



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**22410**

Component  
**Hydraulic System**

Fluid  
**AW HYDRAULIC OIL ISO 68 (--- QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0905336</b>	WC0822784	WC0733792
Sample Date		Client Info		<b>07 Feb 2024</b>	02 Oct 2023	05 Dec 2022
Machine Age	hrs	Client Info		<b>2928</b>	2515	1654
Oil Age	hrs	Client Info		<b>2000</b>	1000	0
Filter Age	hrs	Client Info		<b>1000</b>	1000	0
Oil Changed		Client Info		<b>Not Changd</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>14</b>	12	14
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	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>1</b>	1	0
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185m	>75	<b>10</b>	10	10
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
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

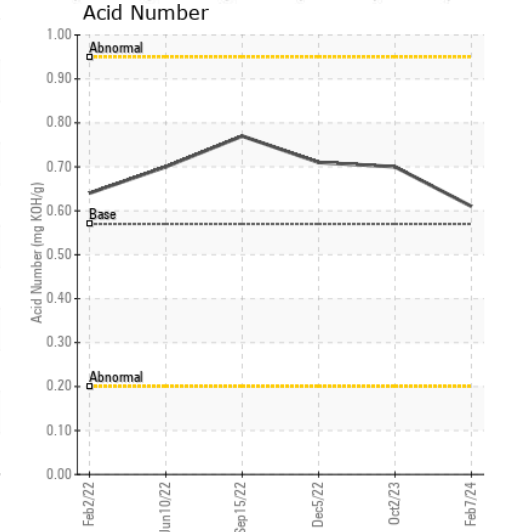
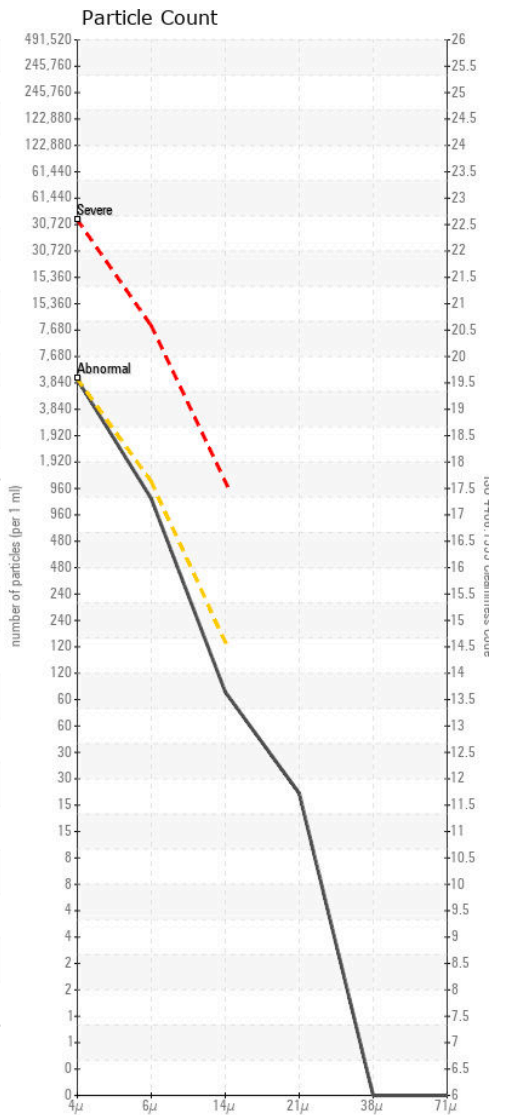
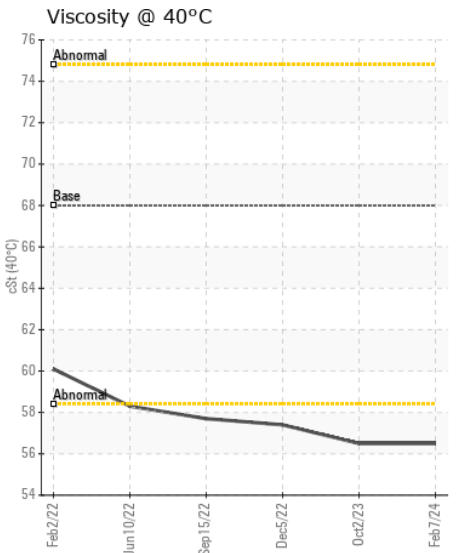
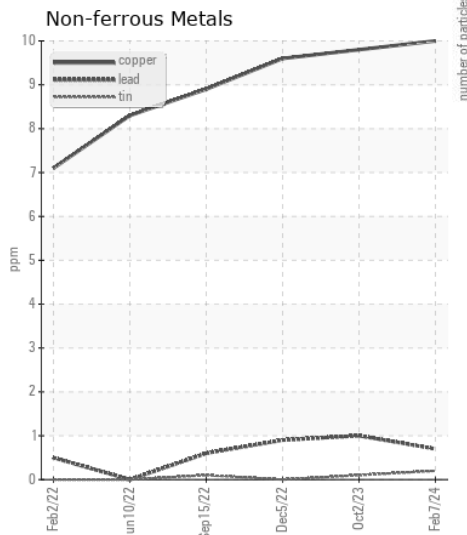
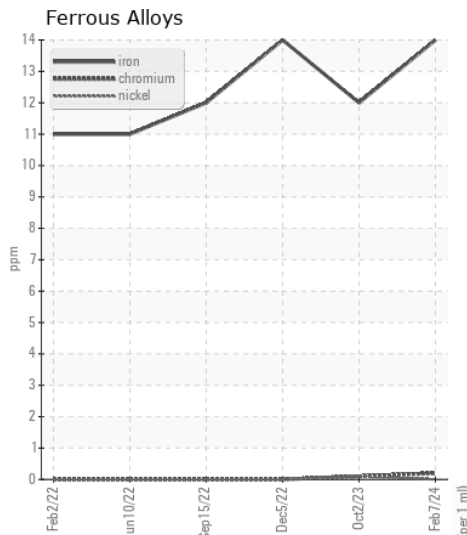
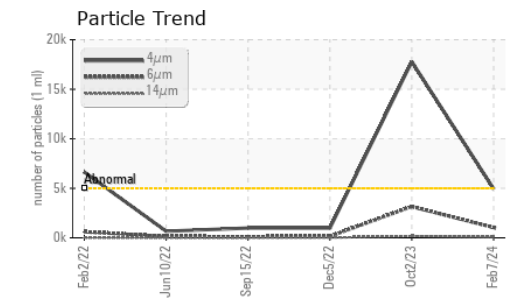
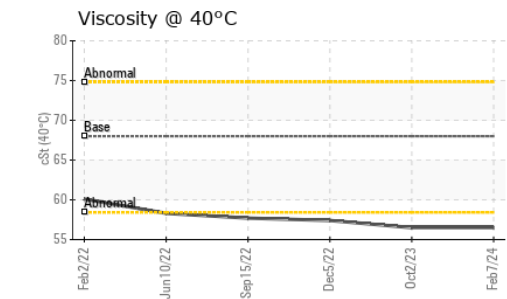
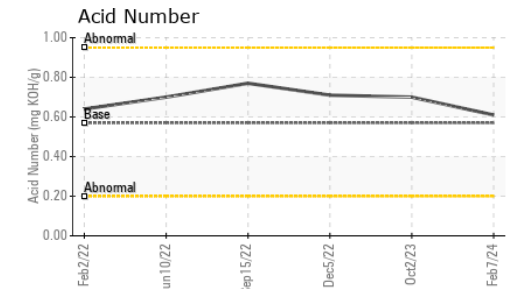
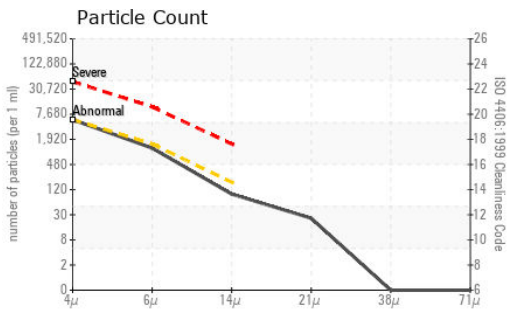
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>3</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	3
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>4942</b>	▲ 17784	980
Particles >6µm		ASTM D7647	>1300	<b>1040</b>	▲ 3159	150
Particles >14µm		ASTM D7647	>160	<b>83</b>	▲ 180	13
Particles >21µm		ASTM D7647	>40	<b>22</b>	42	3
Particles >38µm		ASTM D7647	>10	<b>0</b>	2	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>19/17/14</b>	▲ 21/19/15	17/14/11
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</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>1</b>	<1	0
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	4
Barium	ppm	ASTM D5185m	5	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	5	<b>&lt;1</b>	0	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	25	<b>2</b>	8	9
Calcium	ppm	ASTM D5185m	200	<b>92</b>	93	100
Phosphorus	ppm	ASTM D5185m	300	<b>585</b>	592	616
Zinc	ppm	ASTM D5185m	370	<b>791</b>	770	841
Sulfur	ppm	ASTM D5185m	2500	<b>1567</b>	1499	2050
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.61</b>	0.70	0.71
Visc @ 40°C	cSt	ASTM D445	68	<b>56.5</b>	56.5	57.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0905336

Lab Number : 06088111

Unique Number : 10875556

Test Package : CONST

Received : 13 Feb 2024

Tested : 14 Feb 2024

Diagnosed : 15 Feb 2024 - Don Baldrige

**SULLIVAN EASTERN INC**

2860 C SLATER RD

MORRISVILLE, NC

US 27560

Contact: SCOTT SULLIVAN

ssullivan@sullivaneastern.com

T: (919)484-8993

F: (919)484-2136

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)