



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
TAMEX INC [02623868]
 Machine Id
CASE CX145CSR P-02 (S/N XDAC145K6NKS6E2459)
 Component
Hydraulic System
 Fluid
PANOLIN HLP SYNTH 46 (186 LTR)



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 (<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 AN est acceptable pour ce fluide. L'état de l'huile permet d'en prolonger l'utilisation.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC	---	---
Sample Date	Client Info		21 Mar 2024	---	---
Machine Age	hrs Client Info		3483	---	---
Oil Age	hrs Client Info		0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			NORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m)	>65	27	---	---
Chromium	ppm ASTM D5185(m)	>6	0	---	---
Nickel	ppm ASTM D5185(m)	>10	0	---	---
Titanium	ppm ASTM D5185(m)		0	---	---
Silver	ppm ASTM D5185(m)		0	---	---
Aluminum	ppm ASTM D5185(m)	>5	<1	---	---
Lead	ppm ASTM D5185(m)	>45	0	---	---
Copper	ppm ASTM D5185(m)	>120	4	---	---
Tin	ppm ASTM D5185(m)	>4	0	---	---
Antimony	ppm ASTM D5185(m)		0	---	---
Vanadium	ppm ASTM D5185(m)		0	---	---
Beryllium	ppm ASTM D5185(m)		0	---	---
Cadmium	ppm ASTM D5185(m)		0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m)	0	0	---	---
Barium	ppm ASTM D5185(m)	0	0	---	---
Molybdenum	ppm ASTM D5185(m)	0	0	---	---
Manganese	ppm ASTM D5185(m)	0	0	---	---
Magnesium	ppm ASTM D5185(m)	0	0	---	---
Calcium	ppm ASTM D5185(m)	0	2	---	---
Phosphorus	ppm ASTM D5185(m)	1700	1340	---	---
Zinc	ppm ASTM D5185(m)	0	44	---	---
Sulfur	ppm ASTM D5185(m)	1350	1336	---	---
Lithium	ppm ASTM D5185(m)		<1	---	---

CONTAMINANTS

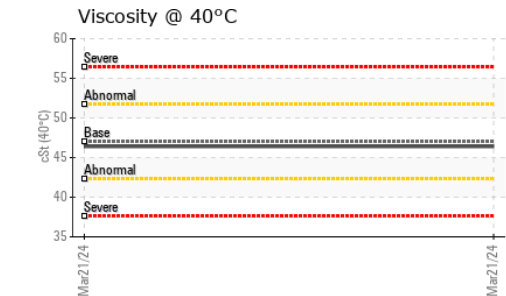
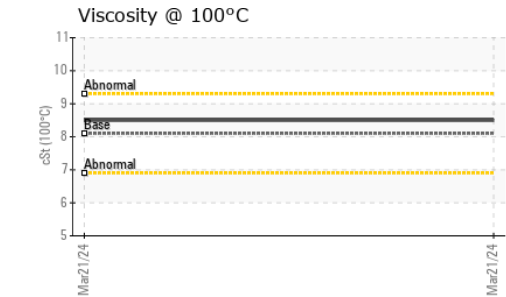
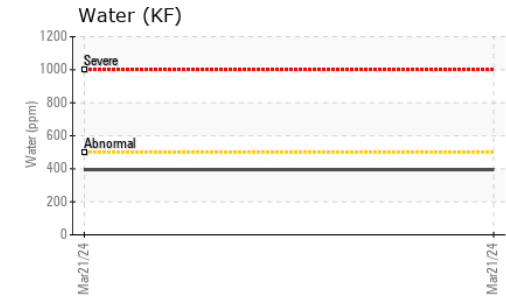
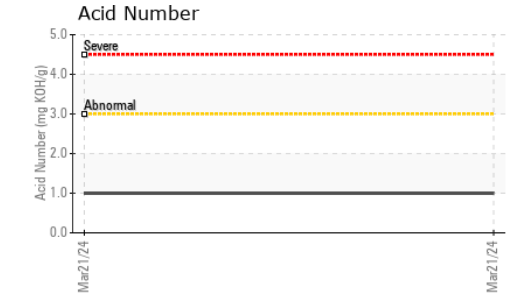
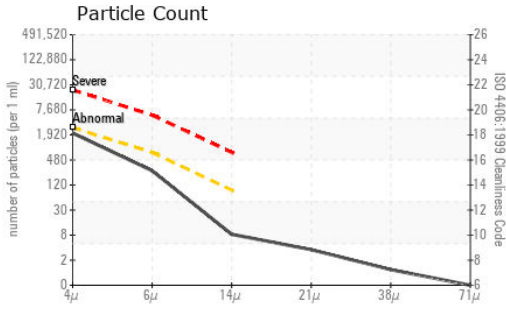
	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m)	>25	2	---	---
Sodium	ppm ASTM D5185(m)		2	---	---
Potassium	ppm ASTM D5185(m)	>20	2	---	---
Water	% ASTM D6304*	>0.05	0.039	---	---
ppm Water	ppm ASTM D6304*	>500	395	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	% ASTM D7844*		0	---	---
Nitration	Abs/cm ASTM D7624*		4.4	---	---
Sulfation	Abs/.1mm ASTM D7415*		151.0	---	---
Mineral Oil Content	% ASTM D7418*	<5.0%	<5.0	---	---



OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC **Received** : 22 Mar 2024
Lab Number : 02624049 **Tested** : 25 Mar 2024
Unique Number : 5749168 **Diagnosed** : 25 Mar 2024 - 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.

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	1866	---	---
Particles >6µm	ASTM D7647	>640	233	---	---
Particles >14µm	ASTM D7647	>80	7	---	---
Particles >21µm	ASTM D7647	>20	3	---	---
Particles >38µm	ASTM D7647	>4	1	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	18/15/10	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414*		157.5	---	---
Acid Number (AN)	mg KOH/g ASTM D974*		1.00	---	---

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	46.4	---	---
Visc @ 100°C	cSt ASTM D7279(m)	8.1	8.5	---	---
Viscosity Index (VI)	Scale ASTM D2270*	146	162	---	---

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





MINERAL OIL CONTENT REPORT

PASS

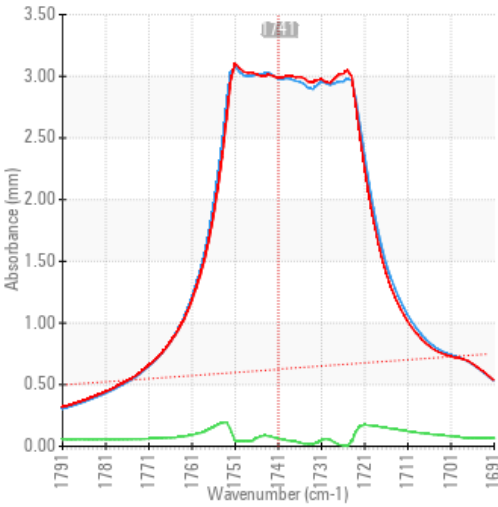


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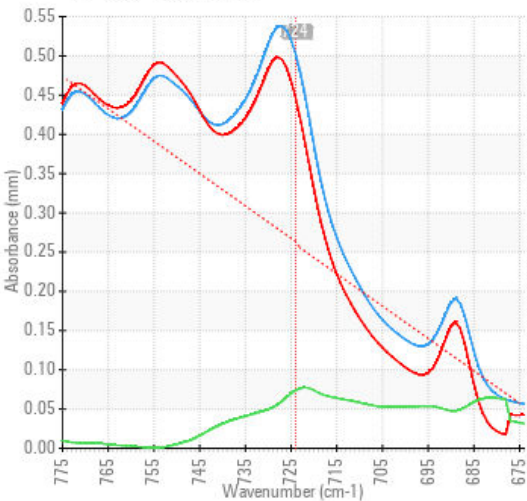
SPECTRAL ANALYSIS

		method	limit/base	current	history1	history2
Zinc	ppm	ASTM D5185(m)	0	44	---	---
Mineral Oil Content	%	ASTM D7418*	<5.0%	<5.0	---	---

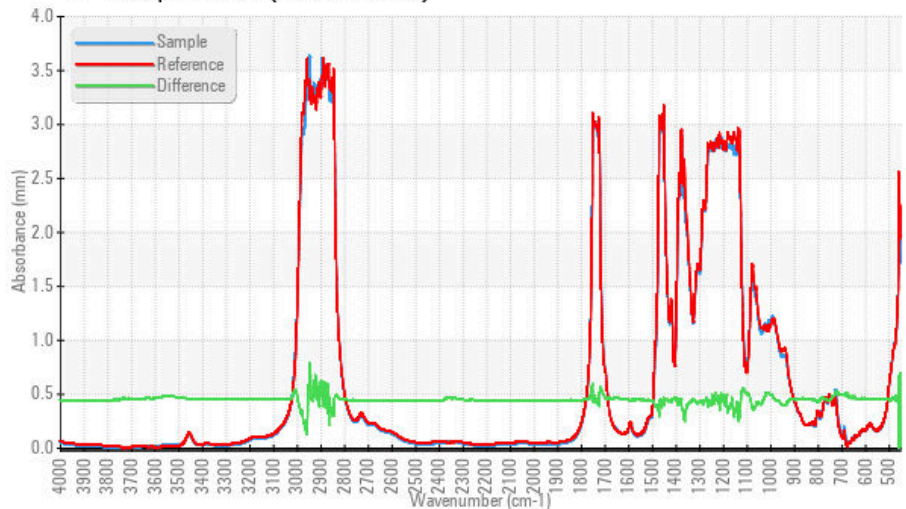
FT-IR - Esters I



FT-IR - Esters II



FT-IR Spectrum (Absorbance)



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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

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