



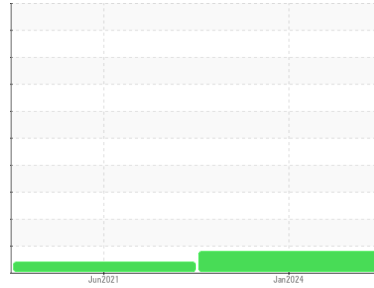
OIL ANALYSIS REPORT

Sample Rating Trend

ADDITIVES



Area
[02609820]
 Machine Id
KOMATSU ENTLOU-VIL 57
 Component
Hydraulic Cooling 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 y a une faible concentration (1.5%) 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		PP	PP	---
Sample Date	Client Info		17 Jan 2024	10 Jun 2021	---
Machine Age	hrs	Client Info	4050	40580	---
Oil Age	hrs	Client Info	1049	5	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			ATTENTION	ABNORMAL	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>20	<1	11	---
Chromium	ppm	ASTM D5185(m)	>20	0	<1	---
Nickel	ppm	ASTM D5185(m)	>20	<1	0	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		<1	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	---
Lead	ppm	ASTM D5185(m)	>20	0	2	---
Copper	ppm	ASTM D5185(m)	>20	<1	3	---
Tin	ppm	ASTM D5185(m)	>20	0	<1	---
Antimony	ppm	ASTM D5185(m)		0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	1	<1	2	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	0	0	0	---
Manganese	ppm	ASTM D5185(m)	0	0	<1	---
Magnesium	ppm	ASTM D5185(m)	0	3	2	---
Calcium	ppm	ASTM D5185(m)	8	▲ 73	14	---
Phosphorus	ppm	ASTM D5185(m)	1325	1228	1226	---
Zinc	ppm	ASTM D5185(m)	6	▲ 34	7	---
Sulfur	ppm	ASTM D5185(m)	2400	2562	2410	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	4	5	---
Sodium	ppm	ASTM D5185(m)		<1	<1	---
Potassium	ppm	ASTM D5185(m)	>20	2	<1	---

INFRA-RED

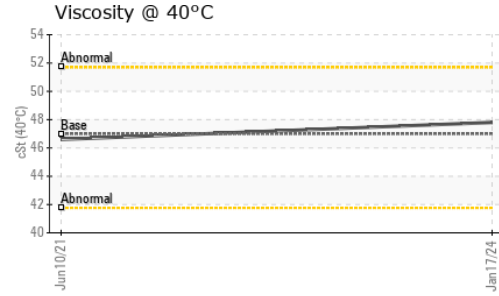
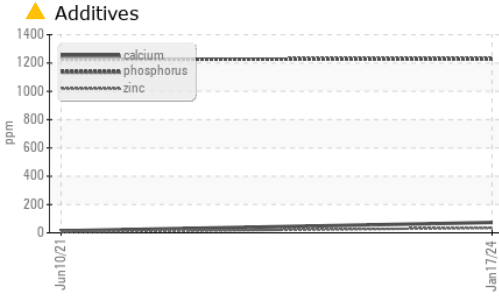
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	---	---
Nitration	Abs/cm	ASTM D7624*		4.1	---	---
Sulfation	Abs/.1mm	ASTM D7415*		159.2	---	---
Mineral Oil Content	%	ASTM D7418*	<5.0%	1.5	0.5	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*		151.8	---	---



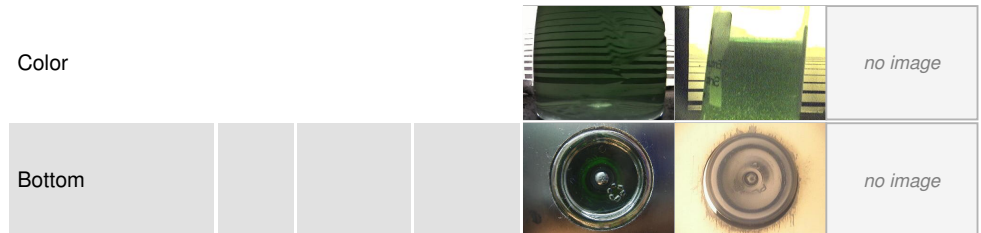
OIL ANALYSIS REPORT



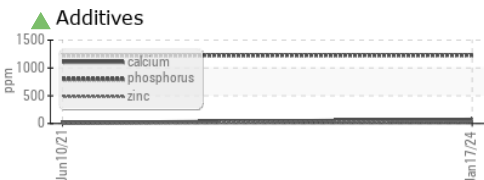
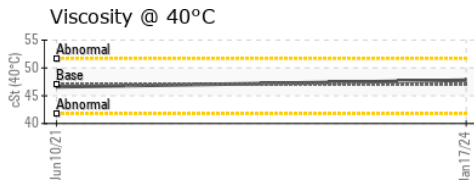
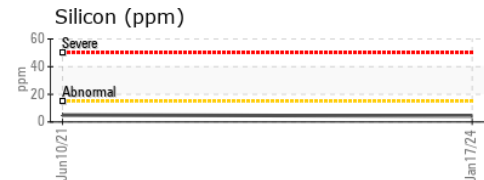
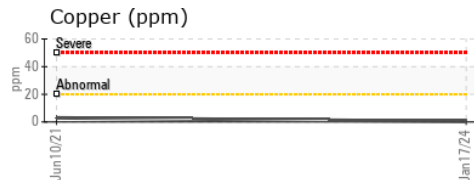
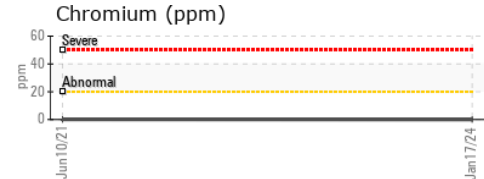
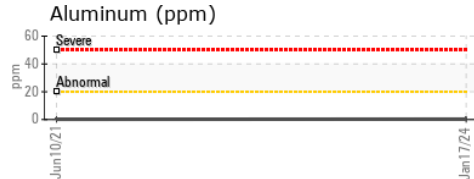
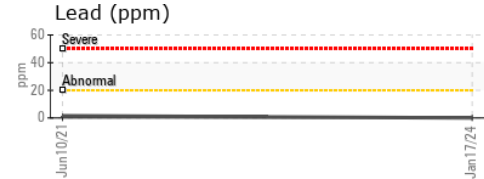
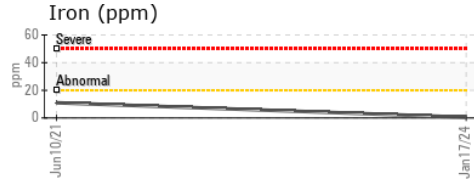
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	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	47.8	46.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PP **Received** : 18 Jan 2024
Lab Number : 02609821 **Diagnosed** : 22 Jan 2024
Unique Number : 5710907 **Diagnostician** : Bill Quesnel
Test Package : MOB 1 (Additional Tests: FT-IR, Mineral Oil Content)

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

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.



MINERAL OIL CONTENT REPORT

PASS

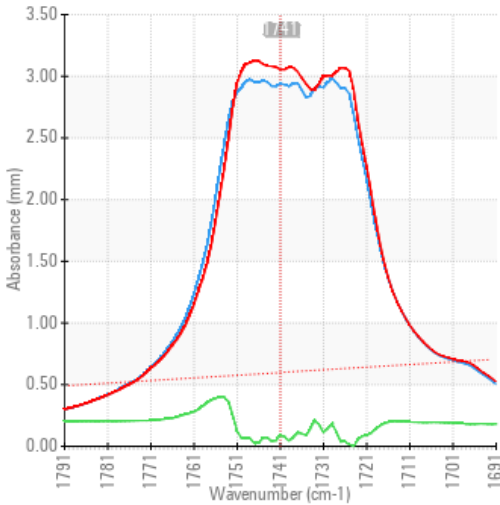


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SINTO MULTIGRADE BIO (--- GAL)

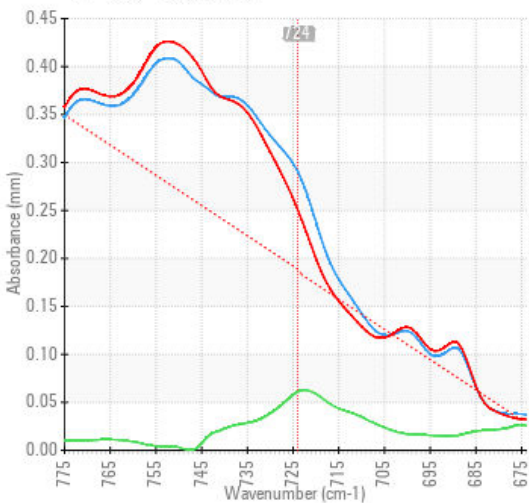
SPECTRAL ANALYSIS

		method	limit/base	current	history1	history2
Zinc	ppm	ASTM D5185(m)	6	▲ 34	7	---
Mineral Oil Content	%	ASTM D7418*	<5.0%	1.5	0.5	---

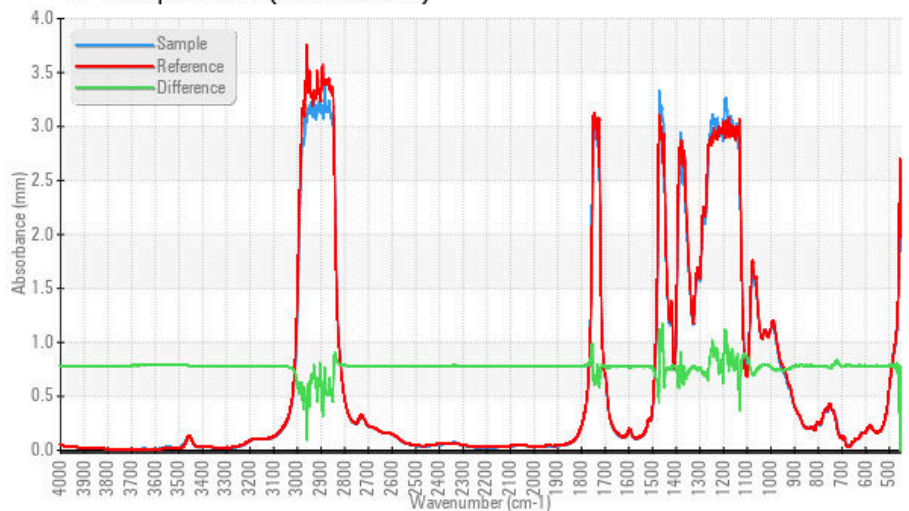
FT-IR - Esters I



FT-IR - Esters II



FT-IR Spectrum (Absorbance)



ISO 17025:2017
 Accredited
 Laboratory

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Lab Number : 02609821
Unique Number : 5710907
Test Package : MOB 1 (Additional Tests: FT-IR, Mineral Oil Content)

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