



# OIL ANALYSIS REPORT

Sample Rating Trend

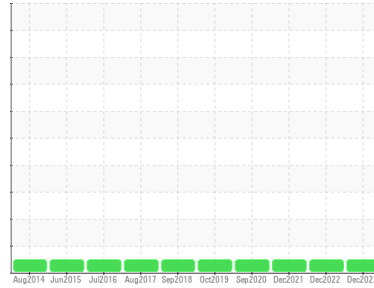
**NORMAL**



Machine Id  
**LITHOMAN 3 PRINT UNIT #4 (S/N 1025133)**

Component  
**Gearbox**  
Fluid

Walter Zeph ZX-60-Syntex (80 LTR)



## 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.

### 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>WC0776672</b>	WC0651221	WC0651214
Sample Date	Client Info		<b>27 Dec 2023</b>	30 Dec 2022	28 Dec 2021
Machine Age	hrs	Client Info	<b>18480</b>	18480	18138
Oil Age	hrs	Client Info	<b>18983</b>	18480	1813
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>0</b>	0	0
Iron	ppm	ASTM D5185(m) >200	<b>14</b>	12	12
Chromium	ppm	ASTM D5185(m) >15	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m) >25	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m) >100	<b>8</b>	8	8
Copper	ppm	ASTM D5185(m) >200	<b>30</b>	33	32
Tin	ppm	ASTM D5185(m) >25	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	<b>&lt;1</b>	1	1
Barium	ppm	ASTM D5185(m)	<b>1</b>	1	2
Molybdenum	ppm	ASTM D5185(m)	<b>6</b>	6	6
Manganese	ppm	ASTM D5185(m)	<b>35</b>	33	27
Magnesium	ppm	ASTM D5185(m)	<b>3</b>	3	3
Calcium	ppm	ASTM D5185(m)	<b>18</b>	16	13
Phosphorus	ppm	ASTM D5185(m)	<b>1496</b>	1621	1584
Zinc	ppm	ASTM D5185(m)	<b>1363</b>	1303	1183
Sulfur	ppm	ASTM D5185(m)	<b>22632</b>	24458	23743
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

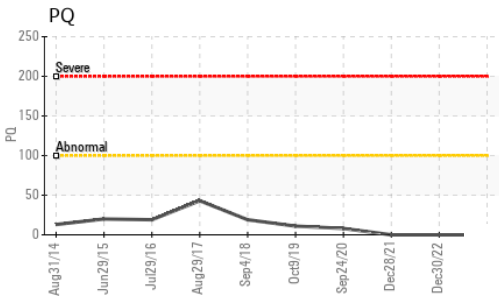
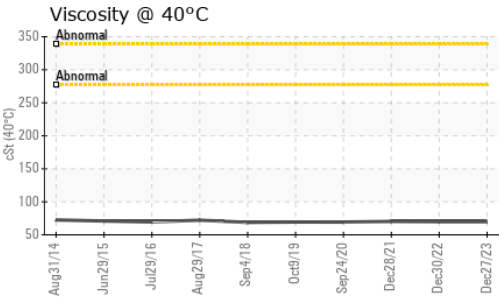
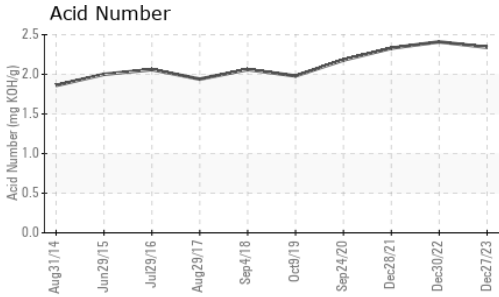
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	<b>23</b>	24	24
Sodium	ppm	ASTM D5185(m)	<b>3</b>	3	2
Potassium	ppm	ASTM D5185(m) >20	<b>9</b>	8	9

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	<b>2.34</b>	2.41	2.33



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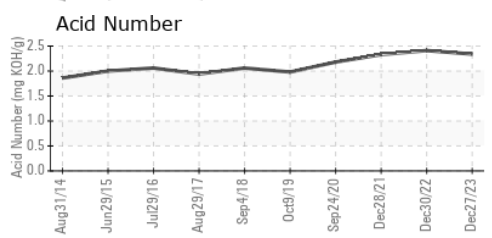
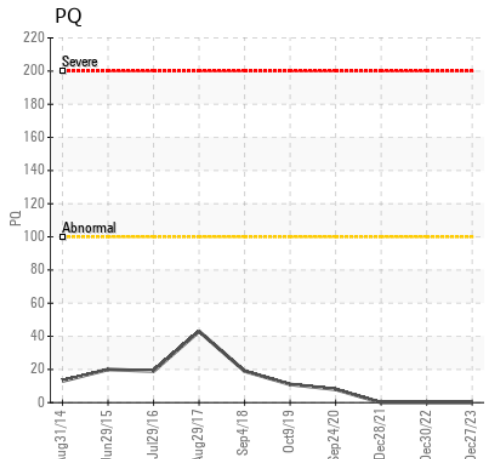
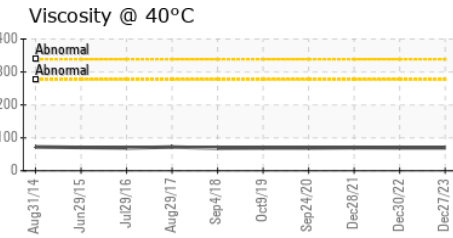
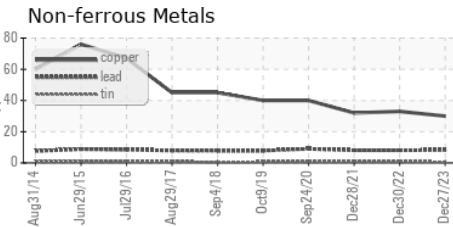
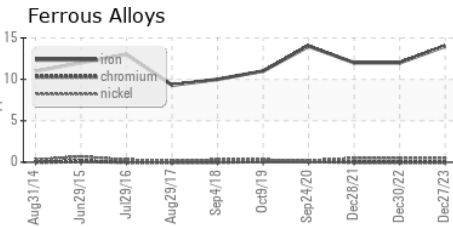


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	69.8	69.8	70.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Watch Tower Bible and Tract Society of Canada  
**Sample No.** : WC0776672 **Received** : 02 Jan 2024 13893 Highway 7  
**Lab Number** : 02606092 **Diagnosed** : 03 Jan 2024 Georgetown, ON  
**Unique Number** : 5707178 **Diagnostician** : Wes Davis CA L7G 4S4  
**Test Package** : IND 2 ( Additional Tests: TAN Man )  
 Contact: Purchasing Department  
 purchase.ca@jw.org  
 T: (905)873-4101  
 F: (905)873-4508

*To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.*