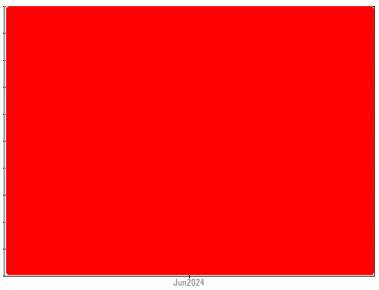
OIL ANALYSIS REPORT

Area
EXCAVATECH JL [02641874]
Machine Id
JOHN DEERE 210G 1FF210GXPCD520622
Component
Hydraulic System
Fluid
{not provided} (--- GAL)

Sample Rating Trend



WEAR

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. Veuillez préciser la marque, le type et la viscosité de l`huile lors de votre prochain échantillon.

Wear
Usure de segment. Le bas indice ferreux (PQ) indique que l'usure ferreuse est due à de la corrosion. Un segment de cylindre peut être fendu ou brisé.

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
l`huile n'est plus en état de service en raison d'une usure anomale et/ou sévère.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0893440**	---	---
Sample Date		Client Info		**12 Jun 2024**	---	---
Machine Age	hrs	Client Info		**9417**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**SEVERE**	---	---

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*	>50	**10**	---	---
Iron	ppm	ASTM D5185(m)	>32	▲ **78**	---	---
Chromium	ppm	ASTM D5185(m)	>9	▲ **22**	---	---
Nickel	ppm	ASTM D5185(m)	>5	**0**	---	---
Titanium	ppm	ASTM D5185(m)		**0**	---	---
Silver	ppm	ASTM D5185(m)		**0**	---	---
Aluminum	ppm	ASTM D5185(m)	>9	**3**	---	---
Lead	ppm	ASTM D5185(m)	>28	**0**	---	---
Copper	ppm	ASTM D5185(m)	>50	**2**	---	---
Tin	ppm	ASTM D5185(m)	>5	**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**	---	---

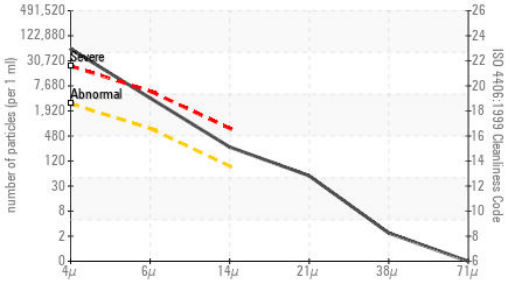
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**3**	---	---
Barium	ppm	ASTM D5185(m)		**0**	---	---
Molybdenum	ppm	ASTM D5185(m)		**0**	---	---
Manganese	ppm	ASTM D5185(m)		**<1**	---	---
Magnesium	ppm	ASTM D5185(m)		**<1**	---	---
Calcium	ppm	ASTM D5185(m)		**16**	---	---
Phosphorus	ppm	ASTM D5185(m)		**225**	---	---
Zinc	ppm	ASTM D5185(m)		**23**	---	---
Sulfur	ppm	ASTM D5185(m)		**1598**	---	---
Lithium	ppm	ASTM D5185(m)		**<1**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>11	**2**	---	---
Sodium	ppm	ASTM D5185(m)	>21	**3**	---	---
Potassium	ppm	ASTM D5185(m)	>20	**2**	---	---
Water	%	ASTM D6304*	>0.075	**0.059**	---	---
ppm Water	ppm	ASTM D6304*	>750	**597**	---	---

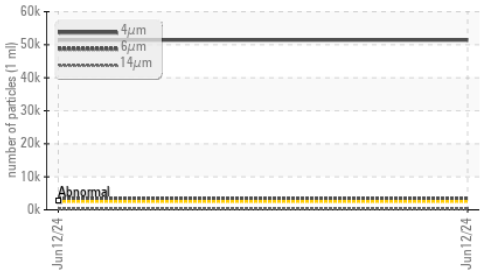
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	---	---
Nitration	Abs/cm	ASTM D7624*		**5.5**	---	---
Sulfation	Abs/.1mm	ASTM D7415*		**162.4**	---	---
Mineral Oil Content	%	ASTM D7418*	<5.0%	**<5.0**	---	---

OIL ANALYSIS REPORT

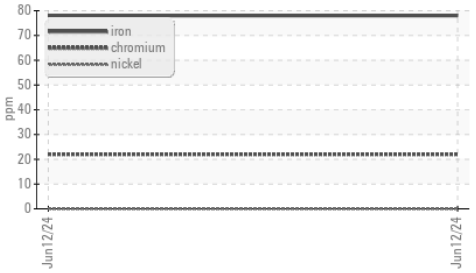
Particle Count



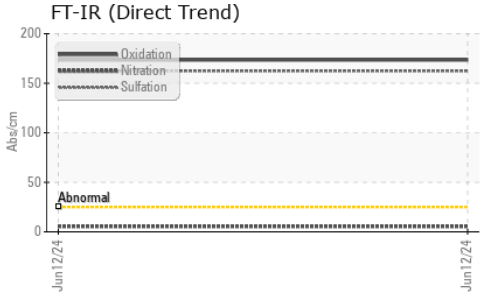
Particle Trend



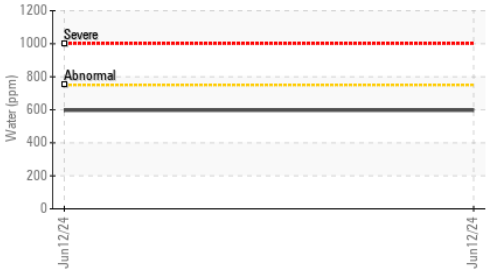
Ferrous Alloys



FT-IR (Direct Trend)



Water (KF)

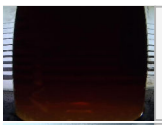


FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	▲ **51406**	---	---
Particles >6µm		ASTM D7647	>640	▲ **3415**	---	---
Particles >14µm		ASTM D7647	>80	▲ **229**	---	---
Particles >21µm		ASTM D7647	>20	▲ **47**	---	---
Particles >38µm		ASTM D7647	>4	**2**	---	---
Particles >71µm		ASTM D7647	>3	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	▲ **23/19/15**	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*		**173.5**	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*		**2.90**	---	---

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	**VLITE**	---	---
Appearance	scalar	Visual*	NORML	**NORML**	---	---
Odor	scalar	Visual*	NORML	**NORML**	---	---
Emulsified Water	scalar	Visual*	>0.075	**NEG**	---	---
Free Water	scalar	Visual*		**NEG**	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)		**46.8**	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		**9.1**	---	---
Viscosity Index (VI)	Scale	ASTM D2270*		**180**	---	---

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

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0893440 **Received** : 13 Jun 2024
Lab Number : 02641875 **Tested** : 14 Jun 2024
Unique Number : 5799414 **Diagnosed** : 19 Jun 2024 - Kevin Marson
Test Package : MOB 2 (Additional Tests: PQ, 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.

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MINERAL OIL CONTENT REPORT

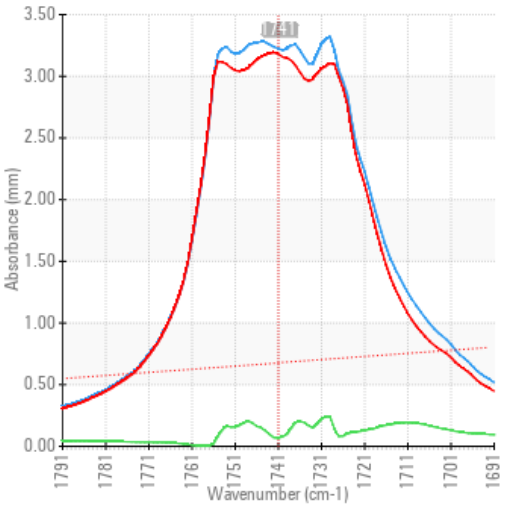
PASS

Area
EXCAVATECH JL [02641874]
Machine Id
JOHN DEERE 210G 1FF210GXPCD520622
Component
Hydraulic System
Fluid
{not provided} (--- GAL)

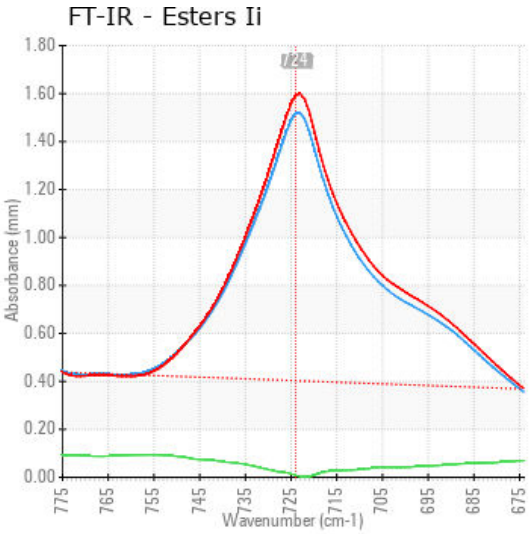
SPECTRAL ANALYSIS

		method	limit/base	current	history1	history2
Zinc	ppm	ASTM D5185(m)		**23**	---	---
Mineral Oil Content	%	ASTM D7418*	<5.0%	**<5.0**	---	---

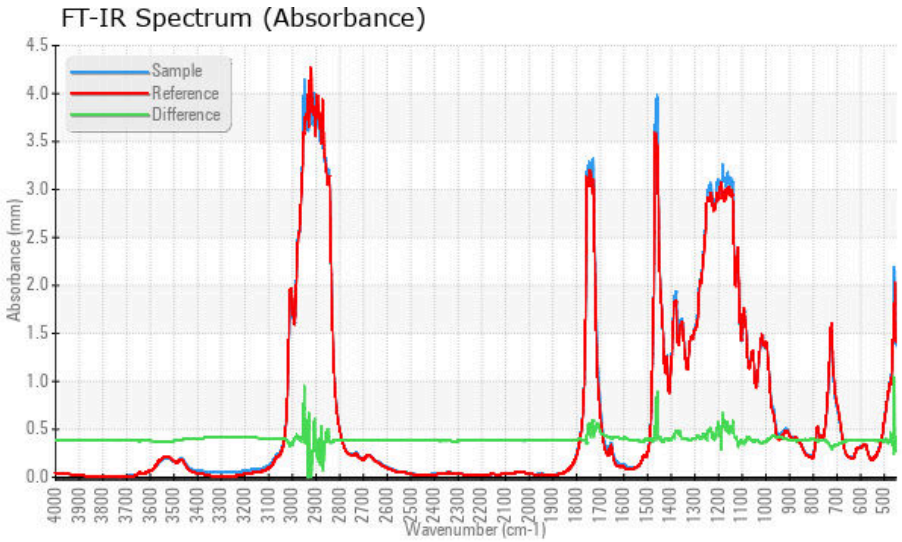
FT-IR - Esters 1



FT-IR - Esters Ii



FT-IR Spectrum (Absorbance)



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