

Machine Id 52648 **Hydraulic System** AW HYDRAULIC OIL ISO 32 (--- GAL)

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 32. 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.

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PTK0005166		
Sample Date		Client Info		12 Jul 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Filter Changed		Client Info		Not Changd		
Sample Status				SEVERE		
Iron	ppm	ASTM D5185m	>20	1		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>20	0		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m		<1		
Aluminum	ppm	ASTM D5185m	>20	4		
Lead	ppm	ASTM D5185m	>20	0		
Copper	ppm	ASTM D5185m	>20	1		
Tin	ppm	ASTM D5185m	>20	<1		
Vanadium	ppm	ASTM D5185m		<1		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>15	0		
Potassium	ppm	ASTM D5185m	>20	<1		
Water		WC Method	>0.05	NEG		
Walei						
Particles >4µm		ASTM D7647	>5000	145166		
		ASTM D7647 ASTM D7647	>5000 >1300	14516683373		
Particles >4µm						
Particles >4µm Particles >6µm		ASTM D7647	>1300	a 83373		
Particles >4µm Particles >6µm Particles >14µm		ASTM D7647 ASTM D7647	>1300 >160	▲ 83373 ▲ 12777		
Particles >4µm Particles >6µm Particles >14µm Particles >21µm		ASTM D7647 ASTM D7647 ASTM D7647	>1300 >160 >40	 83373 12777 3238 	 	
Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm		ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>1300 >160 >40 >10 >3	 83373 12777 3238 61 	 	
Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	scalar	ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>1300 >160 >40 >10 >3	 83373 12777 3238 61 1 	 	
Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness	scalar	ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c)	>1300 >160 >40 >10 >3 >19/17/14	 83373 12777 3238 61 1 24/24/21 	 	
Particles >4µm Particles >6µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness Silt		ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) *Visual	>1300 >160 >40 >10 >3 >19/17/14 NONE	 83373 12777 3238 61 1 24/24/21 LIGHT 		
Particles >4µm Particles >6µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness Silt Debris	scalar	ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) *Visual *Visual	>1300 >160 >40 >10 >3 >19/17/14 NONE NONE	 83373 12777 3238 61 24/24/21 LIGHT NONE 		
Particles >4µm Particles >6µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness Silt Debris Sand/Dirt	scalar scalar	ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) *Visual *Visual *Visual	>1300 >160 >40 >10 >3 >19/17/14 NONE NONE NONE	 83373 12777 3238 61 24/24/21 LIGHT NONE NONE 		
Particles >4µm Particles >6µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness Silt Debris Sand/Dirt Appearance	scalar scalar scalar	ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) *Visual *Visual *Visual *Visual	>1300 >160 >40 >10 >3 >19/17/14 NONE NONE NONE NORML	 83373 12777 3238 61 24/24/21 LIGHT NONE NONE NORML 		
Particles >4µm Particles >6µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness Silt Debris Sand/Dirt Appearance Odor	scalar scalar scalar scalar	ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) *Visual *Visual *Visual *Visual *Visual *Visual	>1300 >160 >40 >10 >3 >19/17/14 NONE NONE NONE NORML NORML	 83373 12777 3238 61 24/24/21 LIGHT NONE NONE NORML NORML 		
Particles >4µm Particles >6µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness Silt Debris Sand/Dirt Appearance Odor	scalar scalar scalar scalar	ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) *Visual *Visual *Visual *Visual *Visual *Visual	>1300 >160 >40 >10 >3 >19/17/14 NONE NONE NONE NORML NORML	 83373 12777 3238 61 24/24/21 LIGHT NONE NONE NORML NORML 		
Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness Silt Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar scalar	ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>1300 >160 >40 >10 >3 >19/17/14 NONE NONE NONE NORML NORML	 83373 12777 3238 61 1 24/24/21 LIGHT NONE NORML NORML NEG 		
Particles >4µm Particles >6µm Particles >14µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	scalar scalar scalar scalar scalar ppm	ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>1300 >160 >40 >3 >19/17/14 NONE NONE NONE NORML NORML >0.05	 83373 12777 3238 61 1 24/24/21 LIGHT NONE NORML NORML NEG 0 		
Particles >4µm Particles >6µm Particles >14µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar scalar ppm ppm	ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) *Visual *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>1300 >160 >40 >3 >19/17/14 NONE NONE NONE NORML NORML >0.05	 83373 12777 3238 61 1 24/24/21 LIGHT NONE NORML NORML NEG 0 0 		
Particles >4µm Particles >6µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) *Visual *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>1300 >160 >40 >3 >19/17/14 NONE NONE NONE NORML NORML >0.05 5 5	 83373 12777 3238 61 1 24/24/21 LIGHT NONE NORML NORML NEG 0 <1 		
Particles >4µm Particles >6µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>1300 >160 >40 >3 >19/17/14 NONE NONE NONE NORML NORML >0.05 5 5	 83373 12777 3238 61 24/24/21 LIGHT NONE NORML NORML NORML NEG 0 <1 <1 		

200

370

ASTM D5185m

ASTM D5185m

ASTM D5185m 300

ASTM D5185m 2500

33

263

376

703

0.37

31.1

Calcium

Zinc

Sulfur

Phosphorus

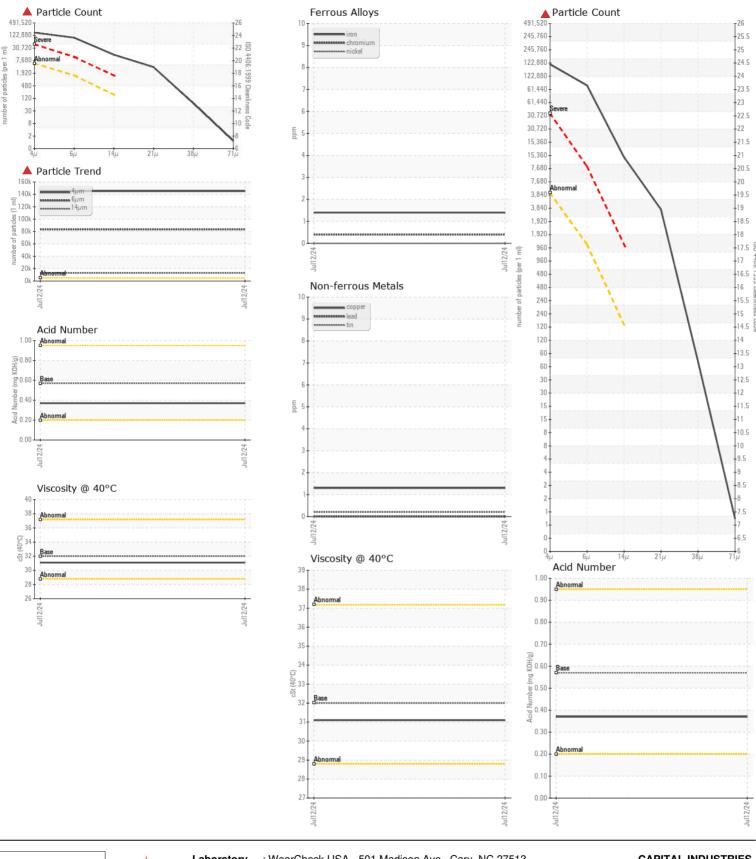
ppm

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Acid Number (AN) mg KOH/g ASTM D8045 0.57 Visc @ 40°C cSt ASTM D445 32



CAPITAL INDUSTRIES Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. Received 5801 3RD AVE S : PTK0005166 : 18 Jul 2024 Lab Number : 06240269 SEATTLE, WA Tested : 19 Jul 2024 Unique Number : 11129103 : 19 Jul 2024 - Wes Davis US 98108 Diagnosed Test Package : MOB 2 Contact: F. DEJONGE Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. fdejonge@capitalind.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (425)577-8345 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Contact/Location: F. DEJONGE - CAPSEAWA Page 2 of 2