



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id  
**CR5503**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0952089</b>	WC0877405	WC0833322
Sample Date		Client Info		<b>14 Jun 2024</b>	19 Jan 2024	03 Sep 2023
Machine Age	hrs	Client Info		<b>10882</b>	10142	9050
Oil Age	hrs	Client Info		<b>740</b>	0	0
Filter Age	hrs	Client Info		<b>740</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ATTENTION</b>	ABNORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<1	1	6
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>3</b>	0	0
Lead	ppm	ASTM D5185m	>10	<b>1</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>3</b>	2	<1
Tin	ppm	ASTM D5185m	>10	<1	2	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

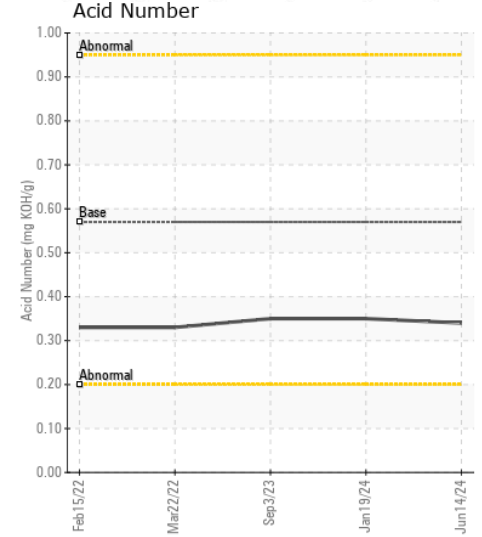
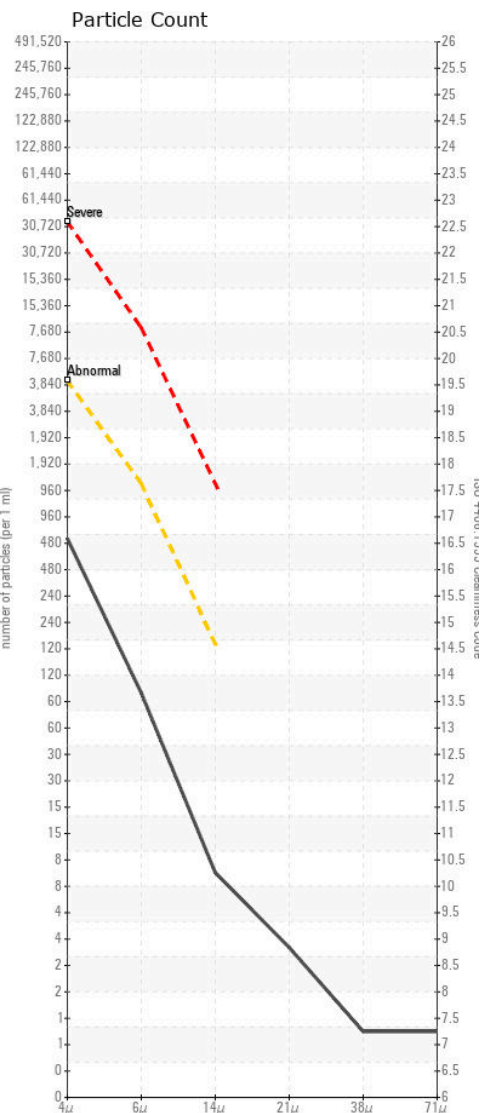
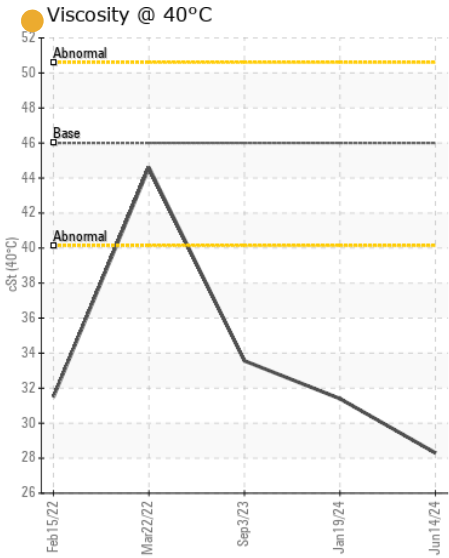
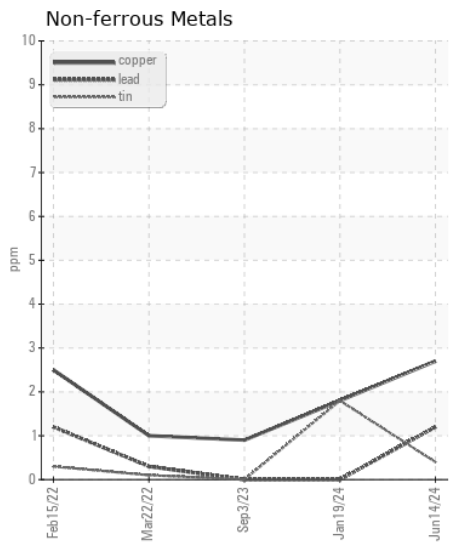
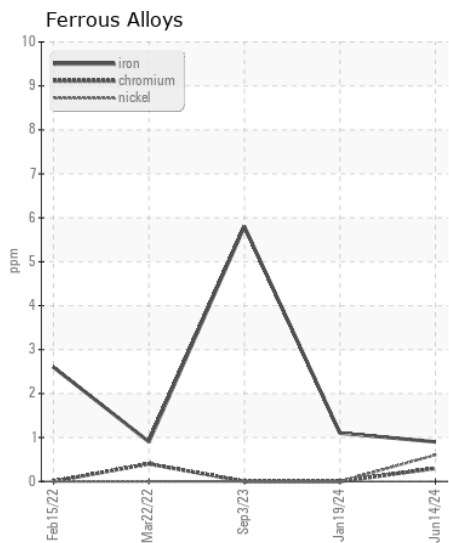
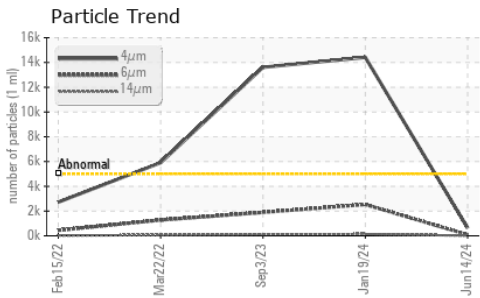
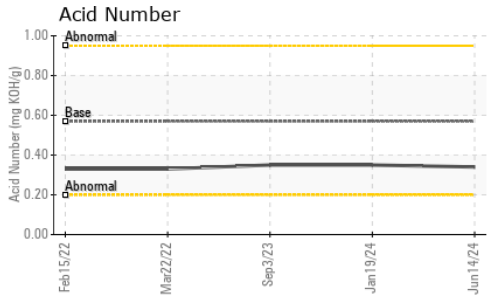
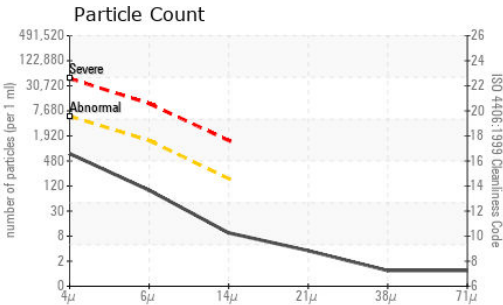
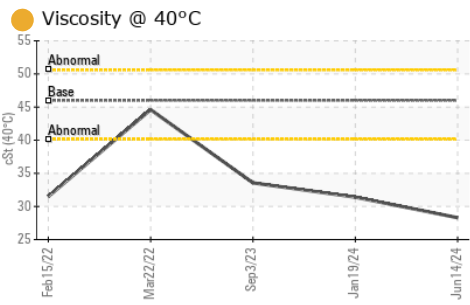
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<1	<1	<1
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>634</b>	▲ 14417	▲ 13608
Particles >6µm		ASTM D7647	>1300	<b>84</b>	● 2529	● 1891
Particles >14µm		ASTM D7647	>160	<b>8</b>	143	127
Particles >21µm		ASTM D7647	>40	<b>3</b>	41	25
Particles >38µm		ASTM D7647	>10	<b>1</b>	2	0
Particles >71µm		ASTM D7647	>3	<b>1</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>16/14/10</b>	▲ 21/19/14	▲ 21/18/14
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

Viscosity of sample indicates oil is within ISO 32 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>0</b>	0	<1
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	5	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m	5	<1	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	25	<1	0	2
Calcium	ppm	ASTM D5185m	200	<b>13</b>	33	62
Phosphorus	ppm	ASTM D5185m	300	<b>322</b>	310	221
Zinc	ppm	ASTM D5185m	370	<b>365</b>	377	415
Sulfur	ppm	ASTM D5185m	2500	<b>1347</b>	1204	1687
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.34</b>	0.35	0.35
Visc @ 40°C	cSt	ASTM D445	46	● <b>28.3</b>	● 31.4	● 33.56



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0952089  
**Lab Number** : 06218746  
**Unique Number** : 11096943  
**Test Package** : CONST  
**Received** : 24 Jun 2024  
**Tested** : 25 Jun 2024  
**Diagnosed** : 26 Jun 2024 - Don Baldrige

**BUCKNER HEAVY LIFT**  
 4732 NC 54 EAST  
 GRAHAM, NC  
 US 27253-9215  
 Contact: MICHAEL LAWSON  
 michael@bucknercompanies.com  
 T: (336)376-8888  
 F: (336)376-4090

Certificate L2367  
 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)