



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>ATTENTION</b>

Machine Id  
**HC1114**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

## RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0823334</b>	WC0556222	WC0785174
Sample Date		Client Info		<b>22 Feb 2024</b>	09 Jun 2023	12 Mar 2023
Machine Age	hrs	Client Info		<b>9430</b>	8557	8094
Oil Age	hrs	Client Info		<b>0</b>	998	0
Filter Age	hrs	Client Info		<b>0</b>	998	0
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Not Changed
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ATTENTION	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>5</b>	5	4
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>75	<b>6</b>	7	7
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

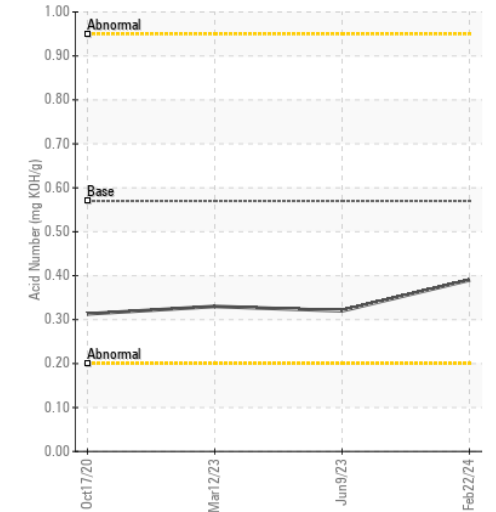
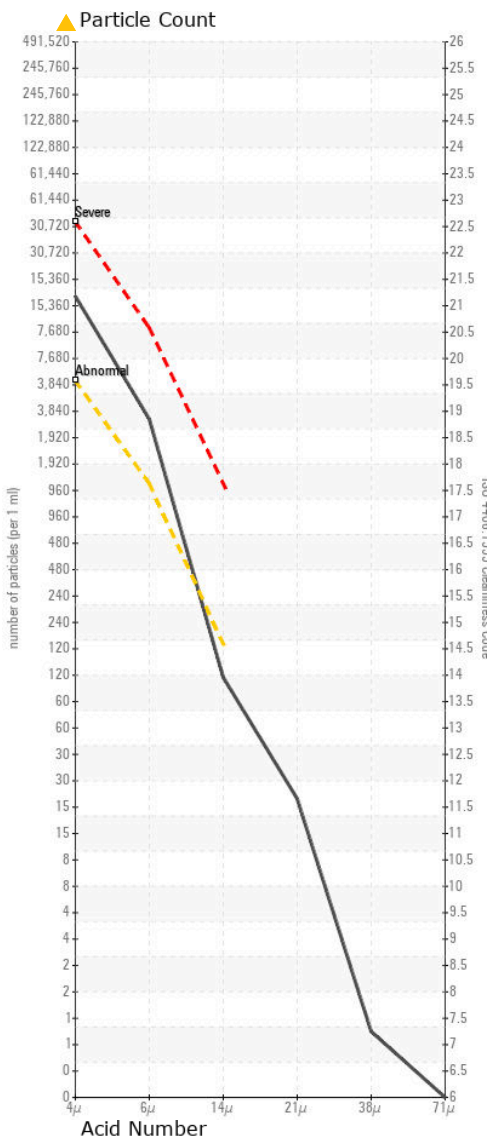
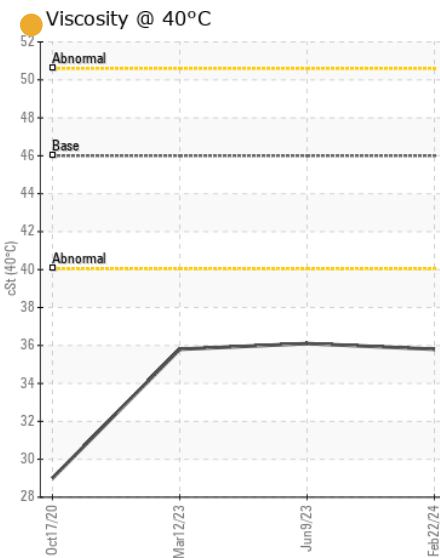
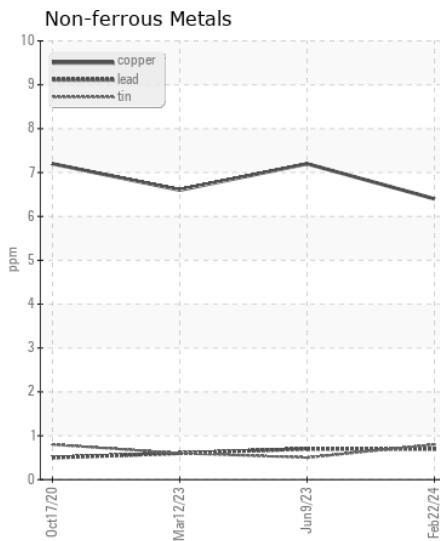
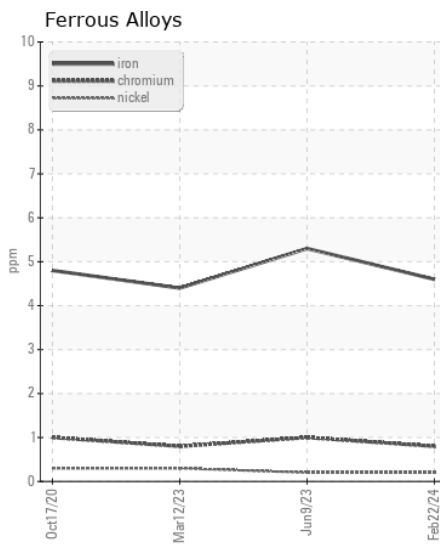
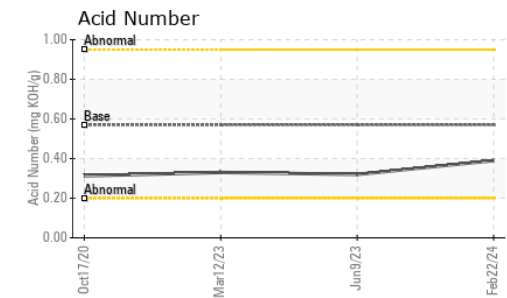
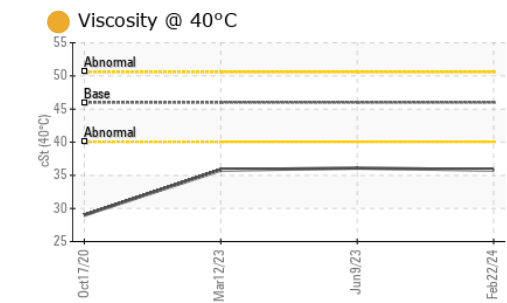
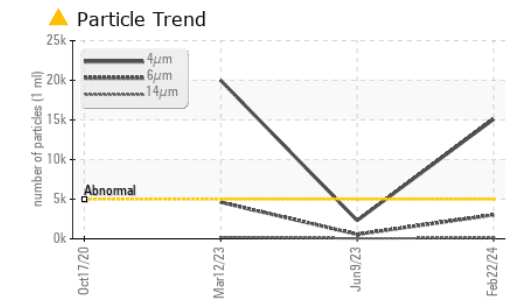
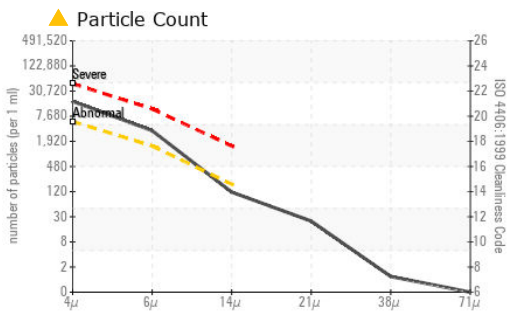
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>4</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>▲ 15090</b>	2311	▲ 19978
Particles >6µm		ASTM D7647	>1300	<b>▲ 3025</b>	559	▲ 4610
Particles >14µm		ASTM D7647	>160	<b>103</b>	50	▲ 198
Particles >21µm		ASTM D7647	>40	<b>21</b>	12	40
Particles >38µm		ASTM D7647	>10	<b>1</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 21/19/14</b>	18/16/13	▲ 21/19/15
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		<b>2</b>	0	0
Boron	ppm	ASTM D5185m	5	<b>4</b>	2	2
Barium	ppm	ASTM D5185m	5	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	25	<b>5</b>	8	8
Calcium	ppm	ASTM D5185m	200	<b>190</b>	195	189
Phosphorus	ppm	ASTM D5185m	300	<b>277</b>	292	264
Zinc	ppm	ASTM D5185m	370	<b>322</b>	350	331
Sulfur	ppm	ASTM D5185m	2500	<b>1814</b>	2241	2020
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.39</b>	0.32	0.33
Visc @ 40°C	cSt	ASTM D445	46	<b>35.8</b>	36.1	35.8



Certificate L2367

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

Sample No. : WC0823334

Lab Number : 06102430

Unique Number : 10900660

Test Package : CONST

Received : 27 Feb 2024

Tested : 29 Feb 2024

Diagnosed : 29 Feb 2024 - Don Baldrige

BUCKNER HEAVY LIFT

4732 NC 54 EAST

GRAHAM, NC

US 27253-9215

Contact: MICHAEL LAWSON

michaell@bucknercompanies.com

T: (336)376-8888

F: (336)376-4090

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)