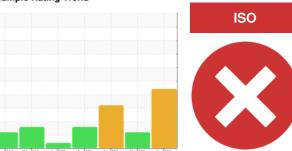


PROBLEM SUMMARY

Sample Rating Trend



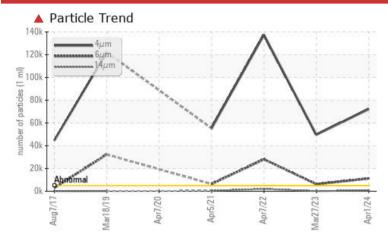
Machine Id

MACHINE 10 (S/N 2866)

Hydraulic System

SAFETY-KLEEN PERFORMANCE PLUS HYDRAULIC AW 46 (55 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. The oil change at the time of sampling has been noted. 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.

PROBLEMATIC TI	EST RESULTS			
Sample Status		SEVER	E ABNORMAL	ABNORMAL
Particles >4μm	ASTM D7647 >	>5000 A 7210	7 49656	▲ 137413
Particles >6μm	ASTM D7647 >	-1300 🔺 1123	5 • 6234	<u>▲</u> 28122
Particles >14μm	ASTM D7647 >	△ 669	117	2007
Particles >21µm	ASTM D7647 >	→40 ▲ 186	23	<u></u> 527
Oil Cleanliness	ISO 4406 (c) >	>19/17/14 ▲ 23/2	1/17 ▲ 23/20/14	<u>4</u> 24/22/18

Customer Id: CONSAM Sample No.: WC0910096 Lab Number: 06147297 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		
Resample			?	Resample in 30-45 days to monitor this situation.		
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.		

HISTORICAL DIAGNOSIS

27 Mar 2023 Diag: Don Baldridge

07 Apr 2022 Diag: Angela Borella

Oil and filter change at the time of sampling has been noted. 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 high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.







We recommend you service the filters on this component. Resample at the next service interval to monitor.Light concentration of visible metal present. All component wear rates are normal. There is a high amount of particulates present in the oil. The condition of the oil is acceptable for the time in service.



05 Apr 2021 Diag: Don Baldridge





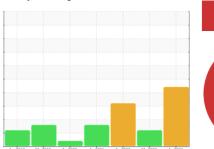
We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id

MACHINE 10 (S/N 2866)

Hydraulic System

Fluid

SAFETY-KLEEN PERFORMANCE PLUS HYDRAULIC AW 46 (55 GAL)

DIAGNOSIS

Recommendation

We advise that you check all areas where contaminants can enter the system. The oil change at the time of sampling has been noted. 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.

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

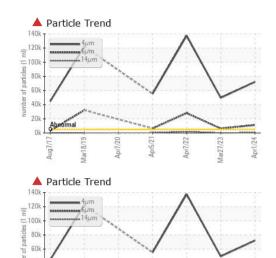
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

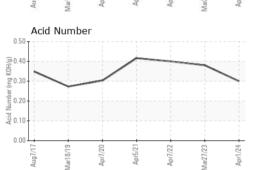
Sample Number Client Info WC091096 WC0800144 WC0668624 Sample Date Client Info O1 Apr 2024 27 Mar 2023 07 Apr 2022 07 ABNORMAL A	AULIC AW 46 (5	5 GAL)	Aug2017	Mar2019 Apr2020	Apr2021 Apr2022 Mar2023	Apr2024	
Cample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age mths Client Info 0 0 0 0 Did Age mths Client Info 0 0 0 0 Did Changed Colient Info Changed Changed Changed Changed ABNORMAL ABNORMAL<	Sample Number		Client Info		WC0910096	WC0800144	WC0668624
Dil Changed	Sample Date		Client Info		01 Apr 2024	27 Mar 2023	07 Apr 2022
Contamination	Machine Age	mths	Client Info		0	0	0
Severage ABNORMAL ABNORMAL	Oil Age	mths	Client Info		0	0	0
WEAR METALS	Oil Changed		Client Info		Changed	Changed	Filtered
Water WC Method >0.05 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Yon ppm ASTM D5185m >20 4 1 5 Chromium ppm ASTM D5185m >20 4 1 5 Jickel ppm ASTM D5185m >20 1 0 0 Jickel ppm ASTM D5185m >20 1 0 0 Silver ppm ASTM D5185m >20 1 0 <1 Muminum ppm ASTM D5185m >20 1 0 <1 Lead ppm ASTM D5185m >20 1 0 <1 Lead ppm ASTM D5185m >20 1 0 <1 Lead ppm ASTM D5185m >20 1 0 0 Astm D5185m >20 1 0 0 0 Astm D5	Sample Status				SEVERE	ABNORMAL	ABNORMAL
WEAR METALS method limit/base current history1 history2 Yon ppm ASTM D5185m >20 4 1 5 Chromium ppm ASTM D5185m >20 <1	CONTAMINATION	V	method	limit/base	current	history1	history2
Coron Popm ASTM D5185m >20 4 1 5	Water		WC Method	>0.05	NEG	NEG	NEG
Chromium ppm ASTM D5185m >20 <1 0 0 0	WEAR METALS		method	limit/base	current	history1	history2
As As As As As As As As	ron	ppm	ASTM D5185m	>20	4	1	5
Astronomic A	Chromium		ASTM D5185m	>20	<1	0	<1
Silver	Nickel		ASTM D5185m	>20	1	0	0
Silver	Γitanium		ASTM D5185m		<1	0	0
Astroper Astroper	Silver		ASTM D5185m		<1	0	0
Lead ppm ASTM D5185m >20 1 0 <1 Copper ppm ASTM D5185m >20 5 2 5 Cin ppm ASTM D5185m >20 1 0 0 Antimony ppm ASTM D5185m Aradium ppm ASTM D5185m <1 0 0 Addium ppm ASTM D5185m 0 0 <1 0 Barium ppm ASTM D5185m 0 0 <1 0 Barium ppm ASTM D5185m 2 1 <1 0 Anaganese ppm ASTM D5185m 2 1 <1 0 Agenesium ppm ASTM D5185m 48 70 69 75 Colicum ppm ASTM D5185m 340 366 348 394 Bullfur ppm ASTM D5185m 914 1021 879 Contamiu	Aluminum		ASTM D5185m	>20	1	0	<1
Copper ppm ASTM D5185m >20 5 2 5 Fin ppm ASTM D5185m >20 1 0 0 Antimony ppm ASTM D5185m Alaridium ppm ASTM D5185m <1	_ead		ASTM D5185m	>20	1	0	<1
Tin	Copper		ASTM D5185m	>20	5	2	5
Anadium ppm ASTM D5185m <1 0 0 Cadmium ppm ASTM D5185m 1 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 <1 Barium ppm ASTM D5185m <1 0 0 Molybdenum ppm ASTM D5185m 2 1 <1 0 Magnesium ppm ASTM D5185m 2 1 <1 0 Adagnesium ppm ASTM D5185m 48 70 69 75 Phosphorus ppm ASTM D5185m 340 366 348 394 Zinc ppm ASTM D5185m 430 447 453 512 Sulfur ppm ASTM D5185m >15 2 2 <1 CONTAMINANTS method limit/base current history1 history2 Solicon	Γin	ppm	ASTM D5185m	>20	1	0	0
ADDITIVES	Antimony	ppm	ASTM D5185m				
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 <1	/anadium	ppm	ASTM D5185m		<1	0	0
Boron ppm ASTM D5185m 0 0 <1 Barium ppm ASTM D5185m <1 0 0 Molybdenum ppm ASTM D5185m 2 1 <1 0 Manganese ppm ASTM D5185m <1 <1 0 0 Magnesium ppm ASTM D5185m 13 22 6 6 Calcium ppm ASTM D5185m 48 70 69 75 Phosphorus ppm ASTM D5185m 340 366 348 394 Zinc ppm ASTM D5185m 430 447 453 512 Bulfur ppm ASTM D5185m 914 1021 879 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >15 2 2 2 <1 CONTAMINANTS method limit/base current history1 <	Cadmium	ppm	ASTM D5185m		1	0	0
Sarium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 2 1 <1 Manganese ppm ASTM D5185m <1 <1 0 Magnesium ppm ASTM D5185m 13 22 6 Calcium ppm ASTM D5185m 48 70 69 75 Phosphorus ppm ASTM D5185m 340 366 348 394 Zinc ppm ASTM D5185m 430 447 453 512 Sulfur ppm ASTM D5185m 914 1021 879 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 2 2 <1 Godium ppm ASTM D5185m >20 <1 0 0 Potassium ppm ASTM D5185m >20 <1 0 1 FLUID CLEANLINESS method limit/base current history1 history2	Boron	ppm	ASTM D5185m		0	0	<1
Manganese ppm ASTM D5185m <1 <1 0 Magnesium ppm ASTM D5185m 13 22 6 Calcium ppm ASTM D5185m 48 70 69 75 Phosphorus ppm ASTM D5185m 340 366 348 394 Zinc ppm ASTM D5185m 430 447 453 512 Sulfur ppm ASTM D5185m 914 1021 879 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 2 2 <1 Goldium ppm ASTM D5185m >20 <1 0 0 0 Potassium ppm ASTM D5185m >20 <1 0 1 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 72107 49656<	Barium	ppm	ASTM D5185m		<1	0	0
Magnesium ppm ASTM D5185m 13 22 6 Calcium ppm ASTM D5185m 48 70 69 75 Phosphorus ppm ASTM D5185m 340 366 348 394 Zinc ppm ASTM D5185m 430 447 453 512 Sulfur ppm ASTM D5185m 914 1021 879 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 2 2 <1 Sodium ppm ASTM D5185m >20 <1 0 0 0 Potassium ppm ASTM D5185m >20 <1 0 1 FLUID CLEANLINESS method limit/base current history1 history2 Particles > 4μm ASTM D7647 >5000 A 72107 A 49656 A 137413 Particles > 6μm ASTM D7647 >160 A 669<	Molybdenum	ppm	ASTM D5185m		2	1	<1
Calcium ppm ASTM D5185m 48 70 69 75 Phosphorus ppm ASTM D5185m 340 366 348 394 Zinc ppm ASTM D5185m 430 447 453 512 Sulfur ppm ASTM D5185m 914 1021 879 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 2 2 <1 Godium ppm ASTM D5185m >20 <1 0 0 Potassium ppm ASTM D5185m >20 <1 0 1 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >5000 72107 49656 137413 Particles >6μm ASTM D7647 >160 669 117 2007 Particles >21μm ASTM D7647 >40 186 23	Manganese	ppm	ASTM D5185m		<1	<1	0
Phosphorus ppm ASTM D5185m 340 366 348 394 Zinc ppm ASTM D5185m 430 447 453 512 Sulfur ppm ASTM D5185m 914 1021 879 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 2 2 <1 Sodium ppm ASTM D5185m >0 0 0 0 Potassium ppm ASTM D5185m >20 <1 0 1 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >5000 ↑ 72107 ↑ 49656 ↑ 137413 Particles >6μm ASTM D7647 >1300 ↑ 11235 ↑ 6234 ↑ 28122 Particles >21μm ASTM D7647 >40 ↑ 186 23 ↑ 527 Particles >71μm ASTM D7647 >10 8	Magnesium	ppm	ASTM D5185m		13	22	6
Zinc ppm ASTM D5185m 430 447 453 512 Sulfur ppm ASTM D5185m 914 1021 879 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 2 2 <1 Godium ppm ASTM D5185m >20 <1 0 0 Potassium ppm ASTM D5185m >20 <1 0 1 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >5000 ↑ 72107 ↑ 49656 ↑ 137413 Particles >6μm ASTM D7647 >1300 ↑ 11235 ↑ 6234 ↑ 28122 Particles >14μm ASTM D7647 >160 ↑ 669 117 ↑ 2007 Particles >21μm ASTM D7647 >40 ↑ 186 23 ↑ 527 Particles >71μm ASTM D7647 >10 8 0 <td>Calcium</td> <td>ppm</td> <td>ASTM D5185m</td> <td>48</td> <th>70</th> <td>69</td> <td>75</td>	Calcium	ppm	ASTM D5185m	48	70	69	75
Sulfur ppm ASTM D5185m 914 1021 879 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 2 2 <1	Phosphorus	ppm	ASTM D5185m	340	366	348	394
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 2 2 <1	Zinc	ppm	ASTM D5185m	430	447	453	512
Solition ppm ASTM D5185m >15 2 2 2 <1	Sulfur	ppm	ASTM D5185m		914	1021	879
Godium ppm ASTM D5185m 0 0 0 0 Potassium ppm ASTM D5185m >20 <1 0 1 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >5000 Δ 72107 Δ 49656 Δ 137413 Particles >6μm ASTM D7647 >1300 Δ 11235 Δ 6234 Δ 28122 Particles >14μm ASTM D7647 >160 Δ 669 117 Δ 2007 Particles >21μm ASTM D7647 >40 Δ 186 23 Δ 527 Particles >38μm ASTM D7647 >10 8 0 Δ 44 Particles >71μm ASTM D7647 >3 0 0 1	CONTAMINANTS	;	method	limit/base	current	history1	history2
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Particles >4μm ASTM D7647 >5000 ▲ 72107 ▲ 49656 ▲ 137413 Particles >6μm ASTM D7647 >1300 ▲ 11235 ▲ 6234 ▲ 28122 Particles >14μm ASTM D7647 >160 ▲ 669 117 ▲ 2007 Particles >21μm ASTM D7647 >40 ▲ 186 23 ▲ 527 Particles >38μm ASTM D7647 >10 8 0 ▲ 44 Particles >71μm ASTM D7647 >3 0 0 1	Potassium	ppm	ASTM D5185m	>20	<1	0	1
Particles >6μm ASTM D7647 >1300 ▲ 11235 ▲ 6234 ▲ 28122 Particles >14μm ASTM D7647 >160 ▲ 669 117 ▲ 2007 Particles >21μm ASTM D7647 >40 ▲ 186 23 ▲ 527 Particles >38μm ASTM D7647 >10 8 0 ▲ 44 Particles >71μm ASTM D7647 >3 0 0 1	FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >14μm ASTM D7647 >160 ▲ 669 117 ▲ 2007 Particles >21μm ASTM D7647 >40 ▲ 186 23 ▲ 527 Particles >38μm ASTM D7647 >10 8 0 ▲ 44 Particles >71μm ASTM D7647 >3 0 0 1	Particles >4µm		ASTM D7647	>5000	72107	4 9656	<u>▲</u> 137413
Particles >21μm ASTM D7647 >40 ▲ 186 23 ▲ 527 Particles >38μm ASTM D7647 >10 8 0 ▲ 44 Particles >71μm ASTM D7647 >3 0 0 1	Particles >6µm		ASTM D7647	>1300	11235	<u>▲</u> 6234	▲ 28122
Particles >38μm ASTM D7647 >10 8 0 ▲ 44 Particles >71μm ASTM D7647 >3 0 0 1	Particles >14µm		ASTM D7647	>160	669	117	△ 2007
Particles >71μm ASTM D7647 >3 0 0	Particles >21µm		ASTM D7647	>40	<u> </u>	23	▲ 527
	Particles >38µm		ASTM D7647	>10	8	0	<u>44</u>
Dil Cleanliness ISO 4406 (c) >19/17/14 ▲ 23/21/17 ▲ 23/20/14 ▲ 24/22/18	Particles >71μm		ASTM D7647	>3	0	0	1
	Oil Cleanliness		ISO 4406 (c)	>19/17/14	23/21/17	23/20/14	2 4/22/18

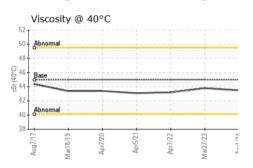


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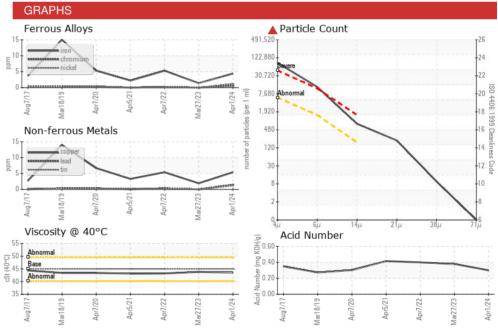
OIL ANALYSIS REPORT















Certificate 12367

Laboratory Sample No.

Lab Number : 06147297

Test Package : IND 2

: WC0910096 Unique Number : 10977375

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

Bottom

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

Received : 12 Apr 2024 **Tested** Diagnosed

: 15 Apr 2024 : 15 Apr 2024 - Wes Davis

Altium Packaging - SAMUELSON - Plant 1302A

1070 SAMUELSON ST CITY OF INDUSTRY, CA US 91748-1219 Contact: ERIC LOYA

Eric.Loya@altiumpkg.com T:

* - 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)

Report Id: CONSAM [WUSCAR] 06147297 (Generated: 04/15/2024 14:38:56) Rev: 1

Contact/Location: ERIC LOYA - CONSAM

F: