



# OIL ANALYSIS REPORT

Area

**Harris Baler**

Machine Id

**Harris Baler**

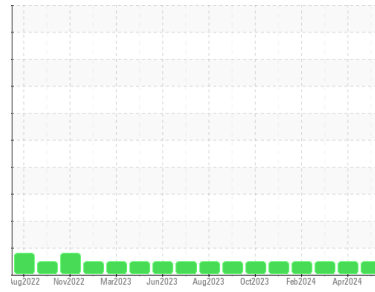
Component

**Hydraulic System**

Fluid

**SHELL AW HYDRAULIC S2 46 (--- GAL)**

## Sample Rating Trend



**NORMAL**



### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

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

#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PE0001506</b>	PE0003610	PE0003606
Sample Date	Client Info			<b>10 Jul 2024</b>	18 Apr 2024	21 Mar 2024
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.05	<b>NEG</b>	NEG	NEG

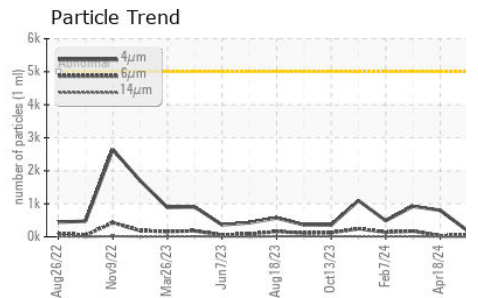
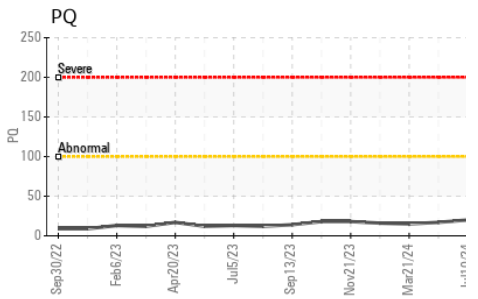
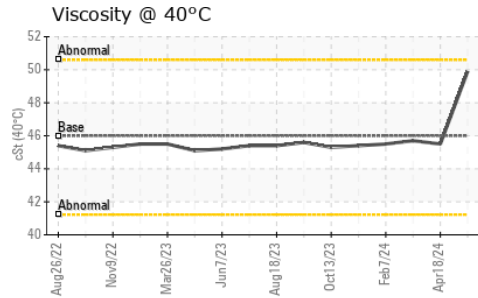
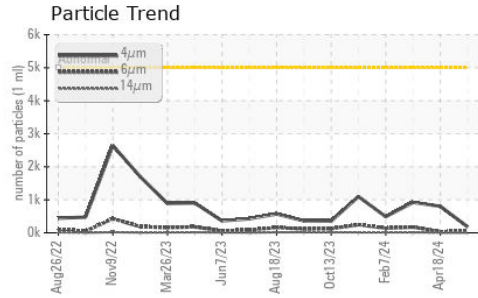
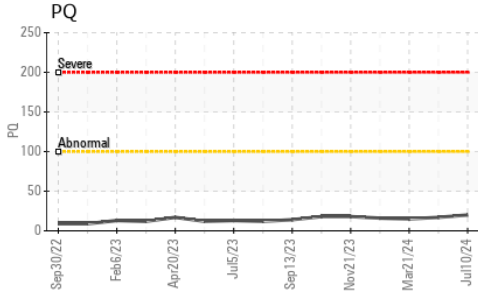
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		<b>20</b>	17	15
Iron	ppm	ASTM D5185m	>20	<b>13</b>	13	12
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	1	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	3	2
Lead	ppm	ASTM D5185m	>20	<b>2</b>	4	3
Copper	ppm	ASTM D5185m	>20	<b>30</b>	31	28
Tin	ppm	ASTM D5185m	>20	<b>0</b>	2	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>5</b>	7	3
Calcium	ppm	ASTM D5185m		<b>48</b>	40	48
Phosphorus	ppm	ASTM D5185m		<b>322</b>	322	318
Zinc	ppm	ASTM D5185m		<b>352</b>	340	331
Sulfur	ppm	ASTM D5185m		<b>946</b>	832	952

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>2</b>	2	1
Sodium	ppm	ASTM D5185m		<b>2</b>	0	1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>181</b>	802	922
Particles >6µm		ASTM D7647	>1300	<b>41</b>	34	175
Particles >14µm		ASTM D7647	>160	<b>4</b>	4	13
Particles >21µm		ASTM D7647	>40	<b>1</b>	1	3
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	1
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>15/13/9</b>	17/12/9	17/15/11

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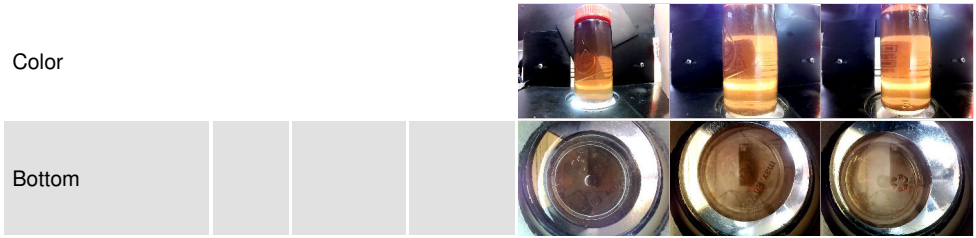


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.25</b>	0.27	0.32

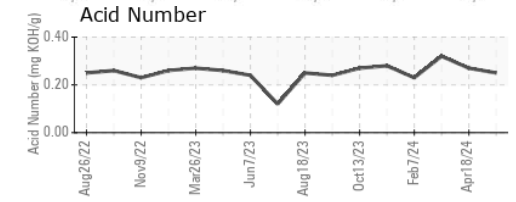
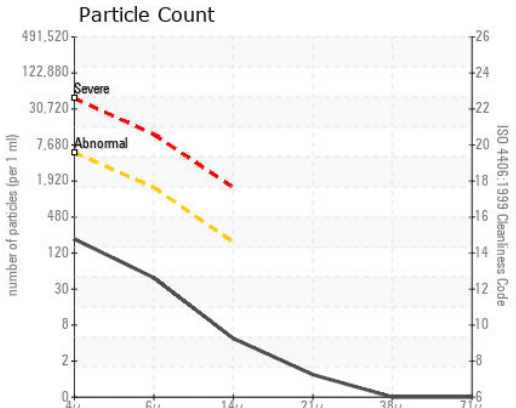
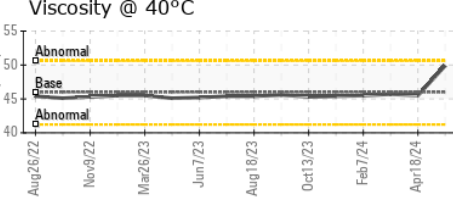
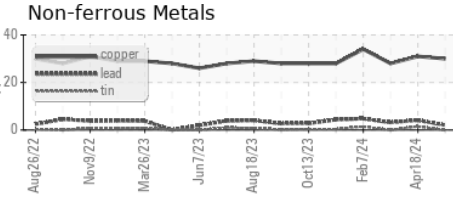
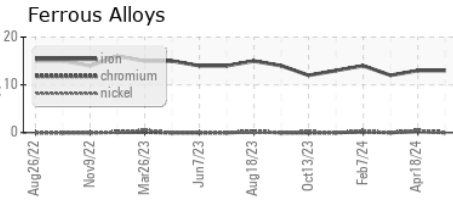
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	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
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	<b>49.9</b>	45.5	45.7

SAMPLE IMAGES		method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PE0001506 **Received** : 17 Jul 2024  
**Lab Number** : 06239551 **Tested** : 18 Jul 2024  
**Unique Number** : 11128385 **Diagnosed** : 19 Jul 2024 - Don Baldrige  
**Test Package** : PLANT ( Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN )

**Seattle Iron and Metals**  
 601 S MYRTLE ST  
 SEATTLE, WA  
 US 98108  
 Contact: ADAM THOMAS  
 athomas@seairon.com  
 T: (206)682-0040  
 F:

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)