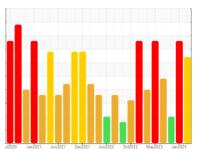


PROBLEM SUMMARY

Sample Rating Trend





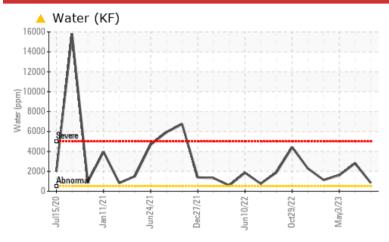
Machine Id

KMW
Component

Component
Pump Hydraulic System

AW HYDRAULIC OIL ISO 32 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. There is too much water present in this sample to perform a particle count.

PROBLEMATIC TEST RESULTS								
Sample Status SEVERE SEVERE ABNORMAL								
Water	%	ASTM D6304	>0.05	△ 0.085		△ 0.280		
ppm Water	ppm	ASTM D6304	>500	A 850		<u>△</u> 2800		
Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG	0.2%		
Free Water	scalar	*Visual		10.0	NEG	NEG		

Customer Id: BLUDAN Sample No.: WC0904908 Lab Number: 06141263 Test Package: IND 2



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						
Action	Status	Date	Done By	Description		
Water Drain-off			?	We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid.		
Resample			?	We recommend an early resample to monitor this condition.		
Check Water Access			?	We advise that you check for the source of water entry.		

HISTORICAL DIAGNOSIS

24 Jan 2024 Diag: Wes Davis

ISO



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 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.All component wear rates are normal. There is a high amount of particulates (2 to 100 microns in size) present in the oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



25 Jul 2023 Diag: Don Baldridge

WATER



We advise that you check for the source of water entry. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. There is a moderate concentration of water present in the oil. The AN level is acceptable for this fluid.



100



18 May 2023 Diag: Wes Davis

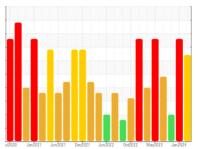
Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We advise that you check all areas where contaminants can enter the system. We advise that you 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. All component wear rates are normal. There is a high amount of particulates (2 to 100 microns in size) present in the oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.





OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id **KMW**

Pump Hydraulic System

AW HYDRAULIC OIL ISO 32 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. There is too much water present in this sample to perform a particle count.

All component wear rates are normal.

Contamination

There is a light concentration of water present in the oil. Excessive free water present.

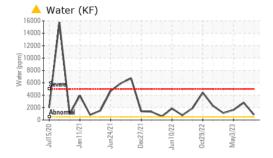
Fluid Condition

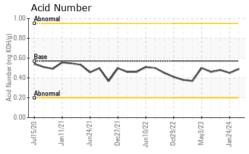
The AN level is acceptable for this fluid.

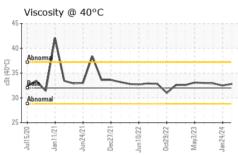
		uizozo Janz	UZI JUNZUZI DBCZUZI	OUNEVEE OUEVEE MAYEVES	Janeury	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0904908	WC0819731	WC0800314
Sample Date		Client Info		04 Apr 2024	24 Jan 2024	25 Jul 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	2	4	4
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	3	0
Lead	ppm	ASTM D5185m	>20	0	0	<1
Copper	ppm	ASTM D5185m	>20	2	2	8
Tin	ppm	ASTM D5185m	>20	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	<1	<1	<1
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	25	3	5	4
Calcium	ppm	ASTM D5185m	200	50	94	58
Phosphorus	ppm	ASTM D5185m	300	152	293	337
Zinc	ppm	ASTM D5185m	370	193	405	417
Sulfur	ppm	ASTM D5185m	2500	880	2001	2783
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	2	<1	<1
Sodium	ppm	ASTM D5185m		16	0	4
Potassium	ppm	ASTM D5185m	>20	2	1	2
Water	%	ASTM D6304	>0.05	△ 0.085		▲ 0.280
ppm Water	ppm	ASTM D6304	>500	<u>▲</u> 850		▲ 2800
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000		▲ 73834	
Particles >6µm		ASTM D7647	>1300		1 6648	
Particles >14μm		ASTM D7647	>160		1 607	
Particles >21µm		ASTM D7647	>40		▲ 394	
Particles >38μm		ASTM D7647	>10		12	
Particles >71µm		ASTM D7647	>3		1	
Oil Cleanliness		ISO 4406 (c)	>19/17/14		2 3/21/18	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.49	0.45	0.48



OIL ANALYSIS REPORT







VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG	0.2%
Free Water	scalar	*Visual		1 0.0	NEG	NEG
ELLID DDODEDT	TIEC	mothod	limit/bass	ourropt	history	hiotory?

FLUID PROPER	ΓIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	32.8	32.5	32.9

$\sim \Lambda \Lambda$	лог	N M N	GES
\circ AIN	ИΕЦ	IVIA	GEO

Color

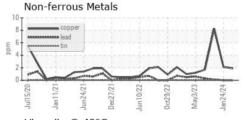
Bottom

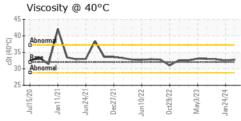


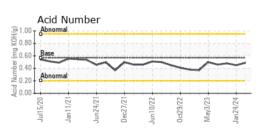


GRAPHS

Ferrous Alloys











Certificate 12367

Laboratory Sample No.

Lab Number : 06141263

: WC0904908

Test Package : IND 2 (Additional Tests: KF)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested** Unique Number : 10966071

: 08 Apr 2024 : 10 Apr 2024 Diagnosed

: 10 Apr 2024 - Don Baldridge

Contact: Jerald Caldwell JCaldwell@blueridgefiberboard.com

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)

Report Id: BLUDAN [WUSCAR] 06141263 (Generated: 04/10/2024 18:03:21) Rev: 1

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