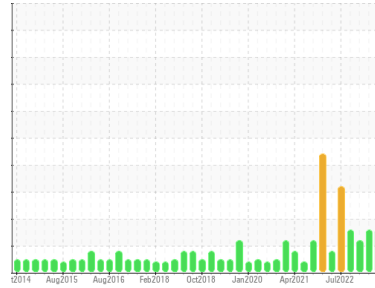




# PROBLEM SUMMARY

Sample Rating Trend



**WEAR**



Area

**5**

Machine Id

## 5-3-250 Atox Rollers Hyd. Pressure Pump

Component

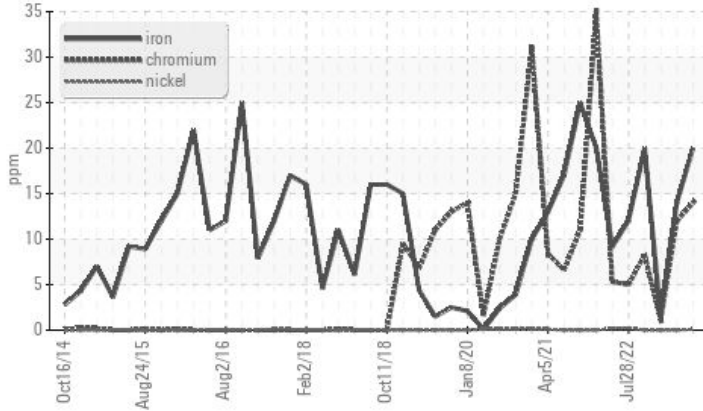
**Hydraulic System**

Fluid

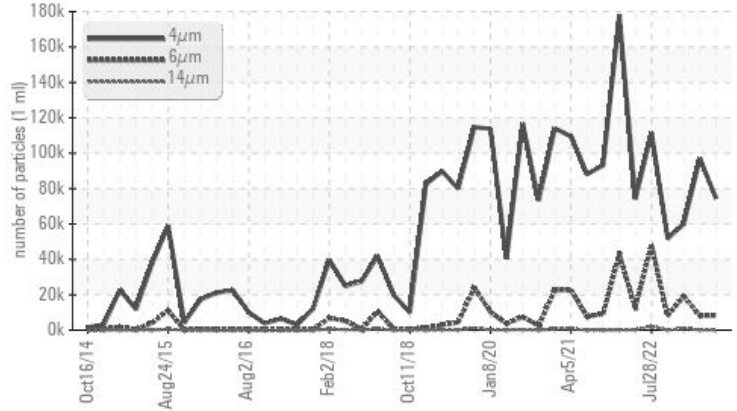
**ESSO NUTO H ISO 68 (1000 LTR)**

### COMPONENT CONDITION SUMMARY

#### ▲ Ferrous Alloys



#### ▲ Particle Trend



### RECOMMENDATION

We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

### PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	ATTENTION	ABNORMAL
Iron	ppm	ASTM D5185(m) >20	▲ <b>20</b>	14	2
Particles >6µm		ASTM D7647 >5000	▲ <b>8250</b>	▲ 8265	▲ 19131
Oil Cleanliness		ISO 4406 (c) >--/19/16	▲ <b>23/20/12</b>	▲ 24/20/13	▲ 23/21/17

Customer Id: STMBOW  
 Sample No.: WC0869874  
 Lab Number: 02601867  
 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.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Fluid Source	---	---	?	Confirm the source of the lubricant being utilized for top-up/fill.

## HISTORICAL DIAGNOSIS

### 07 Sep 2023 Diag: Bill Quesnel

#### WEAR



We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. Chromium ppm levels are marginal. All other component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 18 May 2023 Diag: Kevin Marson

#### ISO



We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report



### 16 Nov 2022 Diag: Kevin Marson

#### WEAR



We recommend you service the filters on this component. Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid. Iron ppm levels are noted. A sharp increase in the iron level is noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. All other component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

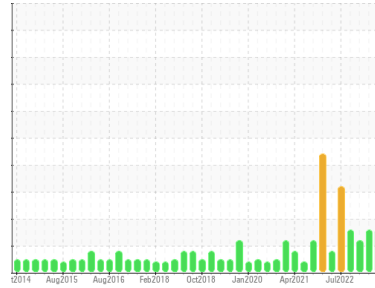
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area

**5**

Machine Id

**5-3-250 Atox Rollers Hyd. Pressure Pump**

Component

**Hydraulic System**

Fluid

**ESSO NUTO H ISO 68 (1000 LTR)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

### Wear

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

### Contamination

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

### Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. 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>WC0869874</b>	WC	WC0818146
Sample Date	Client Info		<b>23 Nov 2023</b>	07 Sep 2023	18 May 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ATTENTION	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.05	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>0</b>	0	---
Iron	ppm	ASTM D5185(m) >20	<b>▲ 20</b>	14	2
Chromium	ppm	ASTM D5185(m) >20	<b>14</b>	▲ 12	1
Nickel	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185(m) >20	<b>3</b>	2	<1
Tin	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<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) 0.6	<b>&lt;1</b>	0	0
Barium	ppm	ASTM D5185(m) 0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0.0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m) 0.0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 0.0	<b>69</b>	71	71
Calcium	ppm	ASTM D5185(m) 44	<b>14</b>	12	12
Phosphorus	ppm	ASTM D5185(m) 319	<b>280</b>	308	321
Zinc	ppm	ASTM D5185(m) 400	<b>347</b>	353	352
Sulfur	ppm	ASTM D5185(m) 2810	<b>698</b>	719	741
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

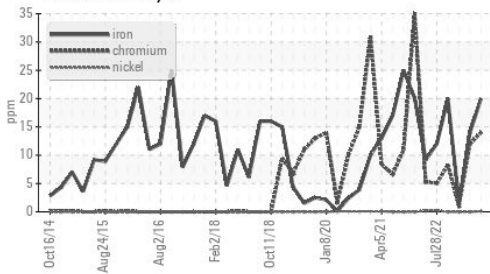
## CONTAMINANTS

	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>	0	0
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	<1	0

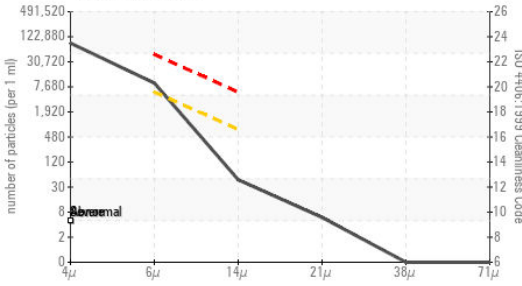


# OIL ANALYSIS REPORT

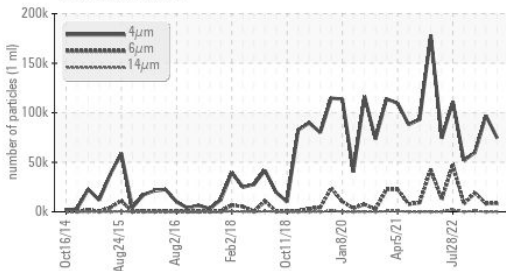
## ▲ Ferrous Alloys



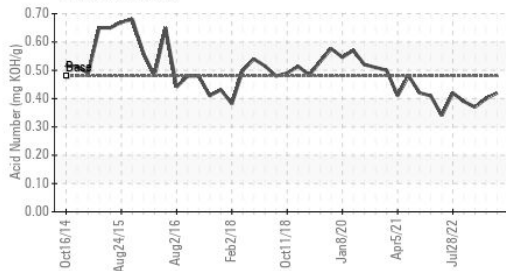
## ▲ Particle Count



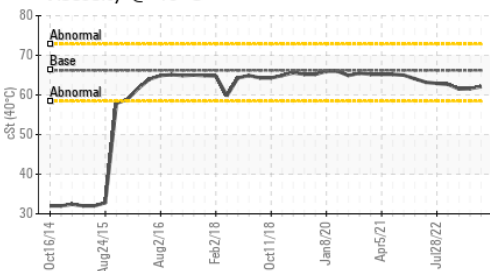
## ▲ Particle Trend



## Acid Number



## Viscosity @ 40°C



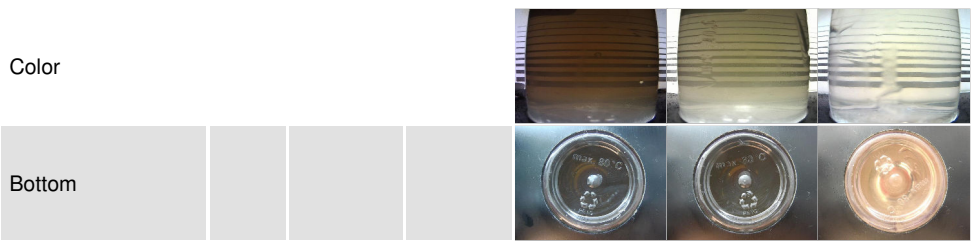
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>74551</b>	97017	60000
Particles >6µm	ASTM D7647	>5000	<b>▲ 8250</b>	▲ 8265	▲ 19131
Particles >14µm	ASTM D7647	>640	<b>40</b>	75	▲ 893
Particles >21µm	ASTM D7647	>160	<b>5</b>	6	147
Particles >38µm	ASTM D7647	>40	<b>0</b>	0	1
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/19/16	<b>▲ 23/20/12</b>	▲ 24/20/13	▲ 23/21/17

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.48	<b>0.42</b>	0.40	0.37

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>NONE</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*	>0.05	<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)	66.2	<b>62.1</b>	61.6	61.5

## SAMPLE IMAGES



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0869874 **Received** : 08 Dec 2023  
**Lab Number** : **02601867** **Diagnosed** : 11 Dec 2023  
**Unique Number** : 5694952 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: PQ )

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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