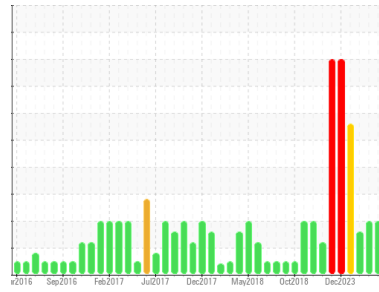




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

LOW FIRMNESS

Component

Hydraulic System

Fluid

AW HYDRAULIC OIL ISO 46 (--- GAL)

DIAGNOSIS

Recommendation

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 perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. 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.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

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 INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0859523	WC0859521	WC0859519
Sample Date	Client Info		12 Apr 2024	13 Mar 2024	12 Feb 2024
Machine Age	wks	Client Info	0	0	0
Oil Age	wks	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	ATTENTION

CONTAMINATION

	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	<1	0	0
Chromium	ppm	ASTM D5185m	>20	<1	0	0
Nickel	ppm	ASTM D5185m	>20	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	0	0
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	<1	0	0
Tin	ppm	ASTM D5185m	>20	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	5	0	0	
Barium	ppm	ASTM D5185m	5	0	0	
Molybdenum	ppm	ASTM D5185m	5	<1	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	25	<1	0	0
Calcium	ppm	ASTM D5185m	200	42	40	44
Phosphorus	ppm	ASTM D5185m	300	314	320	328
Zinc	ppm	ASTM D5185m	370	437	412	398
Sulfur	ppm	ASTM D5185m	2500	870	911	828

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>15	<1	0	1
Sodium	ppm	ASTM D5185m		0	<1	0
Potassium	ppm	ASTM D5185m	>20	<1	0	0

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 10024	▲ 13100	1366
Particles >6µm	ASTM D7647	>640	▲ 3140	▲ 4093	● 695
Particles >14µm	ASTM D7647	>80	▲ 402	▲ 440	● 114
Particles >21µm	ASTM D7647	>20	▲ 115	▲ 111	● 37
Particles >38µm	ASTM D7647	>4	5	5	3
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 21/19/16	▲ 21/19/16	● 18/17/14

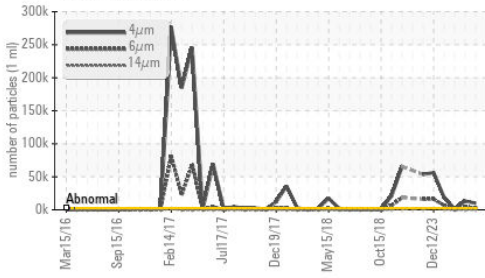
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.36	0.38	0.447

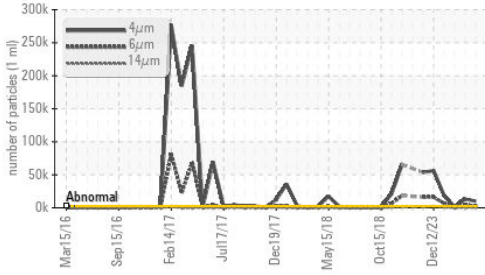


OIL ANALYSIS REPORT

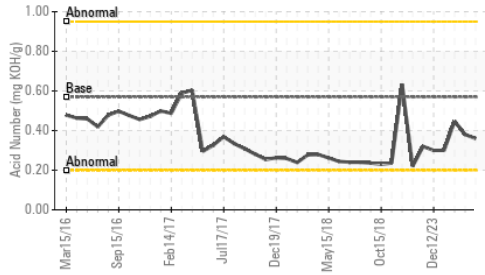
Particle Trend



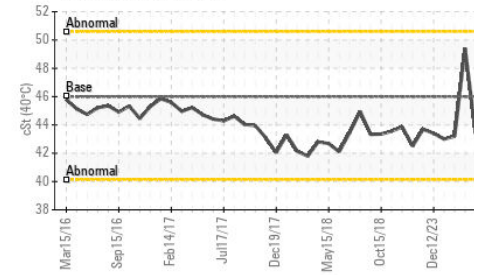
Particle Trend



Acid Number



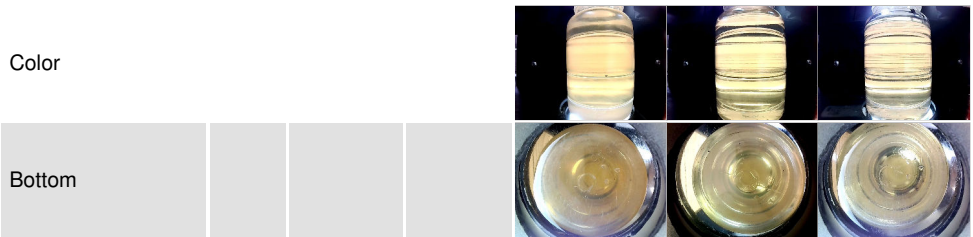
Viscosity @ 40°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

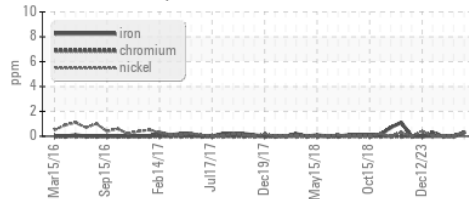
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	43.4	49.4	43.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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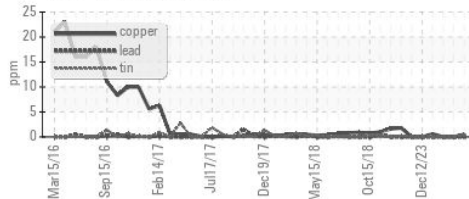


GRAPHS

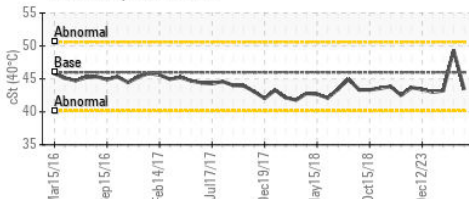
Ferrous Alloys



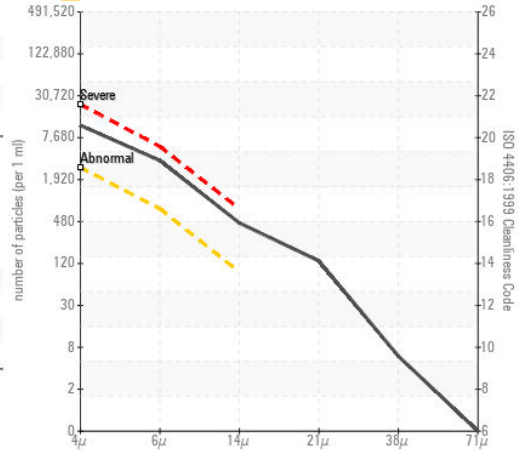
Non-ferrous Metals



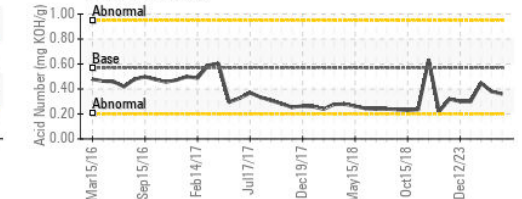
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0859523
 Lab Number : 06157653
 Unique Number : 10993076
 Test Package : IND 2

Received : 23 Apr 2024
 Tested : 24 Apr 2024
 Diagnosed : 24 Apr 2024 - Wes Davis

WOODBRIIDGE CORPORATION
 2399 SOUTH STONE MOUNTAIN
 LITHONIA, GA
 US 30058
 Contact: MIKE FRYER
 mike_fryer@woodbridgegroup.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)

T:
F: