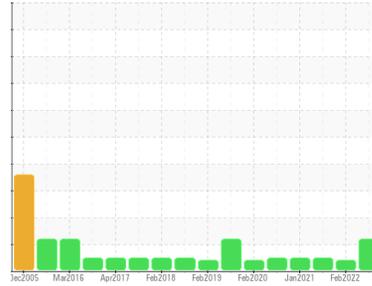




# PROBLEM SUMMARY

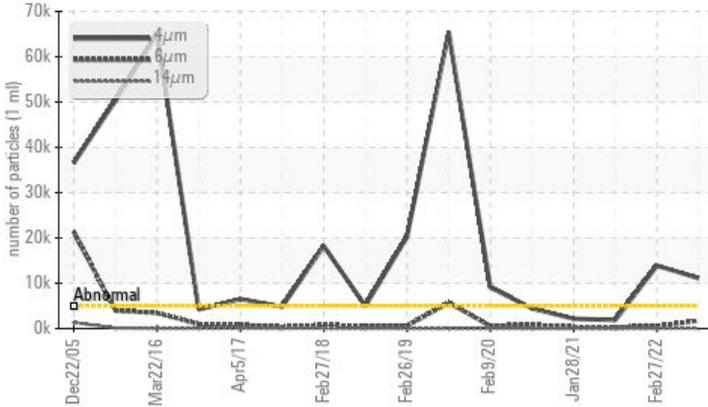
Sample Rating Trend



Area  
**Bermondsey**  
 Machine Id  
**BER #1**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 32 (--- GAL)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	NORMAL
Particles >4µm	ASTM D7647	>5000	▲ 11105	▲ 13893	1878
Particles >6µm	ASTM D7647	>1300	▲ 1753	514	256
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 21/18/14	▲ 21/16/10	18/15/11

Customer Id: CITDOW  
 Sample No.: WC0734172  
 Lab Number: 02505930  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Wes Davis +1 905-569-8600 x223  
[wesd@wearcheck.ca](mailto:wesd@wearcheck.ca)

To change component or sample information:  
 Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	MISSED	Feb 09 2023	?	We recommend you service the filters on this component.
Resample	MISSED	Feb 09 2023	?	We recommend an early resample to monitor this condition.
Alert	MISSED	Feb 09 2023	?	Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment.
Information Required	MISSED	Feb 09 2023	?	Please specify the brand, type, and viscosity of the oil on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

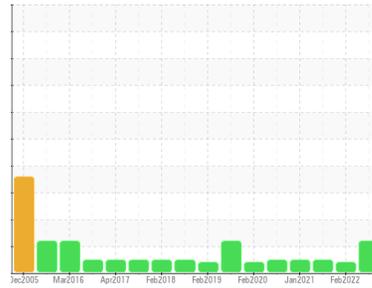
## HISTORICAL DIAGNOSIS

<p><b>ISO</b></p> 	<p><b>27 Feb 2022 Diag: Wes Davis</b></p> <p>Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. Particles &gt;4µm are abnormally high. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.</p>	<p>view report</p> 
<p><b>NORMAL</b></p> 	<p><b>12 Aug 2021 Diag: Wes Davis</b></p> <p>Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.</p>	<p>view report</p> 
<p><b>NORMAL</b></p> 	<p><b>28 Jan 2021 Diag: Wes Davis</b></p> <p>Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.</p>	<p>view report</p> 



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**Bermondsey**

Machine Id  
**BER #1**

Component  
**Hydraulic System**

Fluid  
**AW HYDRAULIC OIL ISO 32 (--- GAL)**

## DIAGNOSIS

### Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

### Contamination

Oil Cleanliness are abnormally high. Particles >4µm are abnormally high. Particles >6µm are notably high.

### Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC0734172</b>	WC0674522	WC0614872
Sample Date	Client Info	<b>17 Aug 2022</b>	27 Feb 2022	12 Aug 2021
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185(m)	>20	<b>9</b>	10	9
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	1	1
Nickel	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>20	<b>5</b>	5	6
Tin	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>&lt;1</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)	5	<b>&lt;1</b>	<1	3
Barium	ppm	ASTM D5185(m)	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	5	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	25	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	200	<b>55</b>	53	53
Phosphorus	ppm	ASTM D5185(m)	300	<b>351</b>	345	354
Zinc	ppm	ASTM D5185(m)	370	<b>411</b>	422	421
Sulfur	ppm	ASTM D5185(m)	2500	<b>1116</b>	1100	1063
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>15	<b>1</b>	<1	<1
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1

## FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>5000	<b>▲ 11105</b>	▲ 13893	1878
Particles >6µm	ASTM D7647	>1300	<b>▲ 1753</b>	514	256
Particles >14µm	ASTM D7647	>160	<b>81</b>	8	17
Particles >21µm	ASTM D7647	>40	<b>16</b>	3	3
Particles >38µm	ASTM D7647	>10	<b>2</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 21/18/14</b>	▲ 21/16/10	18/15/11

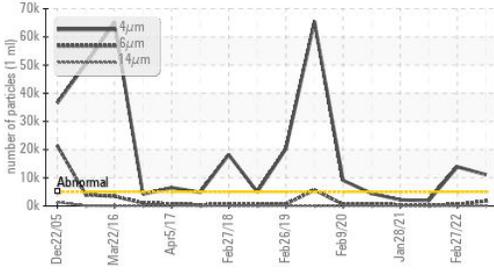
## FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	<b>0.26</b>	0.26	0.26

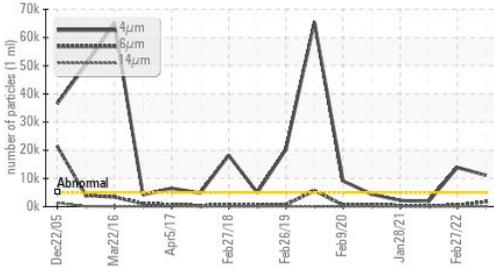


# OIL ANALYSIS REPORT

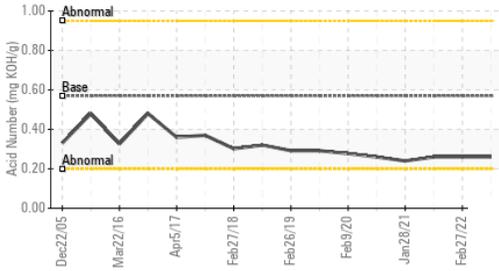
▲ Particle Trend



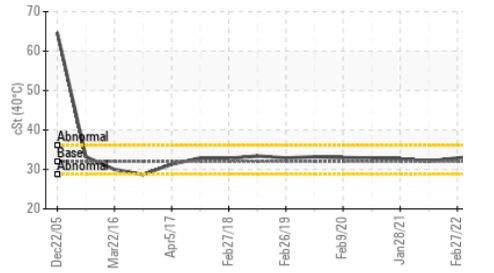
▲ Particle Trend



Acid Number



Viscosity @ 40°C

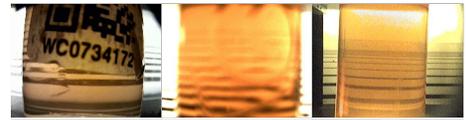


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	32	33.4	32.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

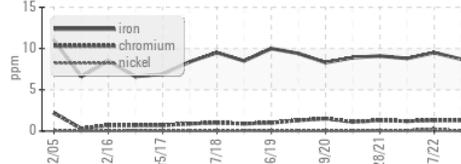


Bottom

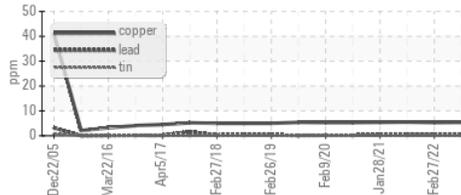


## GRAPHS

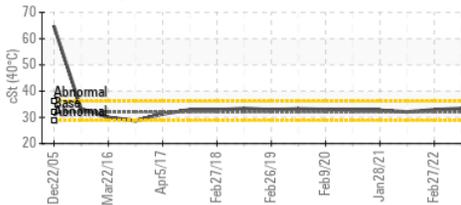
Ferrous Alloys



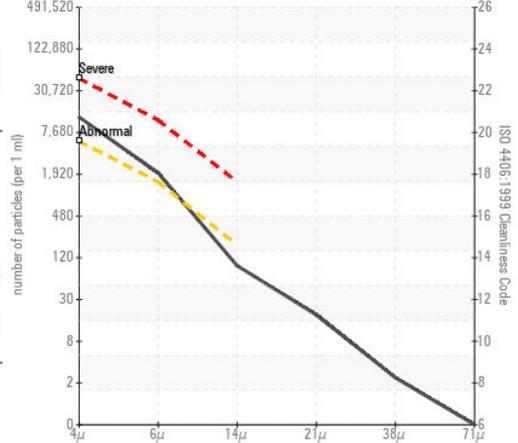
Non-ferrous Metals



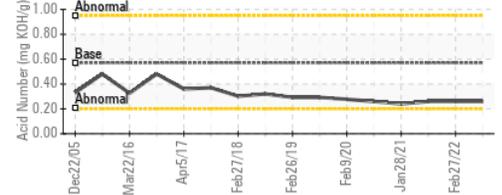
Viscosity @ 40°C



▲ Particle Count



Acid Number



ISO 17025:2017  
Accredited  
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
 Sample No. : WC0734172  
 Lab Number : 02505930  
 Unique Number : 5446900  
 Test Package : IND 2 ( Additional Tests: TAN Man )

Received : 18 Aug 2022  
 Diagnosed : 19 Aug 2022  
 Diagnostician : Wes Davis

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.

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