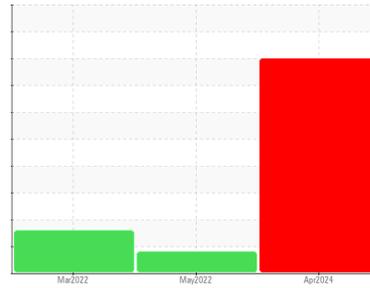




OIL ANALYSIS REPORT

Area
EUROVIA [02548846]
 Machine Id
CASE CX235 3008005 (S/N SAK1125)
 Component
Hydraulic System
 Fluid
PANOLIN HLP SYNTH 46 (--- GAL)

Sample Rating Trend



ISO



DIAGNOSIS

▲ Recommendation

Nous vous recommandons de vérifier tous les endroits par lesquels des contaminants peuvent pénétrer dans le système. Nous vous recommandons de remplacer le filtre et d'utiliser un système de filtrage hors-ligne afin d'améliorer la propreté du fluide. Le reniflard d'air doit être réparé. S'il n'est pas classé, nous vous recommandons de le remplacer par un reniflard à air adapté au micron et / ou au dessicant. Si évalué, nous vous recommandons de réparer / remplacer le reniflard. Échantillonner de nouveau dans 30 à 45 jours afin de contrôler la situation.

Wear

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

▲ Contamination

Il y a une quantité élevée de matières particulaires (2 à 100 µm de taille) présente dans l'huile. Il y a une faible concentration (<5.0%) d'huile minérale présente dans le fluide. La teneur en eau est négligeable. Le code de propreté du système est beaucoup plus haut que 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		WC0893385	WC	WC
Sample Date	Client Info		11 Apr 2024	05 May 2022	24 Mar 2022
Machine Age	hrs	Client Info	8635	7574	7574
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			SEVERE	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >65	8	2	1
Chromium	ppm	ASTM D5185(m) >6	1	0	0
Nickel	ppm	ASTM D5185(m) >10	0	0	<1
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >5	<1	0	0
Lead	ppm	ASTM D5185(m) >45	3	0	0
Copper	ppm	ASTM D5185(m) >120	<1	<1	<1
Tin	ppm	ASTM D5185(m) >4	0	0	0
Antimony	ppm	ASTM D5185(m)	0	0	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	<1	1	<1
Barium	ppm	ASTM D5185(m) 0	0	0	0
Molybdenum	ppm	ASTM D5185(m) 0	0	0	0
Manganese	ppm	ASTM D5185(m) 0	0	0	0
Magnesium	ppm	ASTM D5185(m) 0	<1	<1	<1
Calcium	ppm	ASTM D5185(m) 0	6	<1	1
Phosphorus	ppm	ASTM D5185(m) 1700	1170	1752	1688
Zinc	ppm	ASTM D5185(m) 0	69	6	4
Sulfur	ppm	ASTM D5185(m) 1350	1924	1525	1471
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

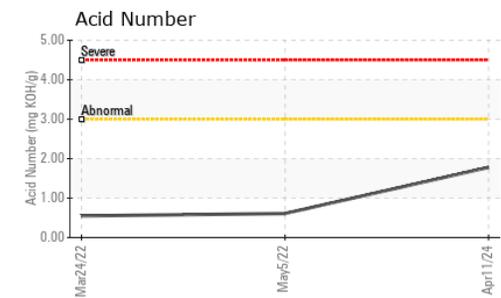
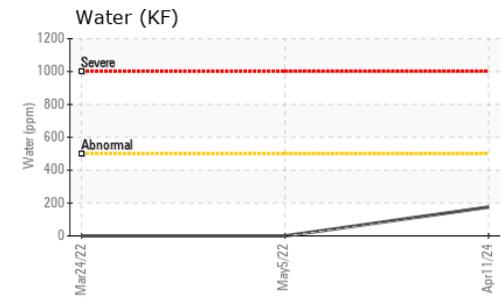
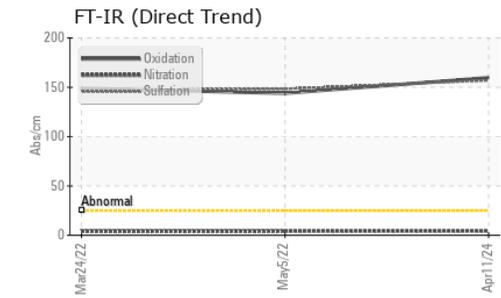
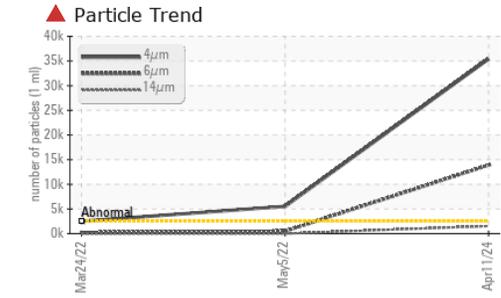
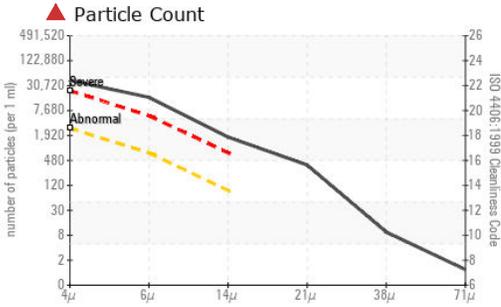
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	4	<1	<1
Sodium	ppm	ASTM D5185(m)	2	<1	<1
Potassium	ppm	ASTM D5185(m) >20	<1	<1	2
Water	%	ASTM D6304* >0.05	0.017	---	---
ppm Water	ppm	ASTM D6304* >500	175	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0	0	0
Nitration	Abs/cm	ASTM D7624*	4.3	4.1	4.0
Sulfation	Abs/.1mm	ASTM D7415*	157.0	148.4	146.9
Mineral Oil Content	%	ASTM D7418* <5.0%	<5.0	<5.0	▲ 7.0



OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0893385 **Received** : 12 Apr 2024
Lab Number : **02628617** **Tested** : 15 Apr 2024
Unique Number : 5761749 **Diagnosed** : 15 Apr 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.

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

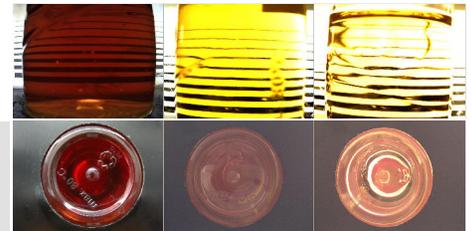
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 35410	▲ 5518	● 2521
Particles >6µm	ASTM D7647	>640	▲ 13895	487	213
Particles >14µm	ASTM D7647	>80	▲ 1537	12	10
Particles >21µm	ASTM D7647	>20	▲ 328	3	3
Particles >38µm	ASTM D7647	>4	● 8	1	0
Particles >71µm	ASTM D7647	>3	1	1	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 22/21/18	▲ 20/16/11	● 19/15/10

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	159.8	143.9	149.0
Acid Number (AN)	mg KOH/g	ASTM D974*	1.78	0.61	0.55

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)	47.0	44.9	46.2
Visc @ 100°C	cSt	ASTM D7279(m)	8.1	8.2	8.3
Viscosity Index (VI)	Scale	ASTM D2270*	146	158	156

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					





MINERAL OIL CONTENT REPORT

PASS

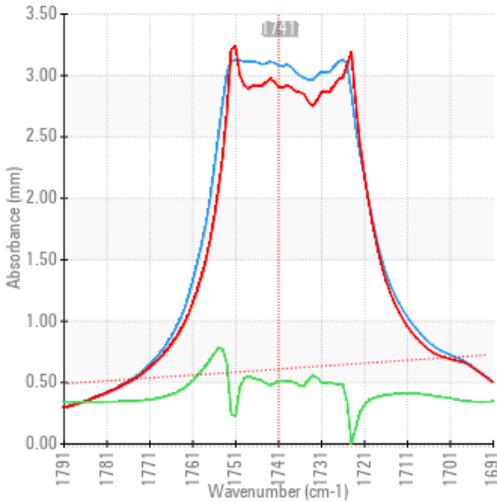


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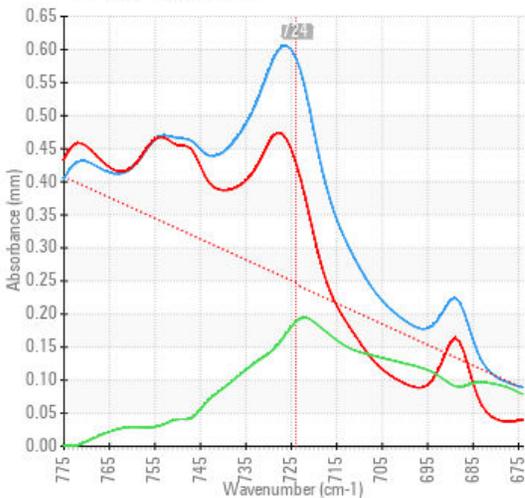
SPECTRAL ANALYSIS

	method	limit/base	current	history1	history2	
Zinc	ppm	ASTM D5185(m)	0	69	6	4
Mineral Oil Content	%	ASTM D7418*	<5.0%	<5.0	<5.0	▲ 7.0

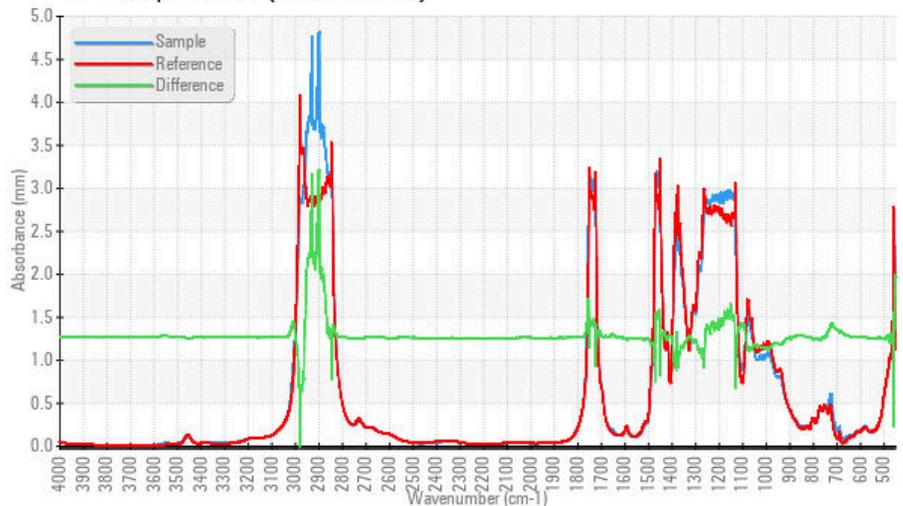
FT-IR - Esters I



FT-IR - Esters II



FT-IR Spectrum (Absorbance)



ISO 17025:2017
 Accredited
 Laboratory

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Sample No. : WC0893385
Lab Number : 02628617
Unique Number : 5761749
Test Package : MOB 2 (Additional Tests: TAN Man)
Received : 12 Apr 2024
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