor Rigid Plastics North America Lab Number : 02621478

: WC0914611

Tested Unique Number : 5746597

Received : 12 Mar 2024 : 15 Mar 2024 Diagnosed

: 15 Mar 2024 - Kevin Marson Test Package: IND 2 (Additional Tests: BottomAnalysis, FILTERPATCH, PrtFilter) 245 Britannia Road East Mississauga, ON CA L4Z 4J3 Contact: Sandip Patel

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. Sandip.Patel@amcor.com T:

Validity of results and interpretation are based on the sample and information as supplied.

F: