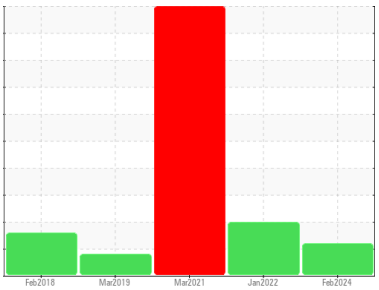
OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION

Area
MASKIMO CONSTRUCTION INC [02624055]
Machine Id
KOMATSU PC360LC-11 3164 (S/N A35272)
Component
Hydraulic System
Fluid
PANOLIN HLP SYNTH 46 (365 LTR)

DIAGNOSIS

Recommendation

Échantillonner de nouveau l`équipement au prochain intervalle de vidange afin d`en surveiller la condition. L'indice d'acidité (AN) indique que votre fluide approche de sa fin de vie utile, veuillez échantillonner à intervalles rapprochées de 250 heures.

Wear

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

Contamination

Il y a une faible concentration (<5.0%) d'huile minérale présente dans le fluide. La propreté du système est acceptable pour votre objectif de propreté ISO 4406. La teneur en eau est négligeable. La propreté du système et du fluide est acceptable.

Fluid Condition

Le niveau de AN est supérieur à la limite recommandée.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC**	WC	WC
Sample Date		Client Info		**22 Feb 2024**	18 Jan 2022	10 Mar 2021
Machine Age	hrs	Client Info		**7482**	5717	4838
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**7**	5	5
Chromium	ppm	ASTM D5185(m)	>10	**6**	5	4
Nickel	ppm	ASTM D5185(m)	>10	**0**	<1	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	<1
Silver	ppm	ASTM D5185(m)		**0**	<1	<1
Aluminum	ppm	ASTM D5185(m)	>10	**<1**	<1	<1
Lead	ppm	ASTM D5185(m)	>10	**1**	6	6
Copper	ppm	ASTM D5185(m)	>75	**2**	3	3
Tin	ppm	ASTM D5185(m)	>10	**0**	<1	<1
Antimony	ppm	ASTM D5185(m)		**0**	<1	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

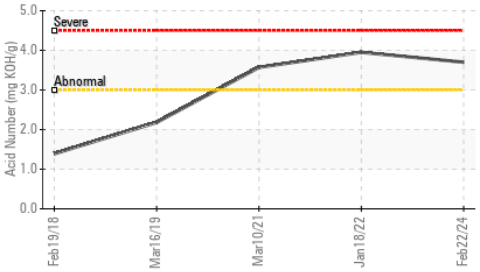
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	**0**	2	2
Barium	ppm	ASTM D5185(m)	0	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	0	**0**	<1	0
Manganese	ppm	ASTM D5185(m)	0	**0**	0	<1
Magnesium	ppm	ASTM D5185(m)	0	**<1**	<1	<1
Calcium	ppm	ASTM D5185(m)	0	**4**	8	7
Phosphorus	ppm	ASTM D5185(m)	1700	**1274**	1322	1232
Zinc	ppm	ASTM D5185(m)	0	**41**	52	45
Sulfur	ppm	ASTM D5185(m)	1350	**1247**	1268	1285
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	**<1**	2	2
Sodium	ppm	ASTM D5185(m)		**2**	7	6
Potassium	ppm	ASTM D5185(m)	>20	**<1**	8	3
Water	%	ASTM D6304*	>0.05	**0.023**	---	---
ppm Water	ppm	ASTM D6304*	>500	**240**	---	---

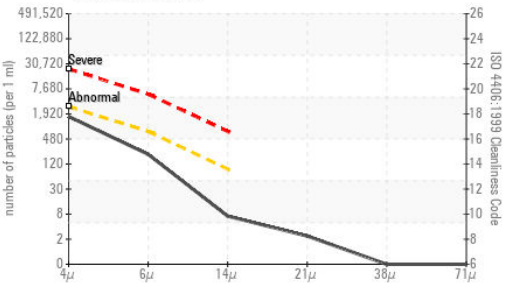
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	---	---
Nitration	Abs/cm	ASTM D7624*		**4.7**	---	---
Sulfation	Abs/.1mm	ASTM D7415*		**157.6**	---	---
Mineral Oil Content	%	ASTM D7418*	<5.0%	**<5.0**	1.8	0.0

OIL ANALYSIS REPORT

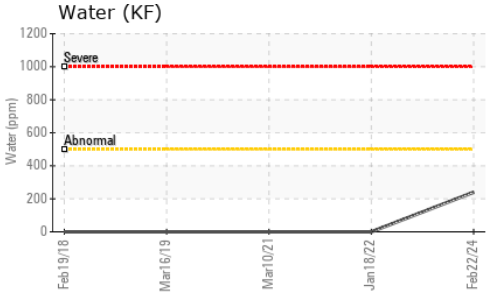
Acid Number



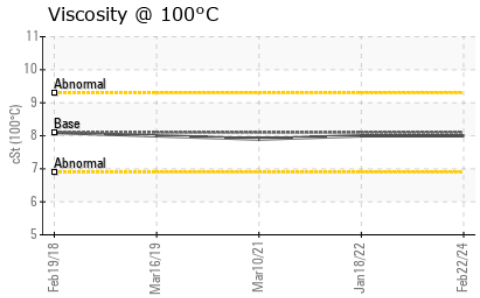
Particle Count



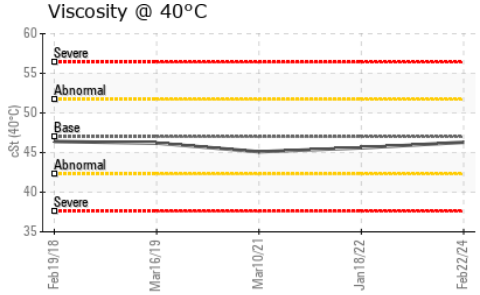
Water (KF)



Viscosity @ 100°C



Viscosity @ 40°C

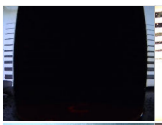


FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	**1459**	▲ 8453	▲ 38079
Particles >6µm		ASTM D7647	>640	**181**	● 701	▲ 14771
Particles >14µm		ASTM D7647	>80	**6**	6	▲ 1948
Particles >21µm		ASTM D7647	>20	**2**	2	▲ 626
Particles >38µm		ASTM D7647	>4	**0**	0	▲ 63
Particles >71µm		ASTM D7647	>3	**0**	0	3
Oil Cleanliness		ISO 4406 (c)	>18/16/13	**18/15/10**	▲ 20/17/10	▲ 22/21/18

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*		**164.4**	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*		▲ **3.70**	▲ 3.95	▲ 3.57

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	47.0	**46.3**	45.6	45.1
Visc @ 100°C	cSt	ASTM D7279(m)	8.1	**8.0**	8	7.9
Viscosity Index (VI)	Scale	ASTM D2270*	146	**145**	148	146

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
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ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC
Lab Number : 02624056
Unique Number : 5749175
Test Package : MOB 2 (Additional Tests: TAN Man)
Received : 22 Mar 2024
Tested : 25 Mar 2024
Diagnosed : 25 Mar 2024 - Bill Quesnel

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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520 rue Adanac
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patrick.levesque@envirolin.com
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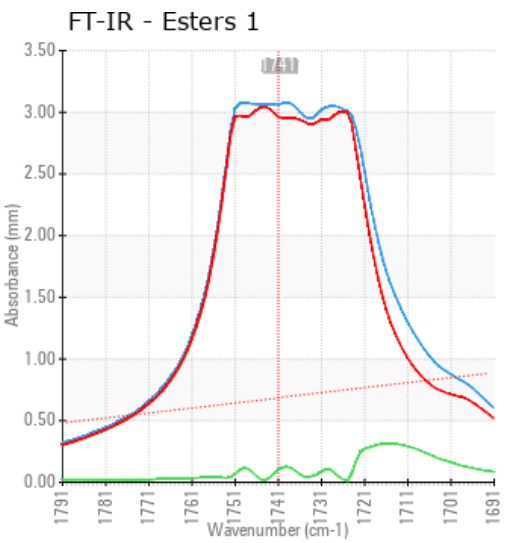
MINERAL OIL CONTENT REPORT

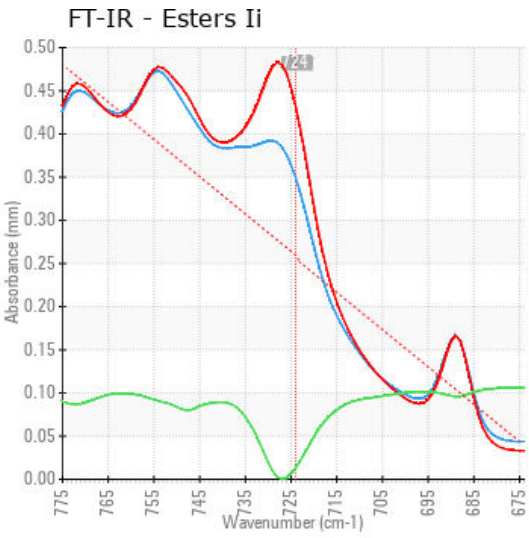
PASS

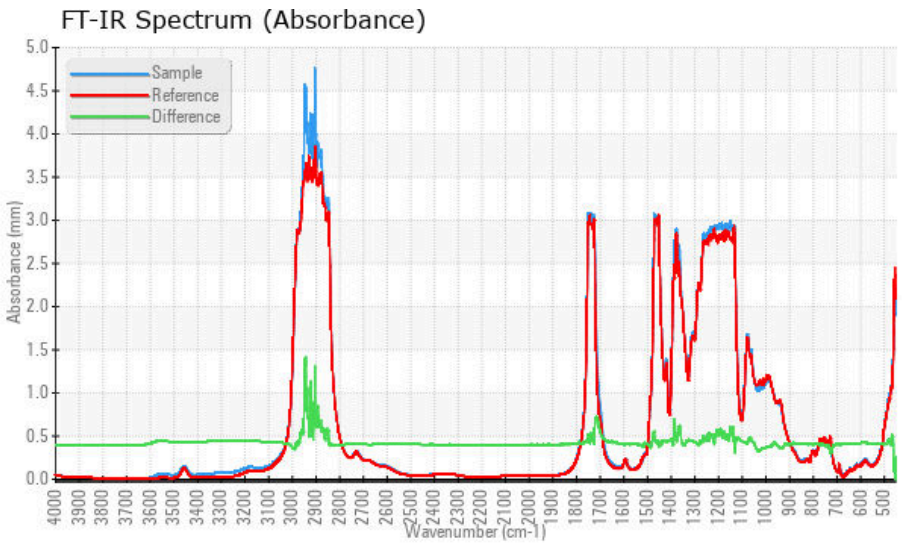
Area
MASKIMO CONSTRUCTION INC [02624055]
Machine Id
KOMATSU PC360LC-11 3164 (S/N A35272)
Component
Hydraulic System
Fluid
PANOLIN HLP SYNTH 46 (365 LTR)

SPECTRAL ANALYSIS

		method	limit/base	current	history1	history2
Zinc	ppm	ASTM D5185(m)	0	**41**	52	45
Mineral Oil Content	%	ASTM D7418*	<5.0%	**<5.0**	1.8	0.0







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