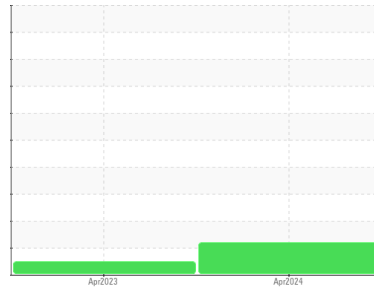




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

EMBELLISSEMENT RIVIÈRE-DU-LOUP [02630413]

Machine Id
JOHN DEERE 245GLC IFF245GXENF802816

Component

Hydraulic System

Fluid

PANOLIN HLP SYNTH 46 (240 LTR)

DIAGNOSIS

Recommendation

Nous avons pris note que le filtre a été remplacé au moment de l'échantillonnage. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

Wear

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

Contamination

Il y a une quantité modérée de particules (de 4 à 14 microns) dans l'huile. Il y a une faible concentration (<5.0%) d'huile minérale présente dans le fluide. La teneur en eau est négligeable. La propreté du système est supérieure à 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		WC0893434	WC	---
Sample Date	Client Info		18 Apr 2024	21 Apr 2023	---
Machine Age	hrs	Client Info	1076	5	---
Oil Age	hrs	Client Info	1076	0	---
Oil Changed	Client Info		Not Chngd	N/A	---
Sample Status			ABNORMAL	NORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>20	13	0	---
Chromium	ppm	ASTM D5185(m)	>10	0	0	---
Nickel	ppm	ASTM D5185(m)	>10	0	0	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>10	<1	0	---
Lead	ppm	ASTM D5185(m)	>10	0	0	---
Copper	ppm	ASTM D5185(m)	>75	1	<1	---
Tin	ppm	ASTM D5185(m)	>10	0	0	---
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)	0	<1	2	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	0	0	0	---
Manganese	ppm	ASTM D5185(m)	0	<1	0	---
Magnesium	ppm	ASTM D5185(m)	0	<1	<1	---
Calcium	ppm	ASTM D5185(m)	0	2	0	---
Phosphorus	ppm	ASTM D5185(m)	1700	1342	1613	---
Zinc	ppm	ASTM D5185(m)	0	30	4	---
Sulfur	ppm	ASTM D5185(m)	1350	1373	1553	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS

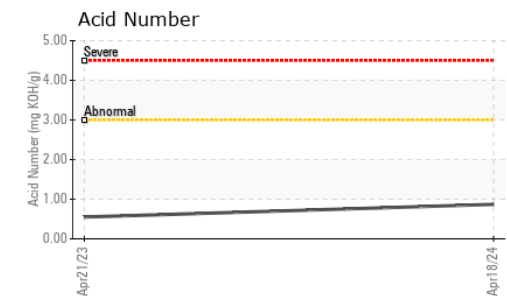
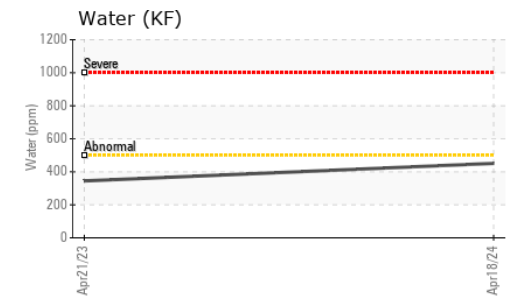
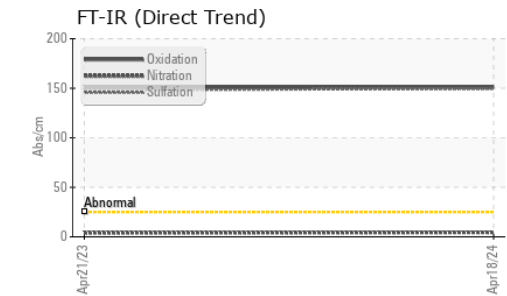
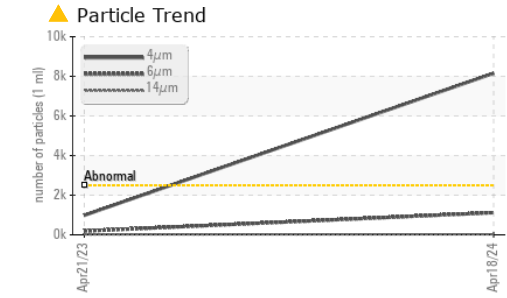
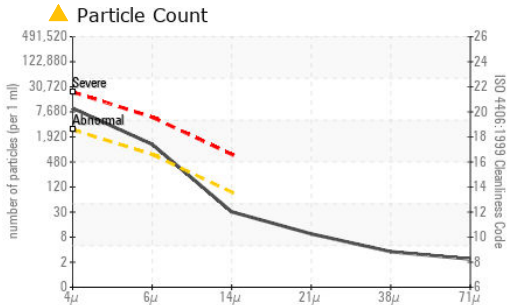
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	2	<1	---
Sodium	ppm	ASTM D5185(m)		<1	<1	---
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	---
Water	%	ASTM D6304*	>0.05	0.045	0.034	---
ppm Water	ppm	ASTM D6304*	>500	451	344.7	---

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	---
Nitration	Abs/cm	ASTM D7624*		4.4	4.0	---
Sulfation	Abs/.1mm	ASTM D7415*		149.4	148.1	---
Mineral Oil Content	%	ASTM D7418*	<5.0%	<5.0	<5.0	---



OIL ANALYSIS REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 8157	986	---
Particles >6µm	ASTM D7647	>640	● 1119	189	---
Particles >14µm	ASTM D7647	>80	27	19	---
Particles >21µm	ASTM D7647	>20	8	5	---
Particles >38µm	ASTM D7647	>4	3	1	---
Particles >71µm	ASTM D7647	>3	2	0	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 20/17/12	17/15/11	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	151.1	150.8	---
Acid Number (AN)	mg KOH/g	ASTM D974*	0.87	0.55	---

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	NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	47.0	44.9	46.1
Visc @ 100°C	cSt	ASTM D7279(m)	8.1	8.3	7.8
Viscosity Index (VI)	Scale	ASTM D2270*	146	162	138

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



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0893434 **Received** : 19 Apr 2024
Lab Number : **02630405** **Tested** : 24 Apr 2024
Unique Number : 5763537 **Diagnosed** : 25 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



MINERAL OIL CONTENT REPORT

PASS

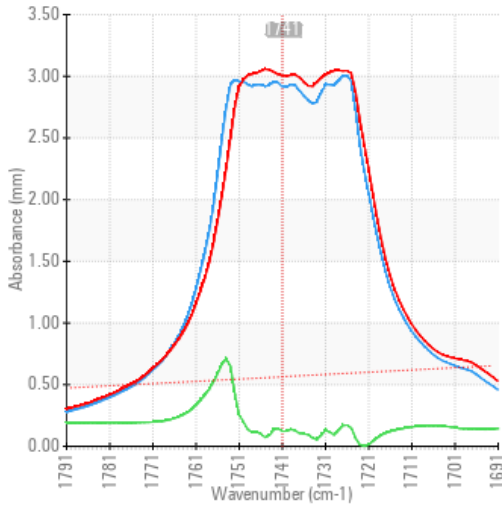


Area
EMBELLISSEMENT RIVIÈRE-DU-LOUP [02630413]
 Machine Id
JOHN DEERE 245GLC IFF245GXENF802816
 Component
Hydraulic System
 Fluid
PANOLIN HLP SYNTH 46 (240 LTR)

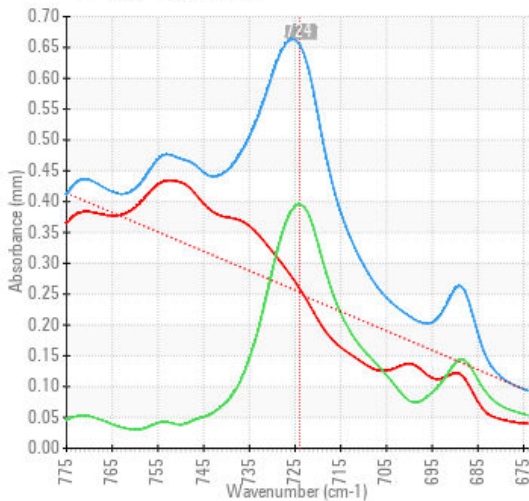
SPECTRAL ANALYSIS

		method	limit/base	current	history1	history2
Zinc	ppm	ASTM D5185(m)	0	30	4	---
Mineral Oil Content	%	ASTM D7418*	<5.0%	<5.0	<5.0	---

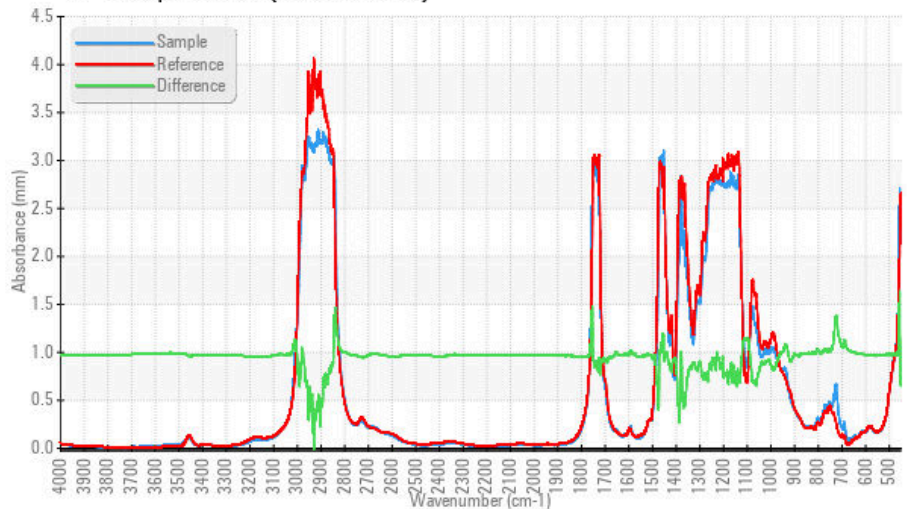
FT-IR - Esters I



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. : WC0893434 **Received** : 19 Apr 2024
Lab Number : 02630405 **Tested** : 24 Apr 2024
Unique Number : 5763537 **Diagnosed** : 25 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

This page left intentionally blank