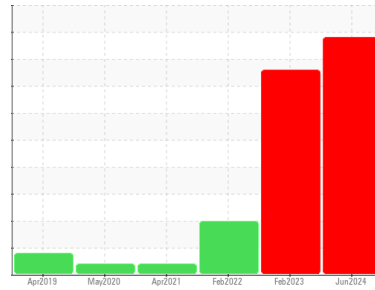




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area

MGF [02642444]

Machine Id

LINK BELT 350X4 17-158 (S/N LBX350Q7NHHEX1371)

Component

Hydraulic System

Fluid

PANOLIN HLP SYNTH 46 (350 LTR)

DIAGNOSIS

Recommendation

Nous vous recommandons de vérifier la source de l'infiltration d'eau. Nous vous recommandons de vidanger l'huile de ce composant si vous ne l'avez pas déjà fait. Nous vous suggérons de confirmer les résultats de l'analyse avant toute action importante de maintenance soit entreprise. Indiquez sur le formulaire d'échantillonnage (SIF-sample information form) qu'il s'agit d'un ré-échantillonnage. 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

Le bas indice ferreux (PQ) indique que l'usure ferreuse est due à de la corrosion.

Contamination

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

Fluid Condition

Le niveau de AN est supérieur à la limite recommandée. l'huile ne peut plus être utilisée en raison de la présence de contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0922691	WC	WC
Sample Date	Client Info		14 Jun 2024	22 Feb 2023	14 Feb 2022
Machine Age	hrs	Client Info	8830	5000	2600
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			SEVERE	SEVERE	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m) >20	▲ 99	▲ 79	▲ 58
Chromium	ppm	ASTM D5185(m) >10	6	3	2
Nickel	ppm	ASTM D5185(m) >10	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	<1	<1	<1
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >10	3	2	1
Lead	ppm	ASTM D5185(m) >10	<1	<1	<1
Copper	ppm	ASTM D5185(m) >75	9	9	5
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	2	<1	2
Barium	ppm	ASTM D5185(m) 0	0	0	0
Molybdenum	ppm	ASTM D5185(m) 0	0	0	<1
Manganese	ppm	ASTM D5185(m) 0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m) 0	1	<1	<1
Calcium	ppm	ASTM D5185(m) 0	3	<1	4
Phosphorus	ppm	ASTM D5185(m) 1700	1315	1481	1282
Zinc	ppm	ASTM D5185(m) 0	190	154	136
Sulfur	ppm	ASTM D5185(m) 1350	1400	1409	1375
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	6	5	5
Sodium	ppm	ASTM D5185(m)	4	3	2
Potassium	ppm	ASTM D5185(m) >20	2	2	4
Water	%	ASTM D6304* >0.05	▲ 0.084	▲ 0.060	---
ppm Water	ppm	ASTM D6304* >500	▲ 844	▲ 604.9	---

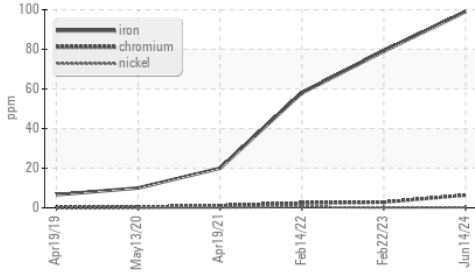
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0	0	---
Nitration	Abs/cm	ASTM D7624*	5.1	5.0	---
Sulfation	Abs/.1mm	ASTM D7415*	158.9	174.1	---
Mineral Oil Content	%	ASTM D7418*	<5.0	<5.0	0.0

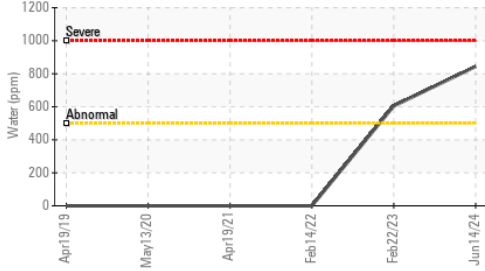


OIL ANALYSIS REPORT

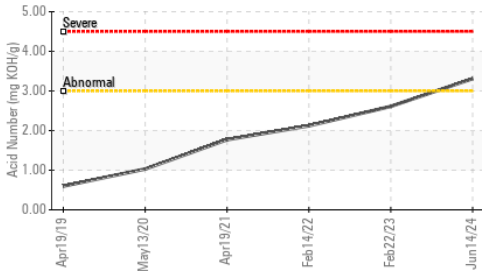
▲ Ferrous Alloys



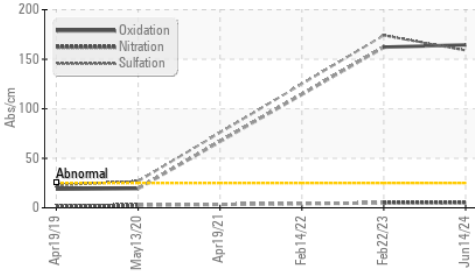
▲ Water (KF)



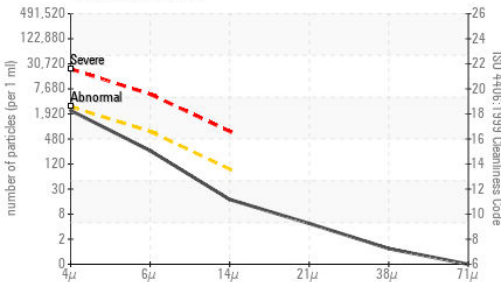
▲ Acid Number



FT-IR (Direct Trend)



Particle Count



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	2027	1772	▲ 36286
Particles >6µm	ASTM D7647	>640	221	370	▲ 2314
Particles >14µm	ASTM D7647	>80	15	32	16
Particles >21µm	ASTM D7647	>20	4	11	1
Particles >38µm	ASTM D7647	>4	1	2	0
Particles >71µm	ASTM D7647	>3	0	1	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	18/15/11	18/16/12	▲ 22/18/11

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414*		164.5	162.2	---
Acid Number (AN)	mg KOH/g ASTM D974*		3.31	2.61	2.12

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	VLITE	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	44.9	43.2	46.5
Visc @ 100°C	cSt ASTM D7279(m)	8.1	8.0	8	8.2
Viscosity Index (VI)	Scale ASTM D2270*	146	151	159	151

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0922691 **Received** : 18 Jun 2024
Lab Number : **02642735** **Tested** : 19 Jun 2024
Unique Number : 5800274 **Diagnosed** : 24 Jun 2024 - Bill Quesnel
Test Package : MOB 2 (Additional Tests: PQ, TAN Man)

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

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



Area

MGF [02642444]

Machine Id

LINK BELT 350X4 17-158 (S/N LBX350Q7NHHEX1371)

Component

Hydraulic System

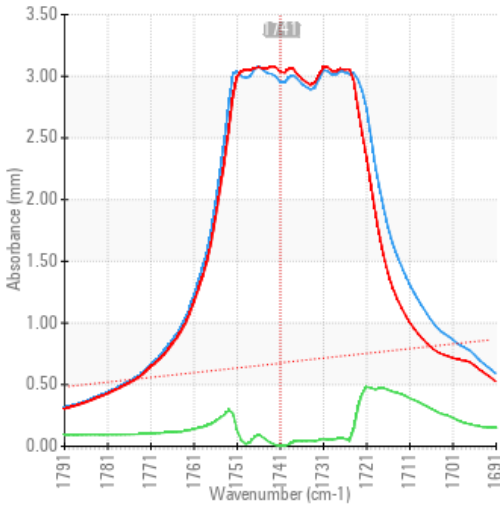
Fluid

PANOLIN HLP SYNTH 46 (350 LTR)

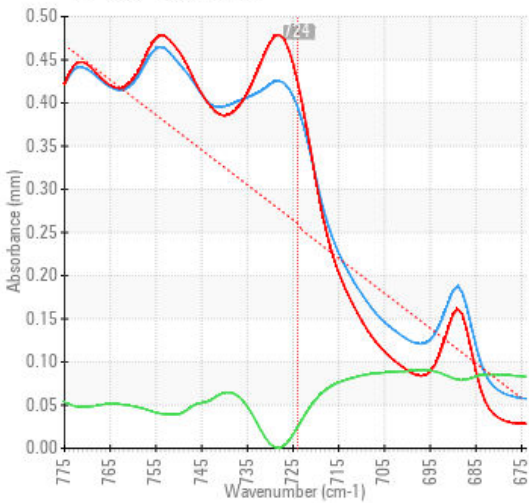
SPECTRAL ANALYSIS

		method	limit/base	current	history1	history2
Zinc	ppm	ASTM D5185(m)	0	190	154	136
Mineral Oil Content	%	ASTM D7418*	<5.0%	<5.0	<5.0	0.0

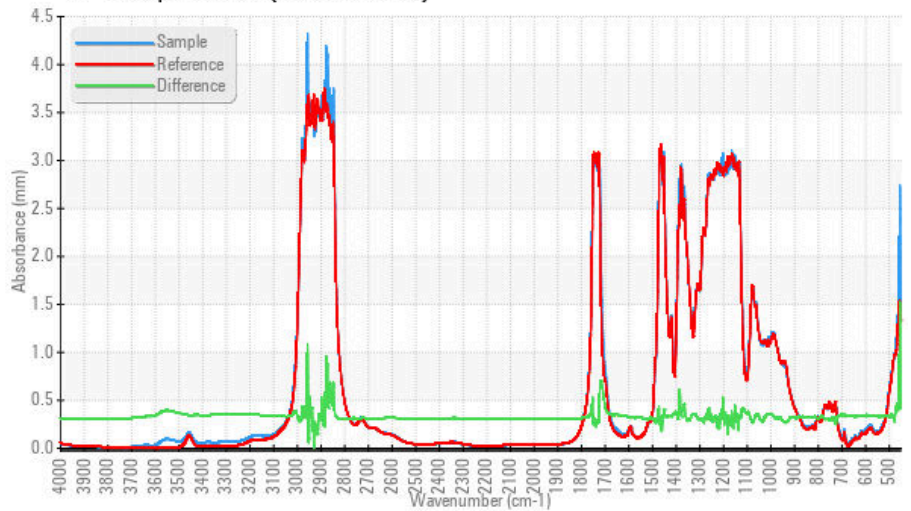
FT-IR - Esters I



FT-IR - Esters II



FT-IR Spectrum (Absorbance)



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : WC0922691

Lab Number : **02642735**

Unique Number : 5800274

Test Package : MOB 2 (Additional Tests: PQ, TAN Man)

Received : 18 Jun 2024

Tested : 19 Jun 2024

Diagnosed : 24 Jun 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.

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

This page left intentionally blank