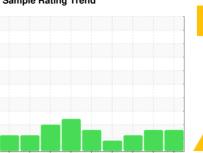


# **OIL ANALYSIS REPORT**

### Sample Rating Trend



**VISCOSITY** 



Machine Id

# **WATER JET PUMP**

Hydraulic System

**AW HYDRAULIC OIL ISO 68 (--- GAL)** 

## **DIAGNOSIS**

#### Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

All component wear rates are normal.

## Contamination

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

#### Fluid Condition

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0873119	WC0845575	WC0845570
Sample Date		Client Info		04 Apr 2024	24 Jan 2024	16 Oct 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				ABNORMAL	ABNORMAL	ABNORMAL
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	2	2	3
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>20	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	3	0
Lead	ppm	ASTM D5185m	>20	0	0	<1
Copper	ppm	ASTM D5185m	>20	2	3	6
Tin	ppm	ASTM D5185m	>20	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	<1	<1	2
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	<1	1	2
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	AOTAL DELOC	25	5	9	-
Calcium	le le	ASTM D5185m				7
	ppm	ASTM D5185m	200	75	100	109
Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m	200 300	156	100 267	109 312
Phosphorus Zinc	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	200 300 370	156 290	100 267 391	109 312 398
Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m	200 300	156	100 267	109 312
Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	200 300 370	156 290	100 267 391	109 312 398
Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	200 300 370 2500 limit/base	156 290 1406 current	100 267 391 2321	109 312 398 2828
Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	200 300 370 2500 limit/base	156 290 1406 current	100 267 391 2321 history1	109 312 398 2828 history2
Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	200 300 370 2500 limit/base >15	156 290 1406 current	100 267 391 2321 history1	109 312 398 2828 history2
Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	200 300 370 2500 limit/base >15	156 290 1406 current 2 9	100 267 391 2321 history1 <1	109 312 398 2828 history2 2
Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	200 300 370 2500 limit/base >15 >20	156 290 1406 current 2 9	100 267 391 2321 history1 <1 0	109 312 398 2828 history2 2 <1
Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method	200 300 370 2500 limit/base >15 >20	156 290 1406  current 2 9 2  current  54609  4665	100 267 391 2321 history1 <1 0 1	109 312 398 2828 history2 2 <1 <1
Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	200 300 370 2500 limit/base >15 >20 limit/base >5000	156 290 1406  current 2 9 2  current  ▲ 54609  ▲ 4665 123	100 267 391 2321 history1 <1 0 1 history1  ▲ 51672 ▲ 4858 87	109 312 398 2828 history2 2 <1 <1 history2
Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  method ASTM D5185m	200 300 370 2500  limit/base >15 >20  limit/base >5000 >1300	156 290 1406  current 2 9 2  current  54609  4665	100 267 391 2321 history1 <1 0 1 history1 ▲ 51672 ▲ 4858	109 312 398 2828 history2 2 <1 <1 history2
Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	200 300 370 2500  limit/base >15  >20  limit/base >5000 >1300 >160 >40 >10	156 290 1406  current  2 9 2  current  ▲ 54609  ▲ 4665 123 31 1	100 267 391 2321 history1 <1 0 1 history1  ▲ 51672 ▲ 4858 87 20 2	109 312 398 2828 history2 2 <1 <1 history2
Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium  FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	200 300 370 2500  limit/base >15  >20  limit/base >5000 >1300 >160 >40 >10 >3	156 290 1406  current  2 9 2  current  ▲ 54609  ▲ 4665 123 31 1 0	100 267 391 2321 history1 <1 0 1 history1  ▲ 51672  ▲ 4858 87 20 2 1	109 312 398 2828 history2 2 <1 <1 history2
Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium  FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	200 300 370 2500  limit/base >15  >20  limit/base >5000 >1300 >160 >40 >10	156 290 1406  current  2 9 2  current  ▲ 54609  ▲ 4665 123 31 1	100 267 391 2321 history1 <1 0 1 history1  ▲ 51672 ▲ 4858 87 20 2	109 312 398 2828 history2 2 <1 <1 history2

Acid Number (AN)

mg KOH/g ASTM D8045 0.57

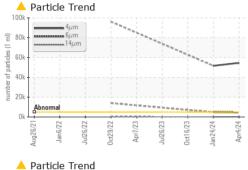
0.36

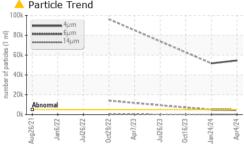
0.31

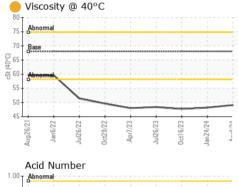
Page 1 of 2

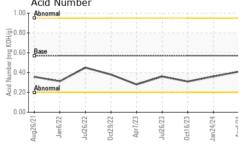


## **OIL ANALYSIS REPORT**



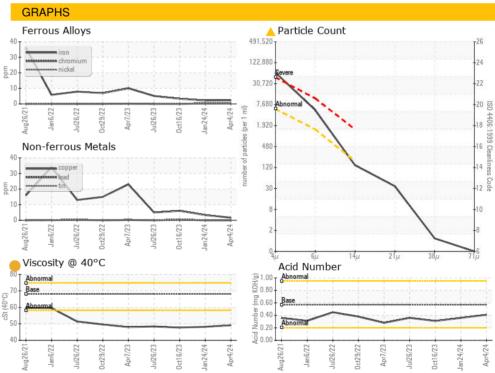






VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	▲ MODER
Debris	scalar	*Visual	NONE	LIGHT	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	TES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	68	49.1	48.2	47.7
SAMPLE IMAGES	3	method	limit/base	current	history1	history2

Color	
Bottom	







Certificate 12367

Laboratory Sample No.

Test Package : IND 2

Lab Number : 06141261 Unique Number : 10966069

С

В

: WC0873119

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 08 Apr 2024 **Tested** 

: 09 Apr 2024 Diagnosed

: 10 Apr 2024 - Don Baldridge

Contact: Jerald Caldwell JCaldwell@blueridgefiberboard.com

**BLUE RIDGE FIBERBOARD** 

250 KNIGHT CELOTEX DR

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] 06141261 (Generated: 04/10/2024 18:01:26) Rev: 1

Contact/Location: Jerald Caldwell - BLUDAN

DANVILLE, VA

US 24541

T:

F: