

PROBLEM SUMMARY

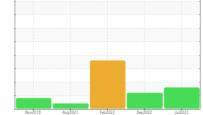
Sample Rating Trend

VISCOSITY

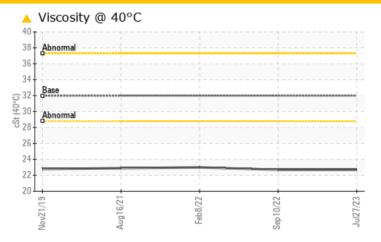
WS55 - WALL BOARD SUPPLY

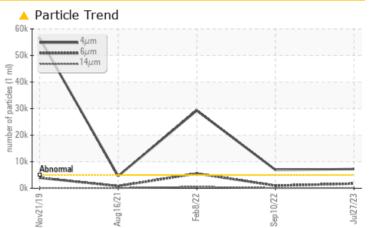
Hydraulic System

AW HYDRAULIC OIL ISO 32 (--- GAL)



COMPONENT CONDITION SUMMARY





RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC 1	TEST RE	ESULTS				
Sample Status				ATTENTION	ATTENTION	ABNORMAL
Particles >4µm		ASTM D7647	>5000	7229	<u>▲</u> 6925	△ 29274
Particles >6µm		ASTM D7647	>1300	1760	995	<u></u> 5562
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<u>^</u> 20/18/14	<u>^</u> 20/17/14	<u>22/20/16</u>
Visc @ 40°C	cSt	ASTM D445	32	22.7	22.7	23.0

Customer Id: PALJACNJ Sample No.: WC0747145 Lab Number: 05931467 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

10 Sep 2022 Diag: Don Baldridge

VISCOSITY



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. Viscosity of sample indicates oil is within ISO 22 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.



08 Feb 2022 Diag: Don Baldridge

WATER



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. Viscosity of sample indicates oil is within ISO 22 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.



16 Aug 2021 Diag: Don Baldridge

VISCOSITY



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 22 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.





OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY

WS55 - WALL BOARD SUPPLY

Hydraulic System

AW HYDRAULIC OIL ISO 32 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

Viscosity of sample indicates oil is within ISO 22 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

		Nov2019	Aug2021	Feb2022 Sep2022	Jul2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0747145	WC0723975	WC0648887
Sample Date		Client Info		27 Jul 2023	10 Sep 2022	08 Feb 2022
Machine Age	hrs	Client Info		5660	5071	4531
Oil Age	hrs	Client Info		5660	0	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Sample Status				ATTENTION	ATTENTION	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	20	16	11
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>10	<1	<1	<1
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>75	<1	<1	1
Tin	ppm	ASTM D5185m	>10	0	0	0
Antimony	ppm	ASTM D5185m				<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0	<1	0
				•	- 1	-
Barium	ppm	ASTM D5185m	5	0	0	0
			5	_		
Barium	ppm	ASTM D5185m	-	0	0	0
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	-	0	0 <1	0
Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	5	0 0 <1	0 <1 0	0 0 0
Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 25	0 0 <1 0	0 <1 0	0 0 0 0 <1
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 25 200	0 0 <1 0 68	0 <1 0 0 69	0 0 0 <1 68
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 25 200 300	0 0 <1 0 68 301	0 <1 0 0 69 307	0 0 0 <1 68 322
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 25 200 300 370	0 0 <1 0 68 301 385	0 <1 0 0 69 307 384	0 0 0 <1 68 322 415
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 25 200 300 370 2500	0 0 <1 0 68 301 385 1189	0 <1 0 0 69 307 384 1198	0 0 0 <1 68 322 415 973
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 25 200 300 370 2500 limit/base	0 0 -<1 0 68 301 385 1189	0 <1 0 0 0 69 307 384 1198 history1	0 0 0 <1 68 322 415 973 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 25 200 300 370 2500 limit/base	0 0 0 <1 0 68 301 385 1189 current	0 <1 0 0 0 69 307 384 1198 history1 <1	0 0 0 <1 68 322 415 973 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm	ASTM D5185m	5 25 200 300 370 2500 Iimit/base >20	0 0 0 <1 0 68 301 385 1189 current 2	0 <1 0 0 0 69 307 384 1198 history1 <1 1	0 0 0 <1 68 322 415 973 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	ASTM D5185m	5 25 200 300 370 2500 limit/base >20 >20	0 0 0 <1 0 68 301 385 1189 current 2 2	0 <1 0 0 0 69 307 384 1198 history1 <1 1 0	0 0 0 <1 68 322 415 973 history2 1 1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 25 200 300 370 2500 limit/base >20 >20 limit/base	0 0 0 <1 0 68 301 385 1189 current 2 2 0	0 <1 0 0 69 307 384 1198 history1 <1 0 history1	0 0 0 <1 68 322 415 973 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm	ASTM D5185m method ASTM D5185m	5 25 200 300 370 2500 limit/base >20 limit/base >5000	0 0 <1 0 68 301 385 1189 current 2 2 0 current ▲ 7229	0 <1 0 0 0 69 307 384 1198 history1 <1 1 0 history1 ▲ 6925	0 0 0 <1 68 322 415 973 history2 1 1 0 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm	ASTM D5185m method ASTM D5185m	5 25 200 300 370 2500 limit/base >20 limit/base >5000 >1300 >160	0 0 0 <1 0 68 301 385 1189 current 2 2 0 current △ 7229 △ 1760	0 <1 0 0 0 69 307 384 1198 history1 <1 1 0 history1 ▲ 6925 995	0 0 0 <1 68 322 415 973 history2 1 1 0 history2 △ 29274 △ 5562
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >6µm Particles >14µm	ppm	ASTM D5185m method ASTM D5185m	5 25 200 300 370 2500 limit/base >20 limit/base >5000 >1300 >160	0 0 0 <1 0 68 301 385 1189 current 2 2 0 current △ 7229 △ 1760 135	0 <1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 <1 68 322 415 973 history2 1 1 0 history2 △ 29274 △ 5562 △ 533
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm	ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	5 25 200 300 370 2500 limit/base >20	0 0 0 <1 0 68 301 385 1189 current 2 2 0 current ^ 7229 1760 135 26	0 <1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 <1 68 322 415 973 history2 1 1 0 history2 △ 29274 △ 5562 △ 533 △ 120
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm	ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 25 200 300 370 2500 limit/base >20 >20 limit/base >5000 >1300 >160 >40 >10	0 0 0 <1 0 68 301 385 1189 current 2 2 0 current 1760 135 26 0	0 <1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 <1 68 322 415 973 history2 1 1 0 history2 △ 29274 △ 5562 △ 533 △ 120 5
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 25 200 300 370 2500 limit/base >20 >20 limit/base >1300 >1300 >160 >40 >10 >3	0 0 0 68 301 385 1189 current 2 2 0 current ▲ 7229 ▲ 1760 135 26 0 0	0 <1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 <1 68 322 415 973 history2 1 1 0 history2 △ 29274 △ 5562 △ 533 △ 120 5



OIL ANALYSIS REPORT







Report Id: PALJACNJ [WUSCAR] 05931467 (Generated: 08/24/2023 10:48:48) Rev: 1

Laboratory Sample No. Lab Number **Unique Number**

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

: 05931467 : 10616738 Test Package : CONST

: WC0747145 Received Diagnosed Diagnostician

: 22 Aug 2023 : 24 Aug 2023 : Don Baldridge **PALFINGER - BRANCH 410** 632 CEDAR SWAMP RD JACKSON, NJ

US 08527

Contact: ANTHONY HARTIGAN

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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)

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