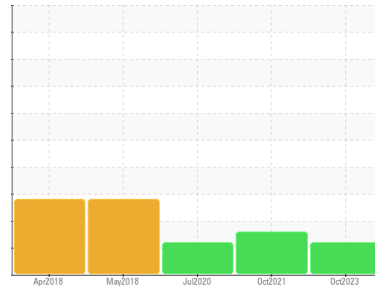




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**BETON PROVINCIAL [02591887]**  
 Machine Id  
**2018 VAN AALST BULKHANDLING 1614-51**  
 Component  
**Hydraulic System**  
 Fluid  
**PANOLIN HLP SYNTH 32 (1000 LTR)**

## DIAGNOSIS

### Recommendation

Nous recommandons le remplacement des filtres de ce composant. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

### Wear

Les taux d'usure de tous les composants sont normaux.

### Contamination

Il y a une quantité modérée de particules (de 4 à 14 microns) dans l'huile. Il y a une faible concentration (<5.0%) d'huile minérale présente dans le fluide. La propreté du système est supérieure à la limite acceptable pour votre objectif de propreté ISO 4406.

### Fluid Condition

Le AN est acceptable pour ce fluide. l'huile peut encore servir si la contamination peut être réduite à un niveau acceptable.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC0839550</b>	WC	WC
Sample Date	Client Info	<b>16 Oct 2023</b>	20 Oct 2021	16 Jul 2020
Machine Age	hrs	<b>13246</b>	4000	2000
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >20	<b>8</b>	3	4
Chromium	ppm	ASTM D5185(m) >10	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >10	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185(m) >10	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m) >75	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >10	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
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	<b>2</b>	4	4
Barium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m) 5	<b>6</b>	6	6
Phosphorus	ppm	ASTM D5185(m) 1500	<b>1252</b>	1060	▲ 846
Zinc	ppm	ASTM D5185(m) 0	<b>36</b>	39	▲ 33
Sulfur	ppm	ASTM D5185(m) 1450	<b>1283</b>	1258	1167
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

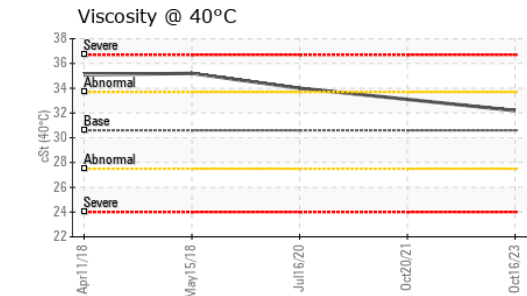
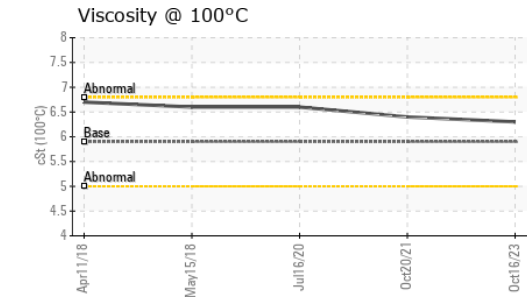
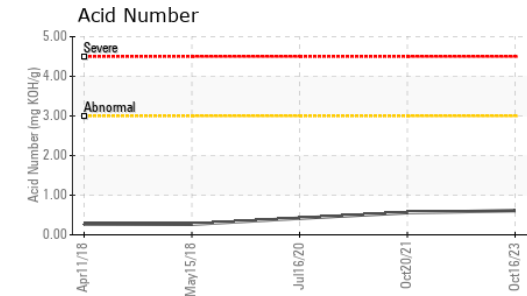
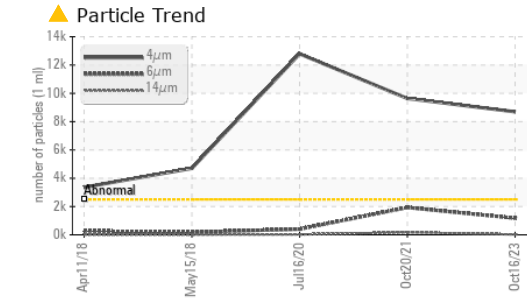
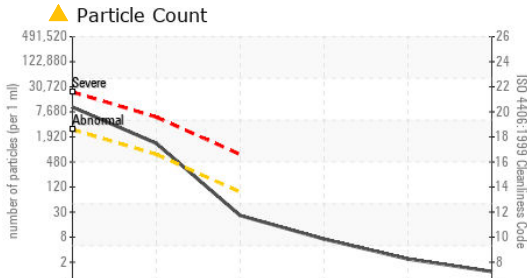
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >20	<b>2</b>	3	4
Sodium	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	<1	<1
Water	%	ASTM D6304* >0.05	<b>0.058</b>	---	---
ppm Water	ppm	ASTM D6304* >500	<b>588.6</b>	---	---

## INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	<b>0</b>	---	---
Nitration	Abs/cm	ASTM D7624*	<b>4.1</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	<b>156.2</b>	---	---
Mineral Oil Content	%	ASTM D7418* <5.0%	<b>&lt;5.0</b>	0.0	0.0



# OIL ANALYSIS REPORT



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0839550 **Received** : 25 Oct 2023  
**Lab Number** : 02591888 **Diagnosed** : 30 Oct 2023  
**Unique Number** : 5668967 **Diagnostician** : Bill Quesnel  
**Test Package** : MOB 2 ( Additional Tests: TAN Man )

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.

**Envirolin Canada**  
 520 rue Adanac  
 Quebec, QC  
 CA G1C 7B7  
 Contact: Patrick Levesque  
 patrick.levesque@envirolin.com  
 T: (418)623-1216  
 F: (418)660-8889

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 8693	▲ 9637	▲ 12791
Particles >6µm	ASTM D7647	>640	▲ 1178	▲ 1933	404
Particles >14µm	ASTM D7647	>80	22	▲ 171	22
Particles >21µm	ASTM D7647	>20	6	▲ 45	9
Particles >38µm	ASTM D7647	>4	2	4	2
Particles >71µm	ASTM D7647	>3	1	0	2
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 20/17/12	▲ 20/18/15	▲ 21/16/12

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	154.1	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*	0.61	0.56	0.42

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	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	30.6	32.2	33.1
Visc @ 100°C	cSt	ASTM D7279(m)	5.9	6.3	6.4
Viscosity Index (VI)	Scale	ASTM D2270*	140	150	148

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					





# MINERAL OIL CONTENT REPORT

PASS

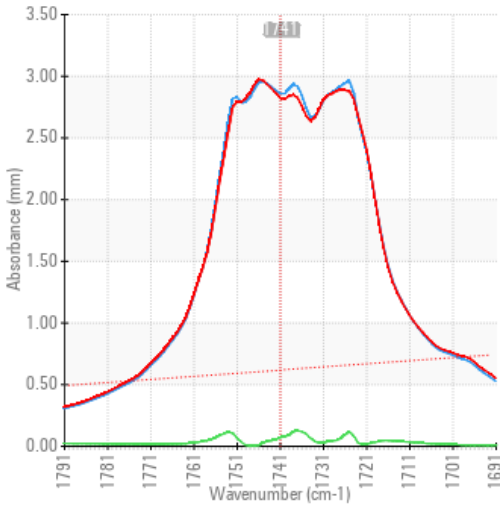


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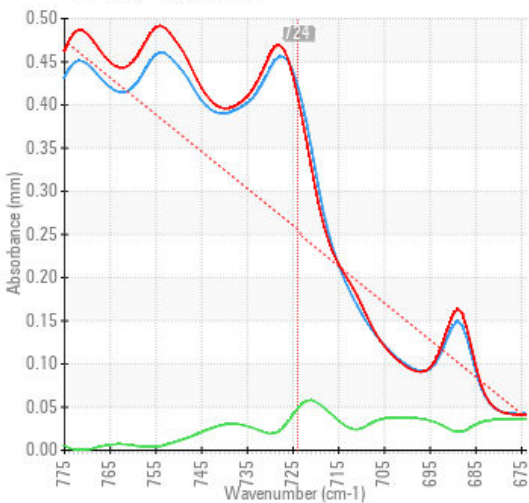
## SPECTRAL ANALYSIS

		method	limit/base	current	history1	history2
Zinc	ppm	ASTM D5185(m)	0	<b>36</b>	39	▲ 33
Mineral Oil Content	%	ASTM D7418*	<5.0%	<b>&lt;5.0</b>	0.0	0.0

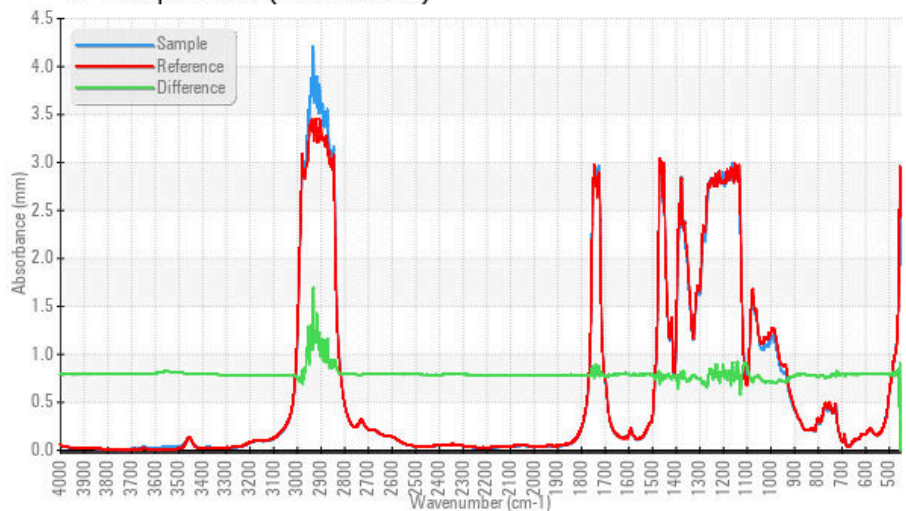
### FT-IR - Esters I



### FT-IR - Esters II



### FT-IR Spectrum (Absorbance)



ISO 17025:2017  
 Accredited  
 Laboratory

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