



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**Harris Baler**  
 Machine Id  
**Harris Baler**  
 Component  
**Hydraulic System**  
 Fluid  
**SHELL AW HYDRAULIC S2 46 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PE0000745</b>	PE0000727	PE0000617
Sample Date		Client Info		<b>07 Feb 2024</b>	21 Nov 2023	13 Oct 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>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

PQ		ASTM D8184		<b>16</b>	18	18
Iron	ppm	ASTM D5185m	>20	<b>14</b>	13	12
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>20	<b>5</b>	4	3
Copper	ppm	ASTM D5185m	>20	<b>34</b>	28	28
Tin	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

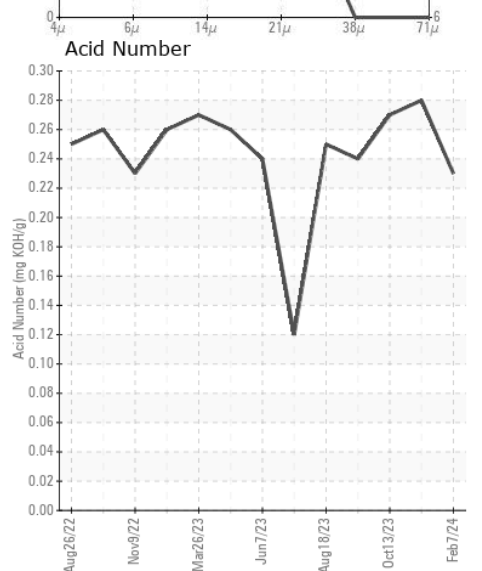
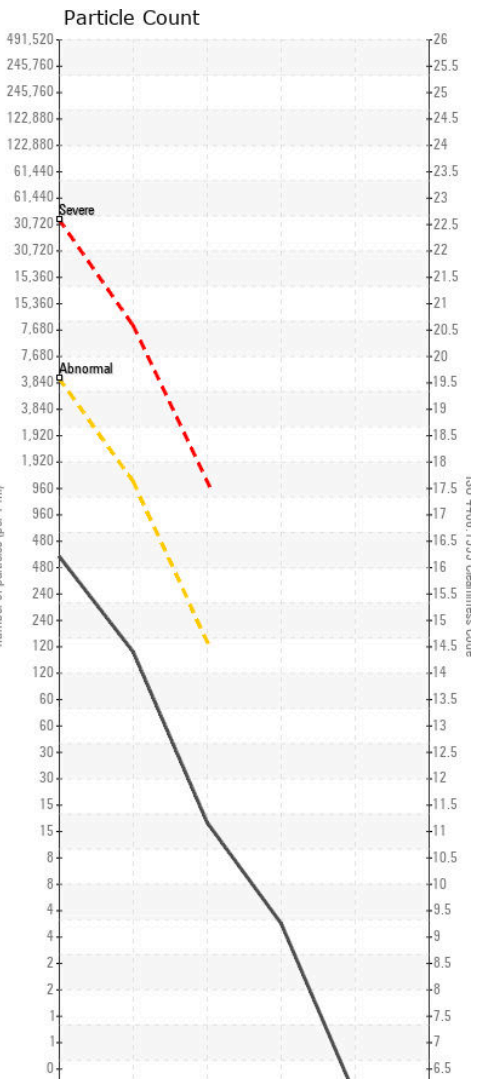
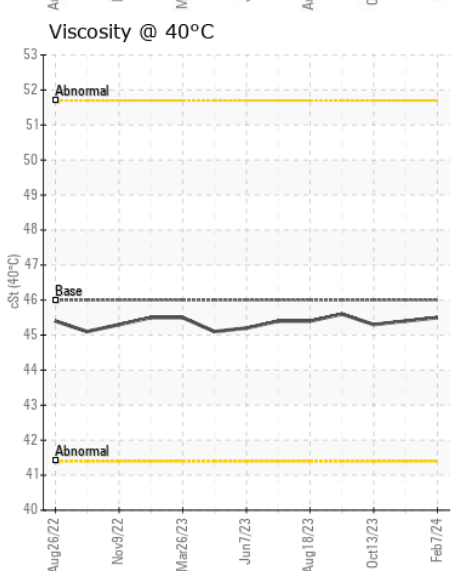
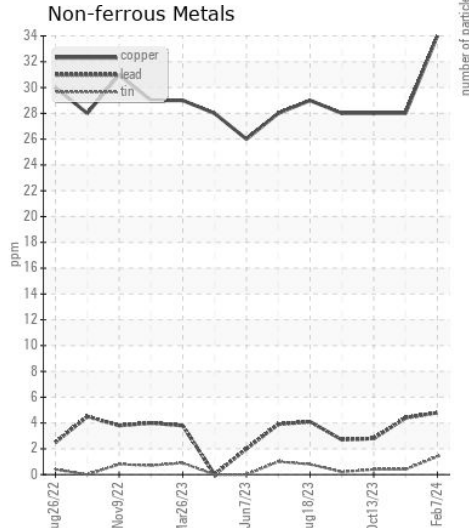
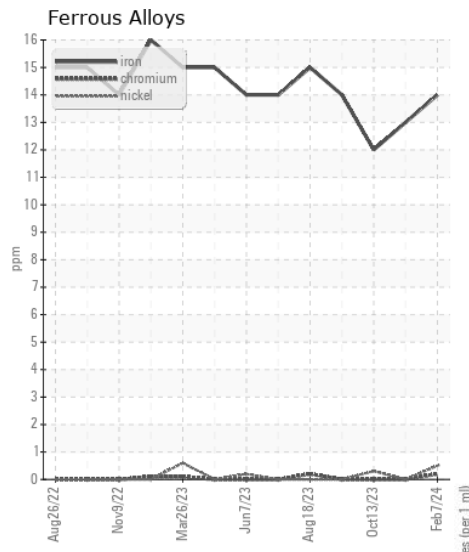
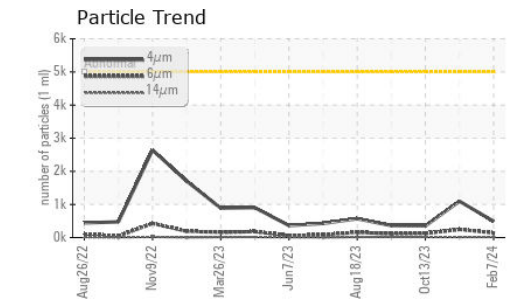
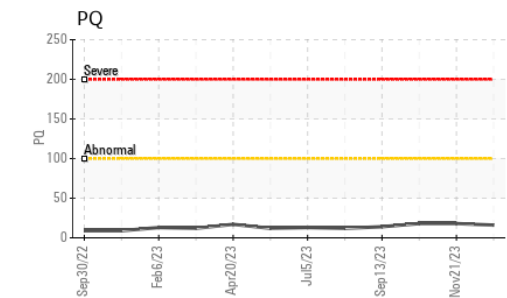
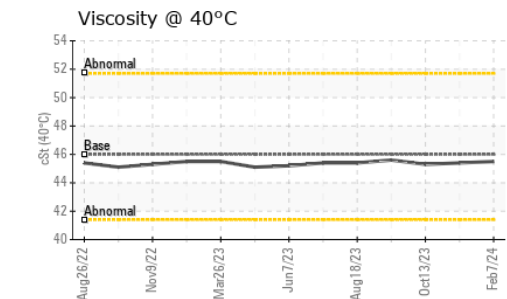
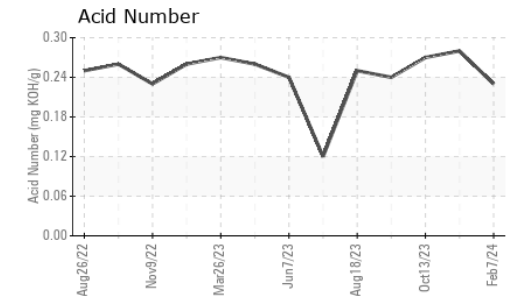
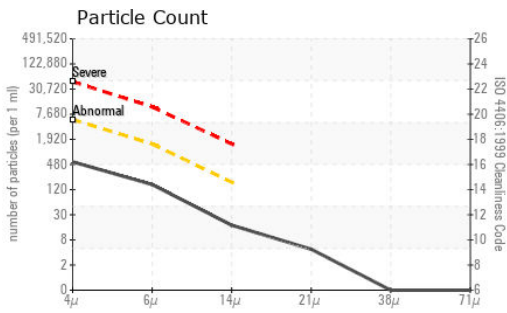
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>15	<b>2</b>	1	2
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	<1
Water		WC Method	>0.05	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>488</b>	1097	356
Particles >6µm		ASTM D7647	>1300	<b>140</b>	246	126
Particles >14µm		ASTM D7647	>160	<b>15</b>	15	16
Particles >21µm		ASTM D7647	>40	<b>4</b>	4	4
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>16/14/11</b>	17/15/11	16/14/11
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	>0.05	<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>	2	1
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>13</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>7</b>	5	<1
Calcium	ppm	ASTM D5185m		<b>46</b>	47	47
Phosphorus	ppm	ASTM D5185m		<b>337</b>	331	266
Zinc	ppm	ASTM D5185m		<b>347</b>	397	360
Sulfur	ppm	ASTM D5185m		<b>888</b>	1037	843
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.23</b>	0.28	0.27
Visc @ 40°C	cSt	ASTM D445	46	<b>45.5</b>	45.4	45.3



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PE0000745 **Received** : 12 Feb 2024  
**Lab Number** : 06085967 **Tested** : 13 Feb 2024  
**Unique Number** : 10873412 **Diagnosed** : 13 Feb 2024 - Don Baldrige  
**Test Package** : PLANT ( Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN )

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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