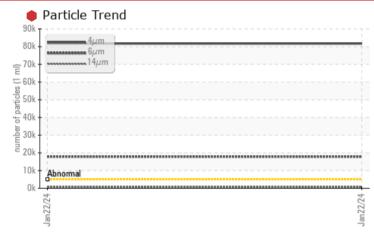


PROBLEM SUMMARY

Area BUILDING 63 - CENTRAL DRAIN & FILL Machine Id BARREL VAN 11

Bulk Fluid Tank Fluid AW HYDRAULIC OIL ISO 68 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

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. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 68. Please confirm.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	
Particles >4µm	ASTM D7647	>5000	e 81709	
Particles >6µm	ASTM D7647	>1300	• 17873	
Particles >14µm	ASTM D7647	>160	<u> </u>	
Particles >21µm	ASTM D7647	>40	4 131	
Oil Cleanliness	ISO 4406 (c)	>19/17/14	e 24/21/17	

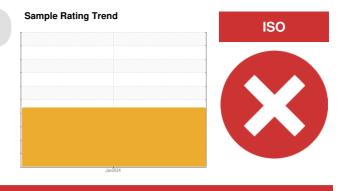
Customer Id: HIRWIN Sample No.: WC Lab Number: 02610599 Test Package: IND 2



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 <u>gloria.gonzalez@wearcheck.com</u>



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			?	The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 68. Please confirm.		
Information Required			?	The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 68. Please confirm.		
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.		
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

BUILDING 63 - CENTRAL DRAIN & FILL **BARREL VAN 11** Component

Bulk Fluid Tank AW HYDRAULIC OIL ISO 68 (--- GAL)

DIAGNOSIS

Recommendation

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. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 68. Please confirm.

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 Number		Client Info		WC		
Sample Date		Client Info		22 Jan 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				SEVERE		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)		7		
Chromium	ppm	ASTM D5185(m)		0		
Nickel	ppm	ASTM D5185(m)		0		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)		<1		
Lead	ppm	ASTM D5185(m)		1		
Copper	ppm	ASTM D5185(m)		13		
Tin	ppm	ASTM D5185(m)		<1		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
Cadmium ADDITIVES	ppm	ASTM D5185(m) method	limit/base	0 current	history1	history2
	ppm ppm		limit/base	-		
ADDITIVES	•••	method		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185(m)	5	current 7	history1	history2
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185(m) ASTM D5185(m)	5 5	current 7 0	history1 	history2
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	Method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5	current 7 0 0	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5	current 7 0 0 0	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 25	current 7 0 0 0 1	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185(m)	5 5 5 25 200	Current 7 0 0 0 0 1 31	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 25 200 300	Current 7 0 0 0 1 31 341	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method ASTM 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	Current 7 0 0 0 1 31 341 214	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	5 5 5 25 200 300 370	Current 7 0 0 0 1 31 341 214 2479	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	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)	5 5 25 200 300 370 2500	Current 7 0 0 0 1 31 341 214 2479 <<1	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Chosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	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 D5185(m)	5 5 25 200 300 370 2500	Current 7 0 0 0 1 31 341 214 2479 <1 Current	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m)	5 5 25 200 300 370 2500	current 7 0 0 0 1 31 341 214 2479 <1 current 2	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m)	5 5 25 200 300 370 2500	Current 7 0 0 0 1 31 341 214 2479 <1 Current 2 4	history1 history1	history2

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	e 81709		
Particles >6µm	ASTM D7647	>1300	e 17873		
Particles >14µm	ASTM D7647	>160	<u> </u>		
Particles >21µm	ASTM D7647	>40	<u> </u>		
Particles >38µm	ASTM D7647	>10	5		
Particles >71µm	ASTM D7647	>3	0		
Oil Cleanliness	ISO 4406 (c)	>19/17/14	• 24/21/17		



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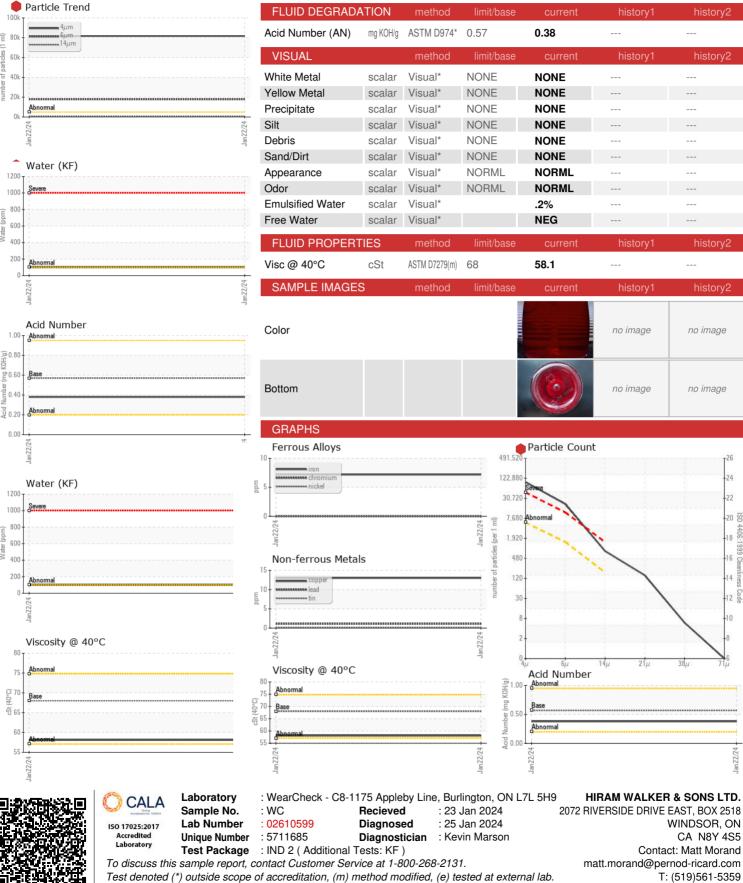
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Water

Water

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OIL ANALYSIS REPORT



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.

Report Id: HIRWIN [WCAMIS] 02610599 (Generated: 01/25/2024 11:34:00) Rev: 1

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