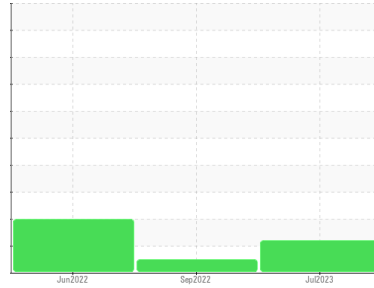




# PROBLEM SUMMARY

Sample Rating Trend

ISO



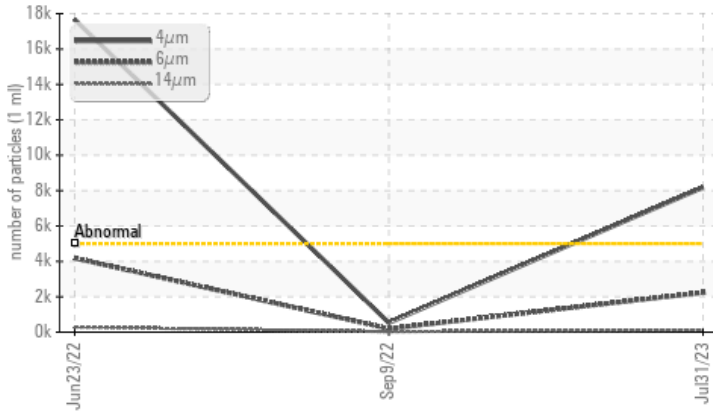
Machine Id  
**HORWOOD LOG LIFTER**

Component  
**Unknown Component**

Fluid  
**ESSO UNIVIS EXTRA (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

## PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	NORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>5000	▲ 8180	527	▲ 17666
Particles >6µm	ASTM D7647	>1300	▲ 2240	196	▲ 4181
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 20/18/14	16/15/12	▲ 21/19/15

Customer Id: ONT801TIM  
Sample No.: WC0618980  
Lab Number: 02578479  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Kevin Marson +1 (289)291-4644 x4644  
[Kevin.Marson@wearcheck.com](mailto:Kevin.Marson@wearcheck.com)

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	---	---	?	We recommend you service the filters on this component.
Information Required	---	---	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

## HISTORICAL DIAGNOSIS

### 09 Sep 2022 Diag: Kevin Marson

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with 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 sample is suitable for further service.

view report



### 23 Jun 2022 Diag: Kevin Marson

ISO



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. All component wear rates are normal. Oil Cleanliness are abnormally high. Particles >4µm are abnormally high. Particles >6µm are abnormally high. Particles >14µm are notably high. Particles >21µm are notably high. The AN level is acceptable for this fluid. The sample is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

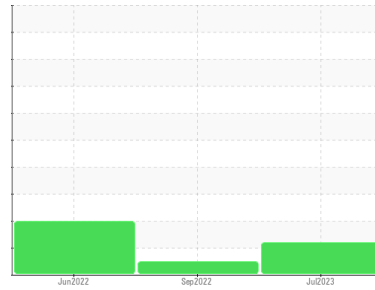
view report





# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Machine Id  
**HORWOOD LOG LIFTER**

Component  
**Unknown Component**

Fluid  
**ESSO UNIVIS EXTRA (--- GAL)**

### DIAGNOSIS

#### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

#### Wear

All component wear rates are normal.

#### Contamination

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

#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the sample is suitable for further service.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0618980</b>	WC0618989	WC0550992
Sample Date	Client Info		<b>31 Jul 2023</b>	09 Sep 2022	23 Jun 2022
Machine Age	days	Client Info	<b>1098</b>	773	695
Oil Age	days	Client Info	<b>0</b>	0	695
Oil Changed	Client Info		<b>N/A</b>	N/A	Changed
Sample Status			<b>ATTENTION</b>	NORMAL	ABNORMAL

### WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>0</b>	0	---
Iron	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0
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)	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185(m)	<b>2</b>	2	3
Copper	ppm	ASTM D5185(m)	<b>4</b>	3	6
Tin	ppm	ASTM D5185(m)	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	<1	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)	2.9	<b>&lt;1</b>	<1
Barium	ppm	ASTM D5185(m)	1.5	<b>0</b>	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0
Magnesium	ppm	ASTM D5185(m)	0	<b>2</b>	2
Calcium	ppm	ASTM D5185(m)	37	<b>44</b>	46
Phosphorus	ppm	ASTM D5185(m)	235	<b>379</b>	398
Zinc	ppm	ASTM D5185(m)	298	<b>496</b>	494
Sulfur	ppm	ASTM D5185(m)	1069	<b>1180</b>	1248
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1

### CONTAMINANTS

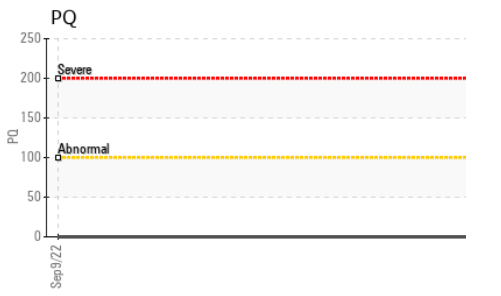
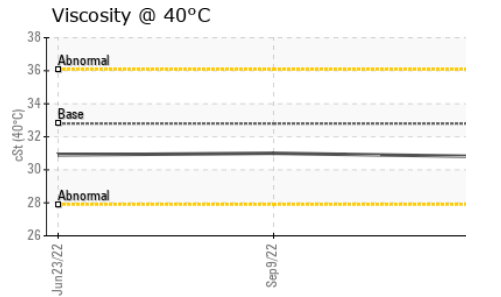
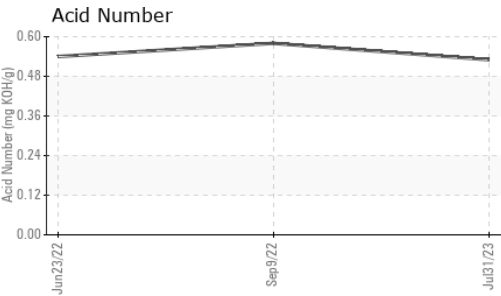
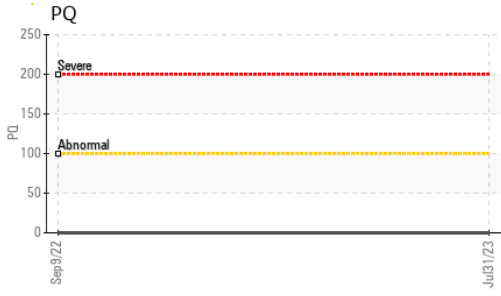
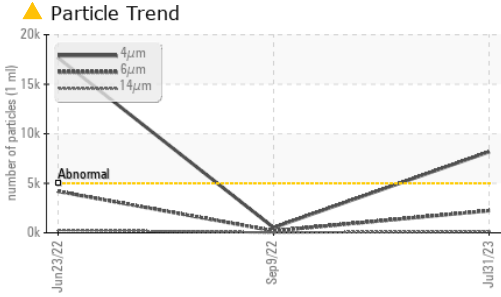
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1

### FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 8180</b>	527	▲ 17666
Particles >6µm	ASTM D7647	>1300	<b>▲ 2240</b>	196	▲ 4181
Particles >14µm	ASTM D7647	>160	<b>128</b>	25	▲ 286
Particles >21µm	ASTM D7647	>40	<b>33</b>	9	▲ 66
Particles >38µm	ASTM D7647	>10	<b>2</b>	1	2
Particles >71µm	ASTM D7647	>3	<b>1</b>	0	2
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 20/18/14</b>	16/15/12	▲ 21/19/15



# OIL ANALYSIS REPORT

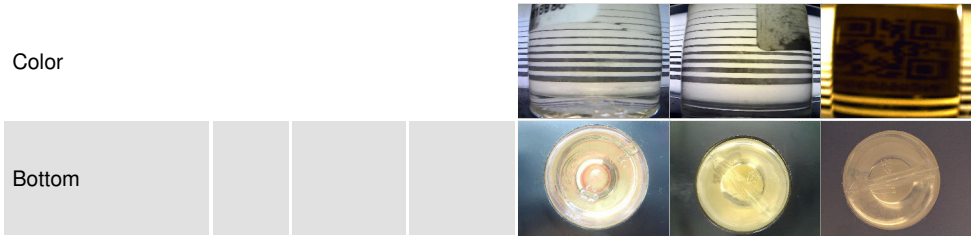


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.53</b>	0.58	0.54

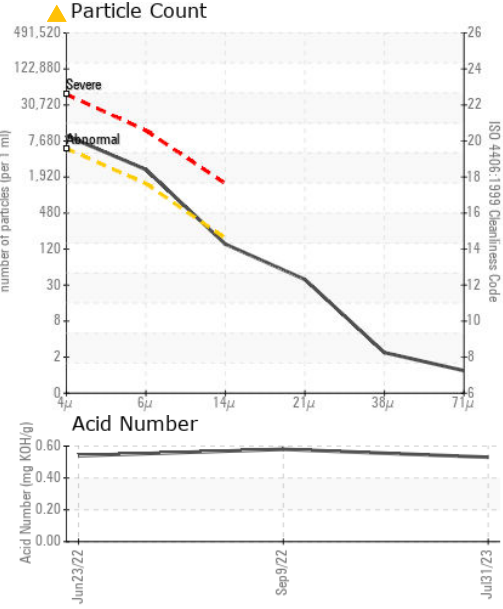
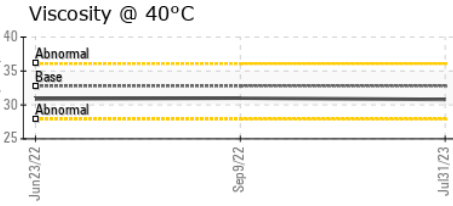
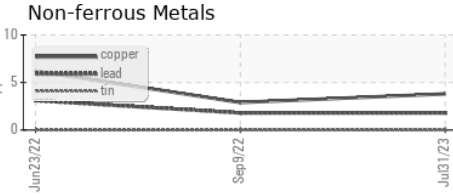
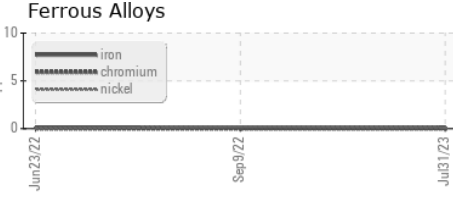
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>VLITE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	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*		<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 D7279(m)	32.8	<b>30.8</b>	31.0	30.9

### SAMPLE IMAGES



### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Ontario Power Generation - Northeast Operations  
**Sample No.** : WC0618980 **Received** : 25 Aug 2023 **801 MOUNTJOY ST S, BOX 966**  
**Lab Number** : **02578479** **Diagnosed** : 29 Aug 2023 **TIMMINS, ON**  
**Unique Number** : 5631539 **Diagnostician** : Kevin Marson **CA P4N 7H1**  
**Test Package** : IND 2 ( Additional Tests: PQ, PrtCount ) **Contact: Zane Lougheed**  
**zane.lougheed@opg.com**  
*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.*