



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Machine Id  
**HC1112**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

## WEAR

All component wear rates are normal.

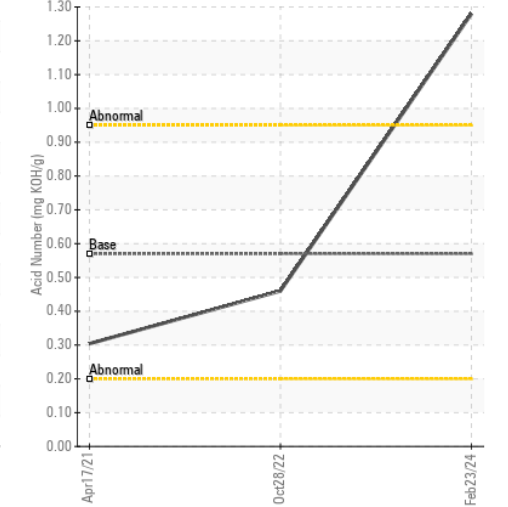
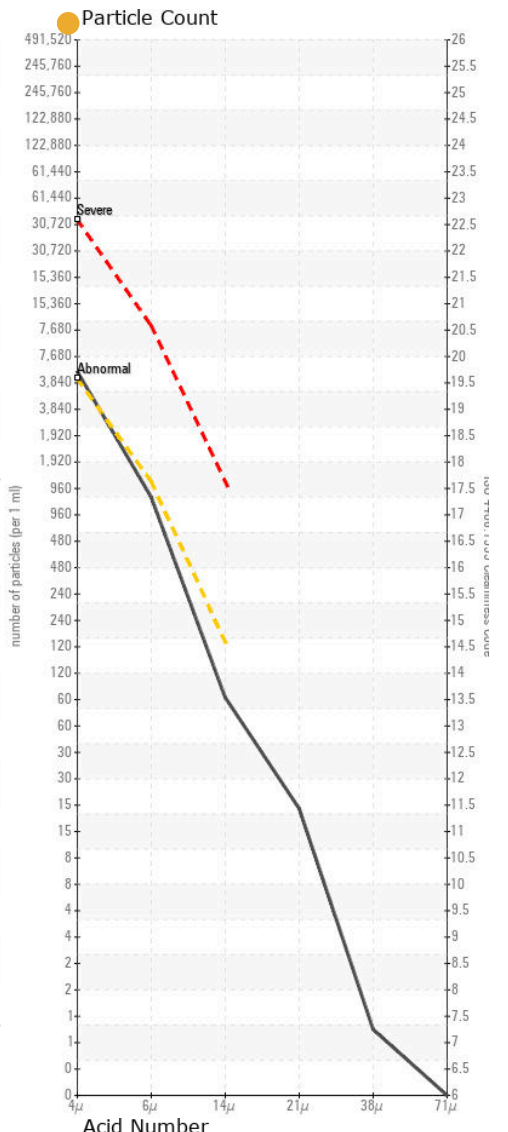
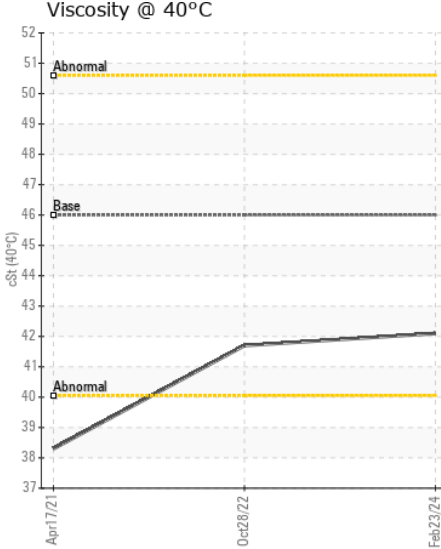
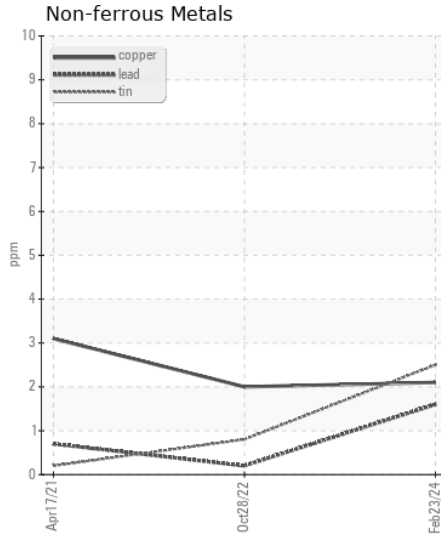
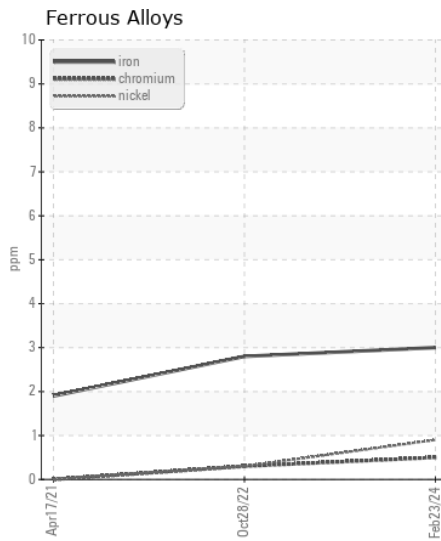
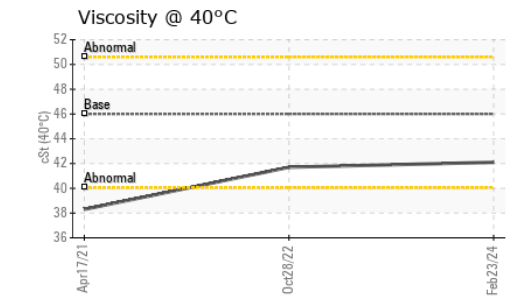
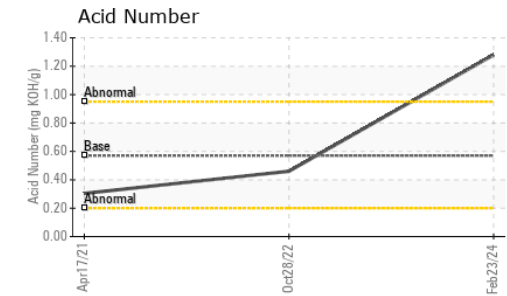
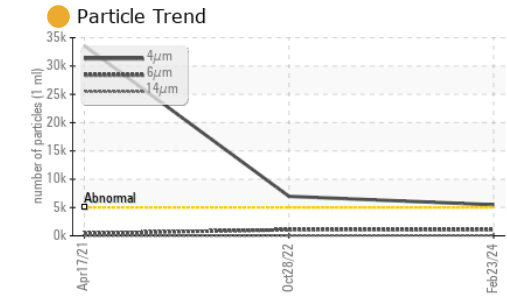
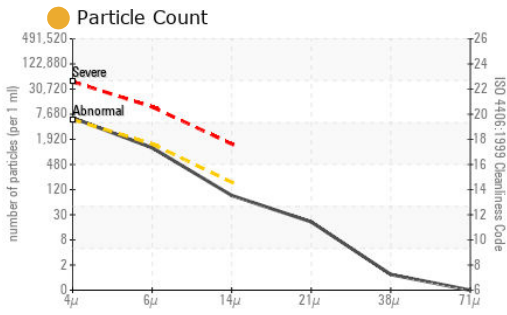
## CONTAMINATION

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

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0823524</b>	WC0720548	WC0567943
Sample Date		Client Info		<b>23 Feb 2024</b>	28 Oct 2022	17 Apr 2021
Machine Age	hrs	Client Info		<b>6555</b>	5627	5165
Oil Age	hrs	Client Info		<b>744</b>	345	1000
Filter Age	hrs	Client Info		<b>744</b>	345	1000
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ATTENTION</b>	ATTENTION	ABNORMAL
Iron	ppm	ASTM D5185m	>20	<b>3</b>	3	2
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	4
Lead	ppm	ASTM D5185m	>10	<b>2</b>	<1	<1
Copper	ppm	ASTM D5185m	>75	<b>2</b>	2	3
Tin	ppm	ASTM D5185m	>10	<b>2</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
Silicon	ppm	ASTM D5185m	>20	<b>1</b>	<1	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>5489</b>	6974	33590
Particles >6µm		ASTM D7647	>1300	<b>1059</b>	1070	442
Particles >14µm		ASTM D7647	>160	<b>77</b>	55	19
Particles >21µm		ASTM D7647	>40	<b>18</b>	12	4
Particles >38µm		ASTM D7647	>10	<b>1</b>	1	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>20/17/13</b>	20/17/13	22/16/11
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	HAZY
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG
Sodium	ppm	ASTM D5185m		<b>2</b>	1	0
Boron	ppm	ASTM D5185m	5	<b>2</b>	1	2
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	5	<b>1</b>	2	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	25	<b>12</b>	15	3
Calcium	ppm	ASTM D5185m	200	<b>157</b>	148	99
Phosphorus	ppm	ASTM D5185m	300	<b>397</b>	375	289
Zinc	ppm	ASTM D5185m	370	<b>514</b>	442	374
Sulfur	ppm	ASTM D5185m	2500	<b>2012</b>	2073	2023
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>1.28</b>	0.46	0.304
Visc @ 40°C	cSt	ASTM D445	46	<b>42.1</b>	41.7	38.3



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0823524 **Received** : 28 Feb 2024  
**Lab Number** : 06103660 **Tested** : 29 Feb 2024  
**Unique Number** : 10901890 **Diagnosed** : 01 Mar 2024 - Don Baldrige  
**Test Package** : CONST

**BUCKNER HEAVY LIFT**  
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 GRAHAM, NC  
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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)