



# OIL ANALYSIS REPORT

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

Machine Id  
**DL14577 - PRESS 4**

Component  
**Hydraulic System**

Fluid  
**TOTAL AZOLLA ZS 32 (--- GAL)**

## RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC06048825</b>	WC05698093	WC05563522
Sample Date		Client Info		<b>18 Dec 2023</b>	17 Nov 2022	08 Jun 2022
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>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

The copper level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>15</b>	13	12
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185m	>20	<b>5</b>	4	4
Copper	ppm	ASTM D5185m	>20	<b>▲ 56</b>	▲ 56	▲ 55
Tin	ppm	ASTM D5185m	>20	<b>2</b>	2	2
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

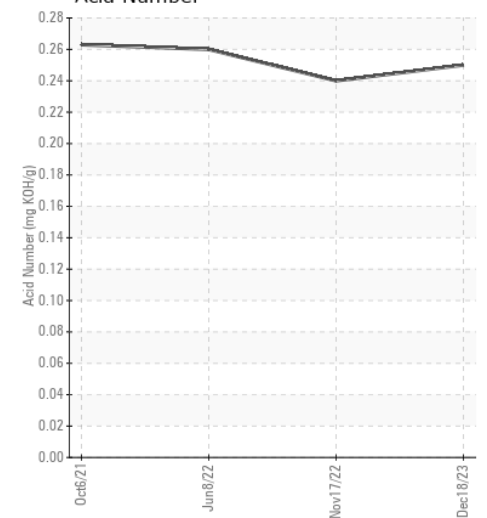
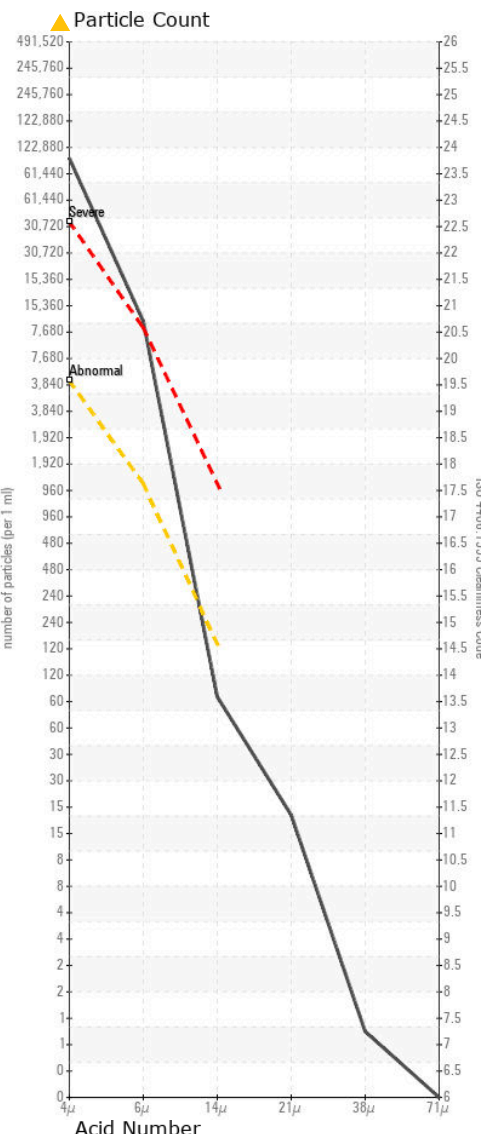
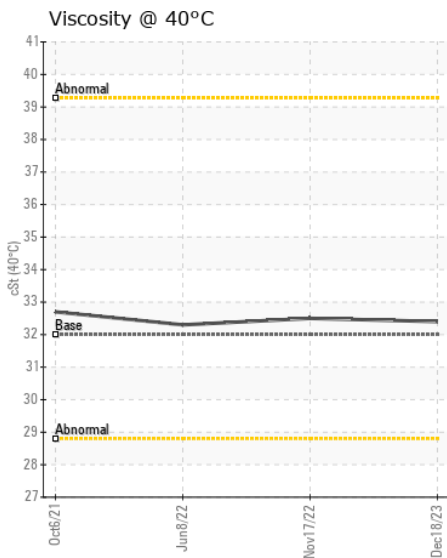
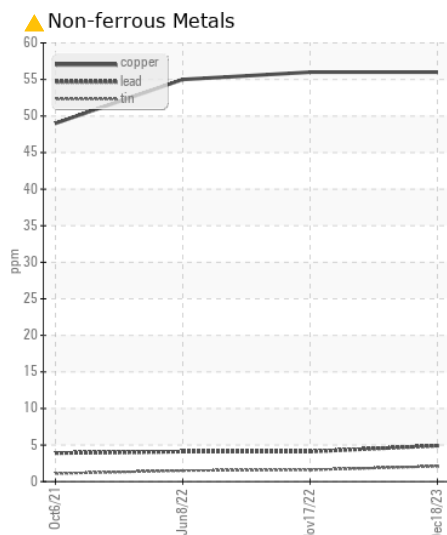
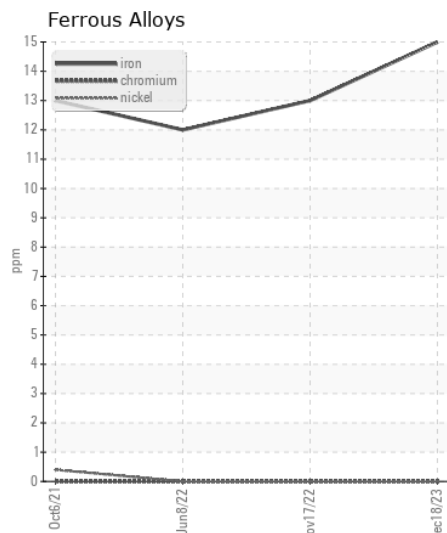
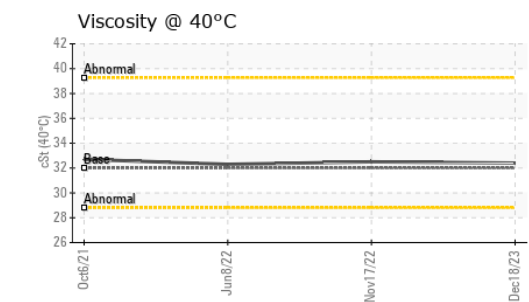
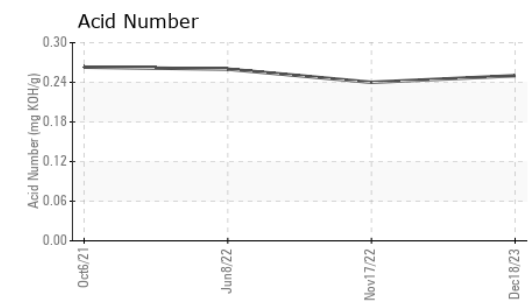
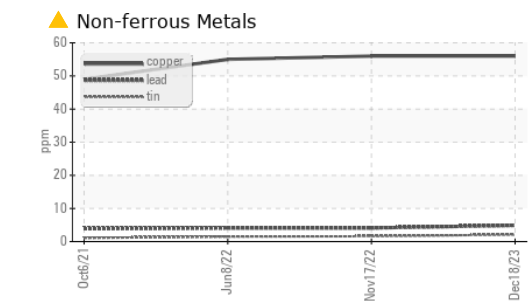
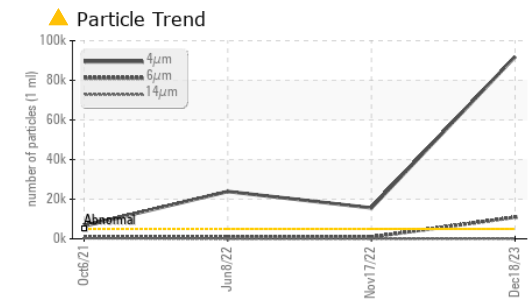
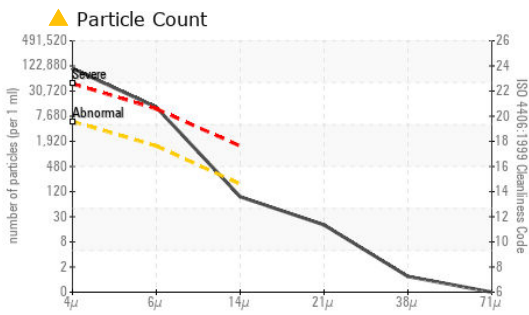
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Water		WC Method	>0.05	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>▲ 91922</b>	▲ 15583	▲ 23885
Particles >6µm		ASTM D7647	>1300	<b>▲ 10895</b>	878	793
Particles >14µm		ASTM D7647	>160	<b>80</b>	28	18
Particles >21µm		ASTM D7647	>40	<b>17</b>	2	5
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>▲ 24/21/13</b>	▲ 21/17/12	▲ 22/17/11
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	>0.05	<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>&lt;1</b>	0	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	<1
Calcium	ppm	ASTM D5185m		<b>47</b>	48	47
Phosphorus	ppm	ASTM D5185m		<b>368</b>	357	343
Zinc	ppm	ASTM D5185m		<b>399</b>	397	381
Sulfur	ppm	ASTM D5185m		<b>1282</b>	1577	1286
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.25</b>	0.24	0.26
Visc @ 40°C	cSt	ASTM D445	32.0	<b>32.4</b>	32.5	32.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC06048825 **Received** : 02 Jan 2024  
**Lab Number** : 06048825 **Diagnosed** : 03 Jan 2024  
**Unique Number** : 10809433 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2

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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