



# OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id  
**MANETEX CRANE TRUCK**

Component  
**Hydraulic System**

Fluid  
**HYRADULA 32 (240 LTR)**

## DIAGNOSIS

### Recommendation

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

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

### Fluid Condition

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PP</b>	---	---
Sample Date	Client Info	<b>30 Aug 2023</b>	---	---
Machine Age	hrs Client Info	<b>400</b>	---	---
Oil Age	hrs Client Info	<b>400</b>	---	---
Oil Changed	Client Info	<b>Not Chngd</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185(m) >20	<b>1</b>	---	---
Chromium ppm	ASTM D5185(m) >10	<b>0</b>	---	---
Nickel ppm	ASTM D5185(m) >10	<b>0</b>	---	---
Titanium ppm	ASTM D5185(m)	<b>0</b>	---	---
Silver ppm	ASTM D5185(m)	<b>0</b>	---	---
Aluminum ppm	ASTM D5185(m) >10	<b>&lt;1</b>	---	---
Lead ppm	ASTM D5185(m) >10	<b>0</b>	---	---
Copper ppm	ASTM D5185(m) >75	<b>1</b>	---	---
Tin ppm	ASTM D5185(m) >10	<b>0</b>	---	---
Antimony ppm	ASTM D5185(m)	<b>0</b>	---	---
Vanadium ppm	ASTM D5185(m)	<b>0</b>	---	---
Beryllium ppm	ASTM D5185(m)	<b>0</b>	---	---
Cadmium ppm	ASTM D5185(m)	<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---
Barium ppm	ASTM D5185(m)	<b>0</b>	---	---
Molybdenum ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---
Manganese ppm	ASTM D5185(m)	<b>0</b>	---	---
Magnesium ppm	ASTM D5185(m)	<b>3</b>	---	---
Calcium ppm	ASTM D5185(m)	<b>127</b>	---	---
Phosphorus ppm	ASTM D5185(m)	<b>544</b>	---	---
Zinc ppm	ASTM D5185(m)	<b>661</b>	---	---
Sulfur ppm	ASTM D5185(m)	<b>1271</b>	---	---
Lithium ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---

## CONTAMINANTS

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

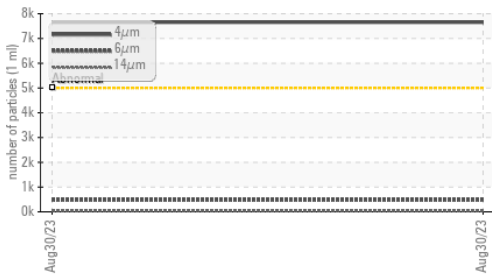
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>▲ 7654</b>	---	---
Particles >6µm	ASTM D7647 >1300	<b>481</b>	---	---
Particles >14µm	ASTM D7647 >160	<b>35</b>	---	---
Particles >21µm	ASTM D7647 >40	<b>14</b>	---	---
Particles >38µm	ASTM D7647 >10	<b>1</b>	---	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>▲ 20/16/12</b>	---	---

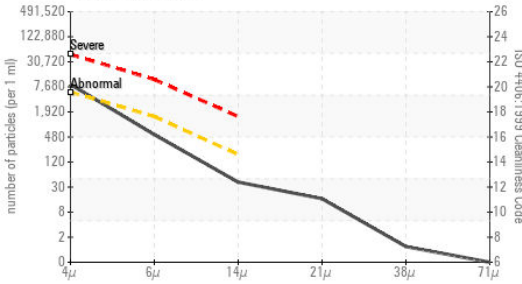


# OIL ANALYSIS REPORT

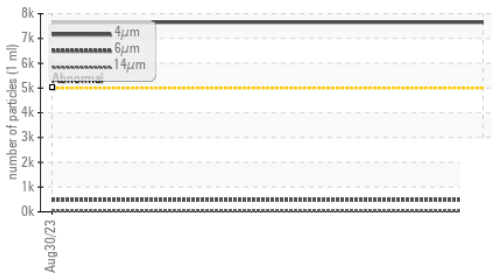
## Particle Trend



## Particle Count



## Particle Trend



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---
Free Water	scalar	Visual*		NEG	---

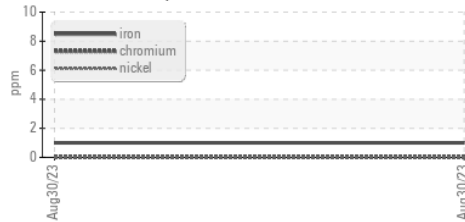
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	▲ 44.7	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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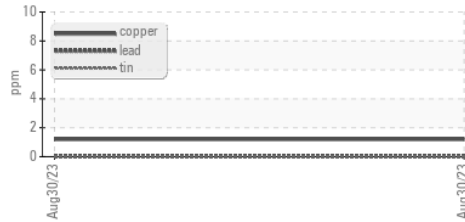
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Bottom				no image	no image

## GRAPHS

### Ferrous Alloys



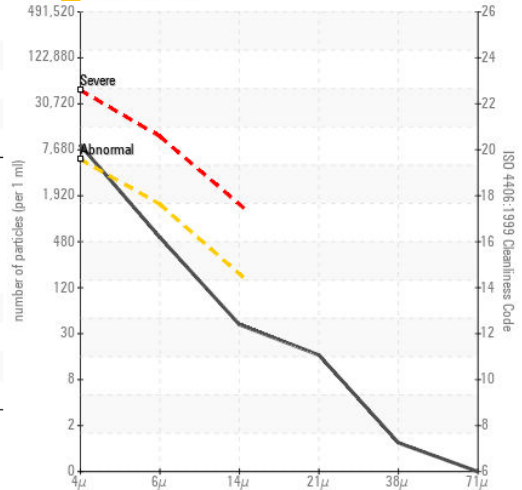
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



ISO 17025:2017  
Accredited  
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
 Sample No. : PP  
 Lab Number : 02579708  
 Unique Number : 5632768  
 Test Package : MOB 2

Received : 31 Aug 2023  
 Diagnosed : 01 Sep 2023  
 Diagnostician : Kevin Marson

**HIGHLAND FUELS**  
 92 MAIN ST. WEST, BOX 593  
 DUNDALK, ON  
 CA N0C 1B0  
 Contact: JAMES LESAGE

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.

T: (800)265-9154  
 F: (519)923-2302