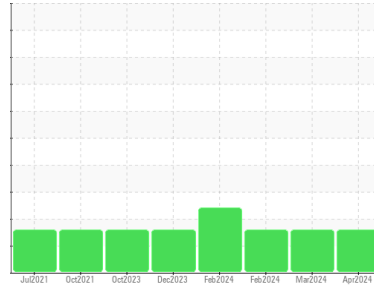




# OIL ANALYSIS REPORT

Sample Rating Trend



**DIRT**



Machine Id  
**HYDRAULIC TEST STAND AIDCO 900C-400 (S/N 130901)**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

## DIAGNOSIS

**Recommendation**  
 No corrective action is recommended at this time. Resample at the next service interval to monitor.

**Wear**  
 All component wear rates are normal.

**Contamination**  
 Elemental level of silicon (Si) above normal indicating ingress of seal material. 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>RH0001883</b>	RH0001934	RH0001981
Sample Date	Client Info		<b>01 Apr 2024</b>	01 Mar 2024	06 Feb 2024
Machine Age	hrs	Client Info	<b>2187</b>	2180	2173
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>ABNORMAL</b>	ABNORMAL	ABNORMAL

CONTAMINATION	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

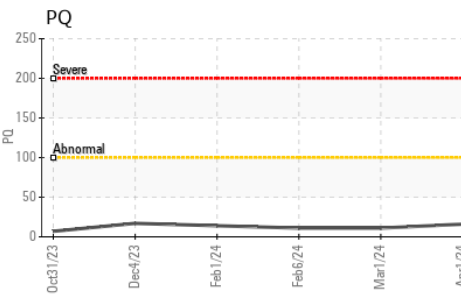
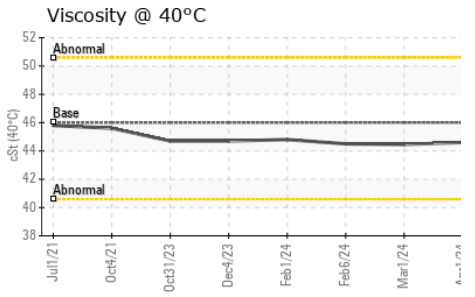
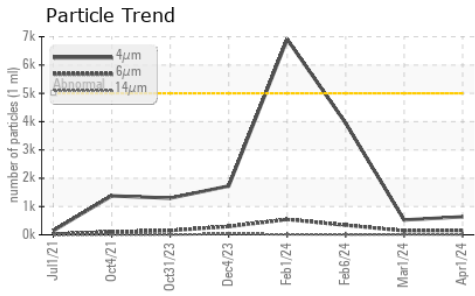
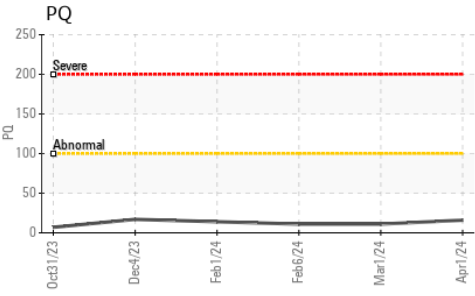
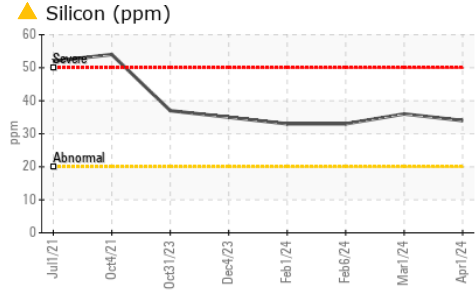
WEAR METALS	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>16</b>	11	11
Iron	ppm	ASTM D5185m >20	<b>2</b>	<1	0
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>2</b>	0	0
Lead	ppm	ASTM D5185m >10	<b>3</b>	1	1
Copper	ppm	ASTM D5185m >75	<b>50</b>	47	46
Tin	ppm	ASTM D5185m >10	<b>1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 5	<b>4</b>	2	3
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 5	<b>3</b>	2	2
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m 25	<b>8</b>	3	0
Calcium	ppm	ASTM D5185m 200	<b>130</b>	119	97
Phosphorus	ppm	ASTM D5185m 300	<b>417</b>	392	369
Zinc	ppm	ASTM D5185m 370	<b>112</b>	90	88
Sulfur	ppm	ASTM D5185m 2500	<b>903</b>	839	610

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>▲ 34</b>	▲ 36	▲ 33
Sodium	ppm	ASTM D5185m	<b>2</b>	4	3
Potassium	ppm	ASTM D5185m >20	<b>4</b>	2	0

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>638</b>	524	3947
Particles >6µm	ASTM D7647	>1300	<b>150</b>	140	340
Particles >14µm	ASTM D7647	>160	<b>5</b>	12	10
Particles >21µm	ASTM D7647	>40	<b>2</b>	3	3
Particles >38µm	ASTM D7647	>10	<b>1</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>16/14/10</b>	16/14/11	19/16/10

# OIL ANALYSIS REPORT

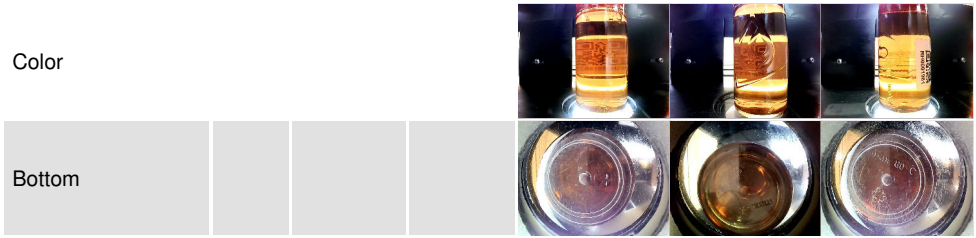


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.19</b>	0.20	0.17

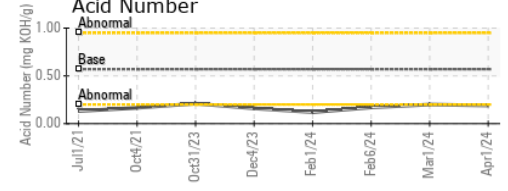
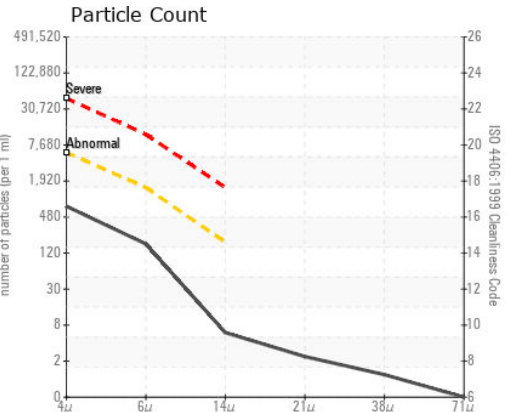
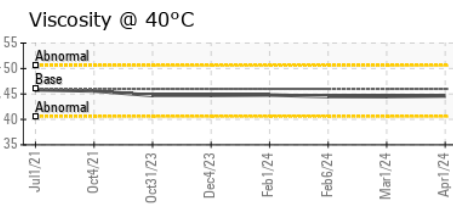
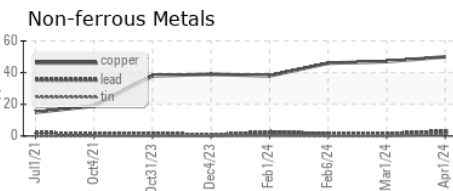
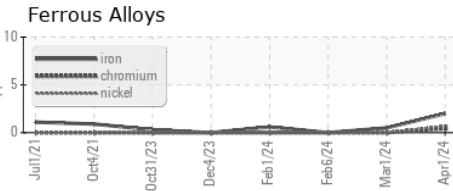
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	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	>0.1	<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>44.6</b>	44.46	44.5

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RH0001883 **Received** : 02 Apr 2024  
**Lab Number** : **06136257** **Tested** : 03 Apr 2024  
**Unique Number** : 10955722 **Diagnosed** : 04 Apr 2024 - Don Baldrige  
**Test Package** : MOB 2 ( Additional Tests: PQ )

**RIVERSIDE HYDRAULICS**  
 11027 LEADBETTER RD  
 ASHLAND, VA  
 US 23005  
 Contact: PATRICK SOHNLY  
 psohnly@riversidehydraulics.com  
 T: (804)545-6700  
 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)