



# OIL ANALYSIS REPORT

Sample Rating Trend

ADDITIVES



Area  
**[02609812]**  
 Machine Id  
**KOMATSU ENTLOU-VIL64**  
 Component  
**Hydraulic System**  
 Fluid  
**SINTO MULTIGRADE BIO (--- GAL)**



## DIAGNOSIS

- Recommendation**  
Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition.
- Wear**  
Les taux d'usure de tous les composants sont normaux.
- Contamination**  
Il n'y a pas d'huile minérale présente dans le fluide. Il n'y a aucune indication de contamination dans le composant (non confirmée).
- Fluid Condition**  
L'état de l'huile est acceptable pour la durée de service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PP</b>	---	---
Sample Date	Client Info		<b>17 Jan 2024</b>	---	---
Machine Age	hrs Client Info		<b>13378</b>	---	---
Oil Age	hrs Client Info		<b>1334</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>ATTENTION</b>	---	---

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Chromium	ppm ASTM D5185(m)	>20	<b>0</b>	---	---
Nickel	ppm ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Titanium	ppm ASTM D5185(m)		<b>0</b>	---	---
Silver	ppm ASTM D5185(m)		<b>0</b>	---	---
Aluminum	ppm ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Lead	ppm ASTM D5185(m)	>20	<b>0</b>	---	---
Copper	ppm ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Tin	ppm ASTM D5185(m)	>20	<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)	1	<b>&lt;1</b>	---	---
Barium	ppm ASTM D5185(m)	0	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185(m)	0	<b>0</b>	---	---
Manganese	ppm ASTM D5185(m)	0	<b>0</b>	---	---
Magnesium	ppm ASTM D5185(m)	0	<b>5</b>	---	---
Calcium	ppm ASTM D5185(m)	8	<b>▲ 130</b>	---	---
Phosphorus	ppm ASTM D5185(m)	1325	<b>1227</b>	---	---
Zinc	ppm ASTM D5185(m)	6	<b>▲ 57</b>	---	---
Sulfur	ppm ASTM D5185(m)	2400	<b>2611</b>	---	---
Lithium	ppm ASTM D5185(m)		<b>&lt;1</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m)	>15	<b>4</b>	---	---
Sodium	ppm ASTM D5185(m)		<b>&lt;1</b>	---	---
Potassium	ppm ASTM D5185(m)	>20	<b>2</b>	---	---

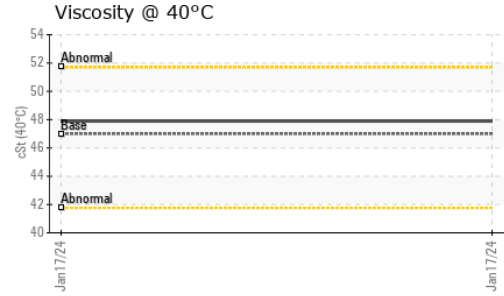
## INFRA-RED

	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>178.2</b>	---	---
Mineral Oil Content	% ASTM D7418*	<5.0%	<b>0.0</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414*		<b>156.3</b>	---	---

# OIL ANALYSIS REPORT



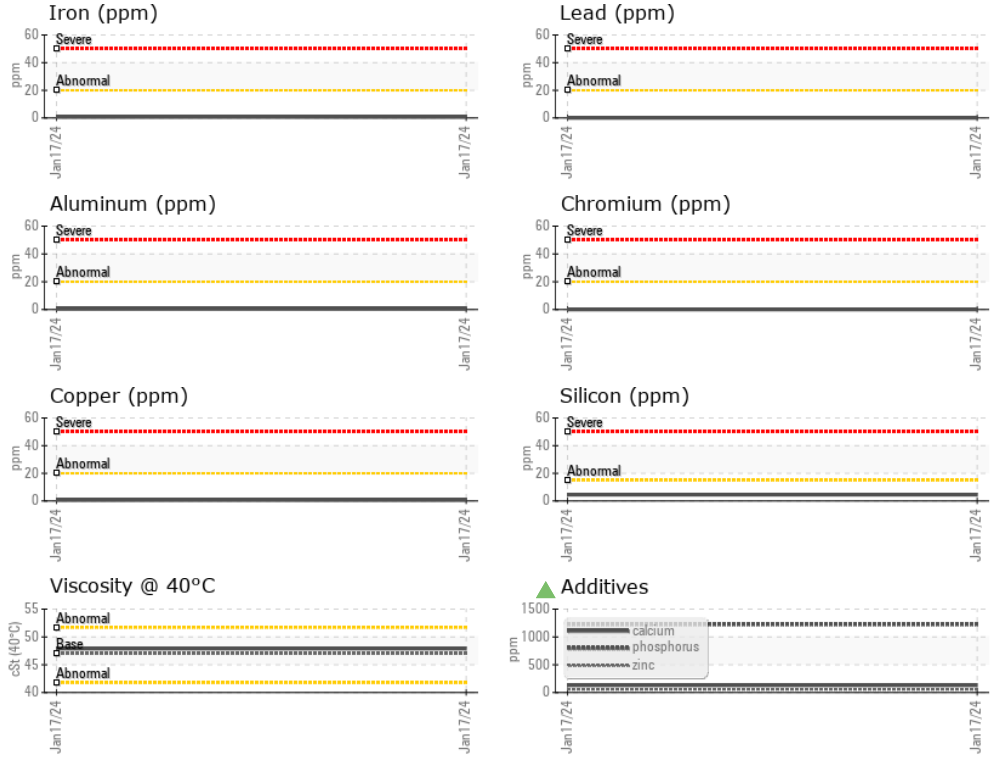
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	47.0	<b>47.9</b>	---

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

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PP **Received** : 18 Jan 2024  
**Lab Number** : 02609813 **Diagnosed** : 22 Jan 2024  
**Unique Number** : 5710899 **Diagnostician** : Bill Quesnel  
**Test Package** : MOB 1 ( Additional Tests: FT-IR, Mineral Oil Content )

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.

**SINTO INC**  
 3750, 14 AVE WEST  
 SAINT-GEORGES DE BEAUCES, QC  
 CA G5Y 8E3  
 Contact: Jimmie Roy  
 j.roy@sinto.ca  
 T: (418)227-6442  
 F: (418)228-5592



# MINERAL OIL CONTENT REPORT

PASS

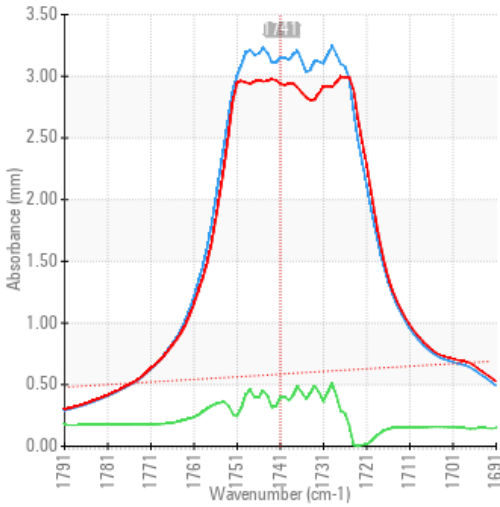


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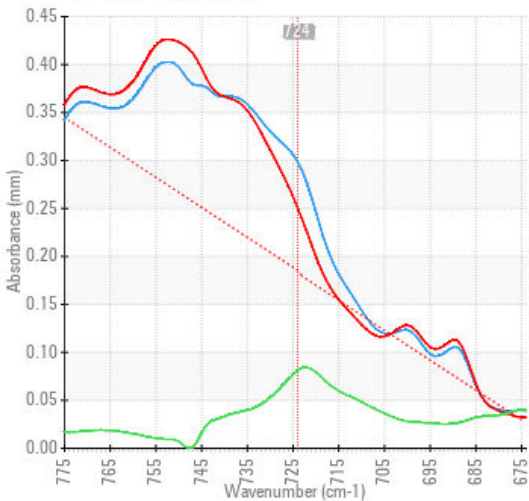
## SPECTRAL ANALYSIS

		method	limit/base	current	history1	history2
Zinc	ppm	ASTM D5185(m)	6	<span style="color: green;">▲</span> 57	---	---
Mineral Oil Content	%	ASTM D7418*	<5.0%	<b>0.0</b>	---	---

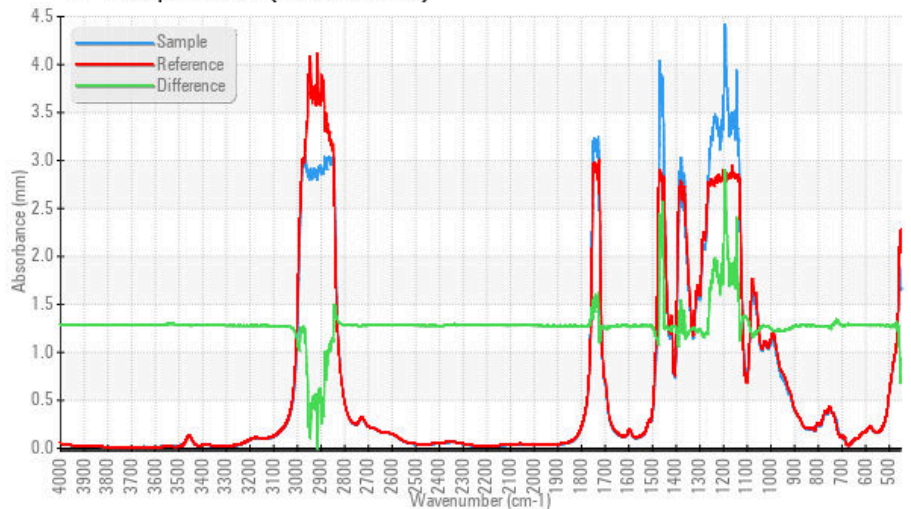
### FT-IR - Esters I



### FT-IR - Esters II



### FT-IR Spectrum (Absorbance)



ISO 17025:2017  
 Accredited  
 Laboratory

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**Sample No.** : PP  
**Lab Number** : 02609813  
**Unique Number** : 5710899  
**Test Package** : MOB 1 ( Additional Tests: FT-IR, Mineral Oil Content )

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