



# OIL ANALYSIS REPORT

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

Machine Id  
**AMERICAN BALER**

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. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PTK0005345</b>	PTK0004674	PTK0004664
Sample Date		Client Info		<b>05 Feb 2024</b>	02 Nov 2023	14 Sep 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ATTENTION</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>1</b>	2	0
Lead	ppm	ASTM D5185m	>10	<b>1</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>7</b>	7	7
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
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

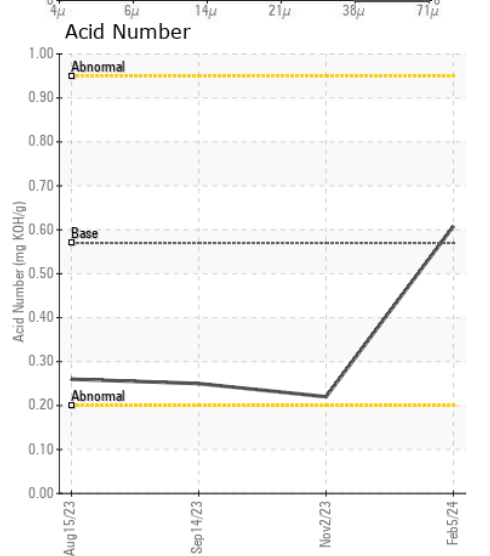
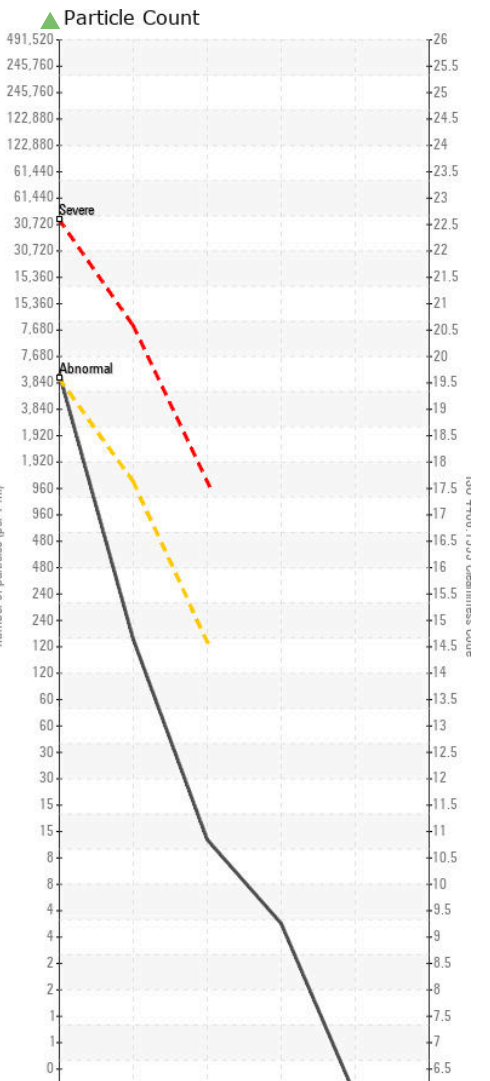
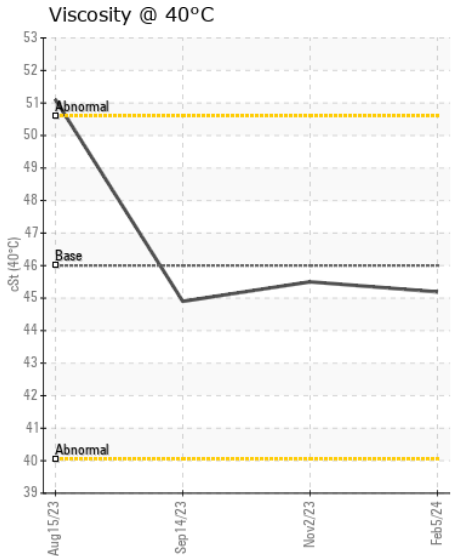
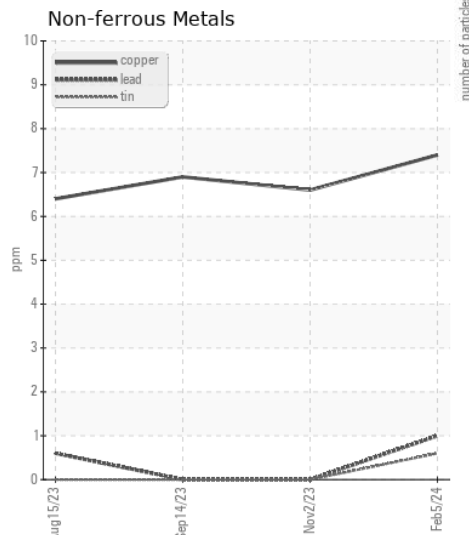
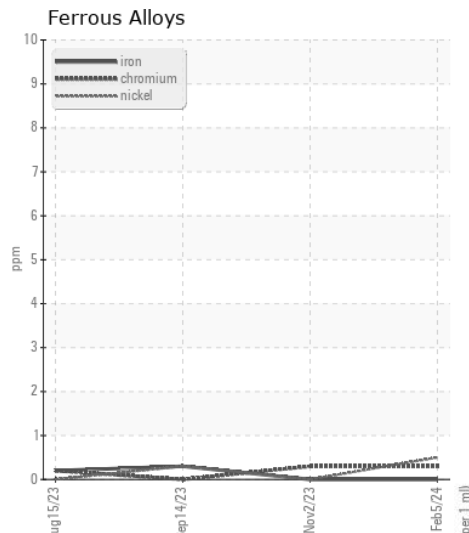
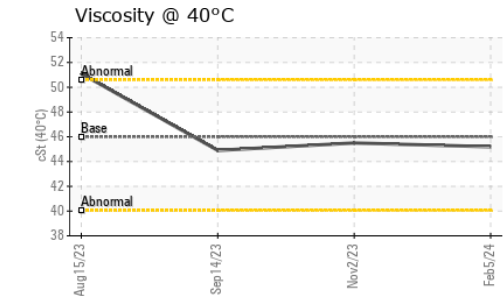
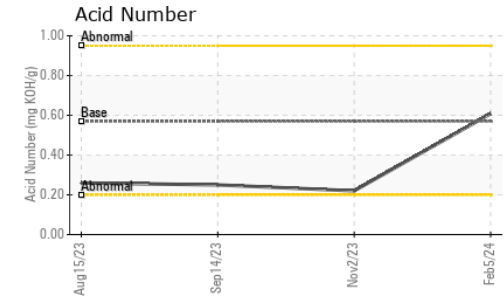
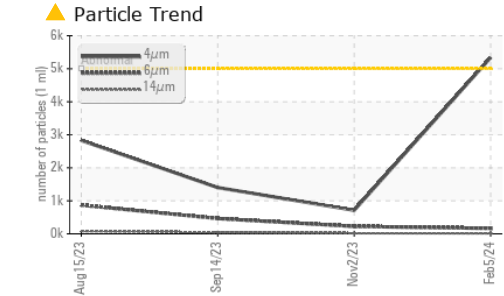
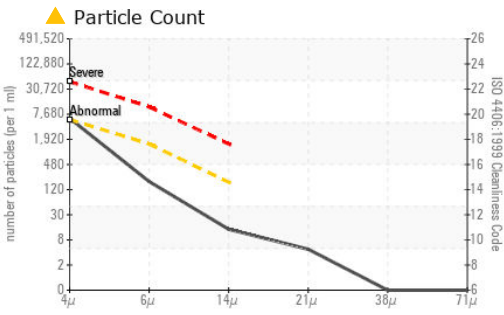
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>▲ 5338</b>	713	1401
Particles >6µm		ASTM D7647	>1300	<b>165</b>	225	463
Particles >14µm		ASTM D7647	>160	<b>12</b>	17	43
Particles >21µm		ASTM D7647	>40	<b>4</b>	4	8
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 20/15/11</b>	17/15/11	18/16/13
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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>0</b>	0	0
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	5	<b>&lt;1</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	25	<b>1</b>	2	<1
Calcium	ppm	ASTM D5185m	200	<b>85</b>	54	55
Phosphorus	ppm	ASTM D5185m	300	<b>304</b>	300	340
Zinc	ppm	ASTM D5185m	370	<b>435</b>	432	473
Sulfur	ppm	ASTM D5185m	2500	<b>1535</b>	1517	1639
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.608</b>	0.22	0.25
Visc @ 40°C	cSt	ASTM D445	46	<b>45.19</b>	45.5	44.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : PTK0005345  
 Lab Number : 06087213  
 Unique Number : 10874658  
 Test Package : MOB 2

Received : 13 Feb 2024  
 Tested : 16 Feb 2024  
 Diagnosed : 16 Feb 2024 - Wes Davis

**GREAT NORTHERN CORP**  
 8600 WYOMING AVE N  
 BROOKLYN PARK, MN  
 US 55445  
 Contact: Service Manager

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)

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F: