



OIL ANALYSIS REPORT

Sample Rating Trend

DEGRADATION



Area
EXCAVATECH JL [02641872]
 Machine Id
JOHN DEERE 350G LC IFF350GXVHD811840
 Component
Hydraulic System
 Fluid
PANOLIN HLP SYNTH 46 (--- GAL)



DIAGNOSIS

▲ Recommendation

Nous vous recommandons de vérifier la source de l'infiltration d'eau. L'indice d'acidité (AN) indique que votre fluide a atteint la fin de sa vie utile, veuillez procéder à un changement d'huile complet. Nous recommandons le remplacement des filtres de ce composant. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

▲ Wear

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

▲ Contamination

Il y a une légère quantité de limon (particules de 4 à 14 microns) dans l'huile. Il y a une faible concentration (<5.0%) d'huile minérale présente dans le fluide. Concentration modérée d'eau dans l'huile.

▲ Fluid Condition

Le niveau de AN est beaucoup plus élevé que la limite recommandée. l'huile ne peut plus être utilisée.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0893439	---	---
Sample Date	Client Info		12 Jun 2024	---	---
Machine Age	hrs	Client Info	5735	---	---
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	0	---	---
Iron	ppm	ASTM D5185(m)	>32	▲ 47	---
Chromium	ppm	ASTM D5185(m)	>9	▲ 12	---
Nickel	ppm	ASTM D5185(m)	>5	0	---
Titanium	ppm	ASTM D5185(m)		<1	---
Silver	ppm	ASTM D5185(m)		0	---
Aluminum	ppm	ASTM D5185(m)	>9	2	---
Lead	ppm	ASTM D5185(m)	>28	0	---
Copper	ppm	ASTM D5185(m)	>50	1	---
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)	0	5	---
Barium	ppm	ASTM D5185(m)	0	<1	---
Molybdenum	ppm	ASTM D5185(m)	0	2	---
Manganese	ppm	ASTM D5185(m)	0	0	---
Magnesium	ppm	ASTM D5185(m)	0	<1	---
Calcium	ppm	ASTM D5185(m)	0	<1	---
Phosphorus	ppm	ASTM D5185(m)	1700	1499	---
Zinc	ppm	ASTM D5185(m)	0	51	---
Sulfur	ppm	ASTM D5185(m)	1350	1333	---
Lithium	ppm	ASTM D5185(m)		<1	---

CONTAMINANTS

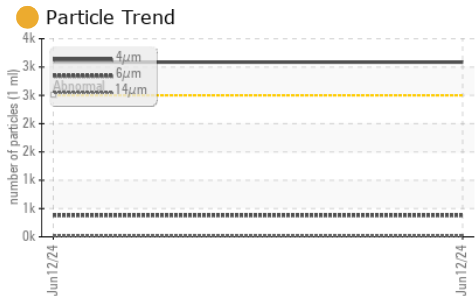
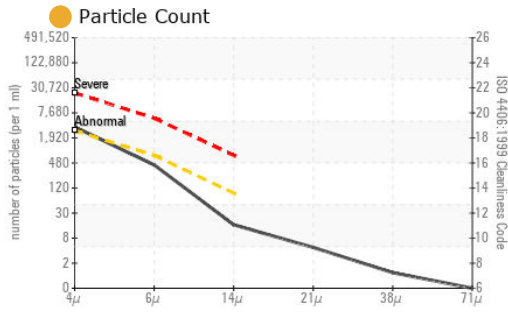
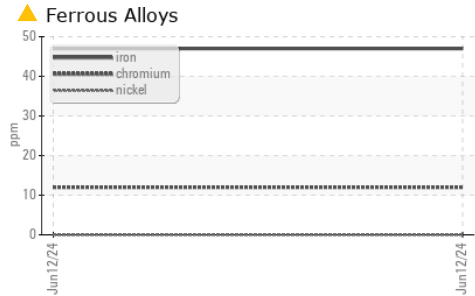
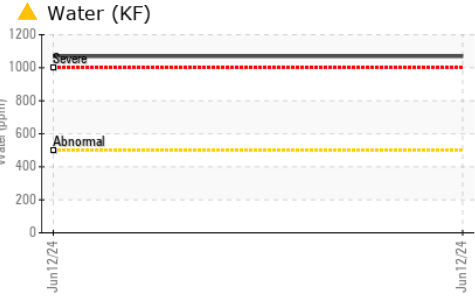
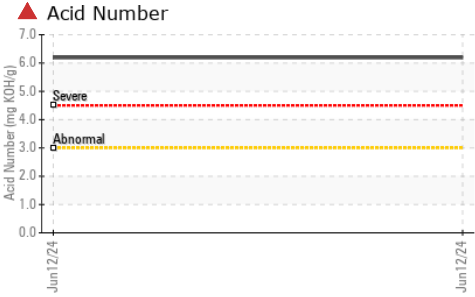
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>11	<1	---
Sodium	ppm	ASTM D5185(m)	>21	39	---
Potassium	ppm	ASTM D5185(m)	>20	51	---
Water	%	ASTM D6304*	>0.05	▲ 0.106	---
ppm Water	ppm	ASTM D6304*	>500	▲ 1069	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0	---
Nitration	Abs/cm	ASTM D7624*		5.3	---
Sulfation	Abs/.1mm	ASTM D7415*		159.1	---
Mineral Oil Content	%	ASTM D7418*	<5.0%	<5.0	---



OIL ANALYSIS REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	● 3085	---	---
Particles >6µm	ASTM D7647	>640	379	---	---
Particles >14µm	ASTM D7647	>80	14	---	---
Particles >21µm	ASTM D7647	>20	4	---	---
Particles >38µm	ASTM D7647	>4	1	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	● 19/16/11	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414*		165.5	---	---
Acid Number (AN)	mg KOH/g ASTM D974*		▲ 6.19	---	---

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	44.5	---	---
Visc @ 100°C	cSt ASTM D7279(m)	8.1	8.0	---	---
Viscosity Index (VI)	Scale ASTM D2270*	146	153	---	---

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



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0893439 **Received** : 13 Jun 2024
Lab Number : **02641873** **Tested** : 24 Jun 2024
Unique Number : 5799412 **Diagnosed** : 24 Jun 2024 - Bill Quesnel
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



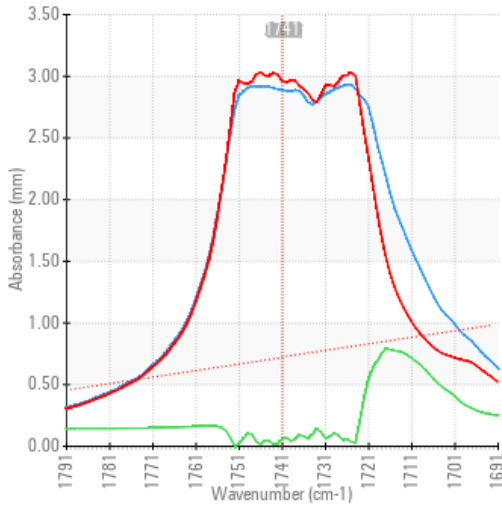
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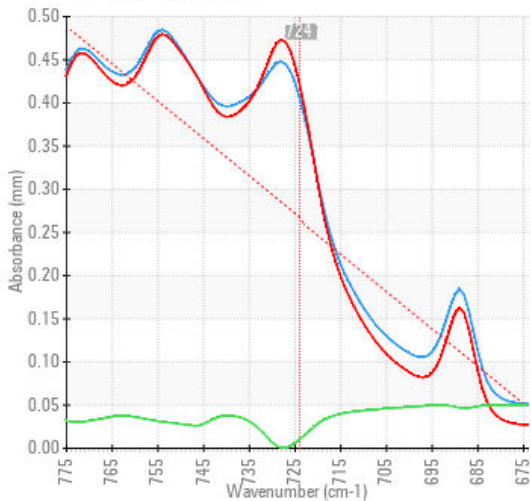
SPECTRAL ANALYSIS

		method	limit/base	current	history1	history2
Zinc	ppm	ASTM D5185(m)	0	51	---	---
Mineral Oil Content	%	ASTM D7418*	<5.0%	<5.0	---	---

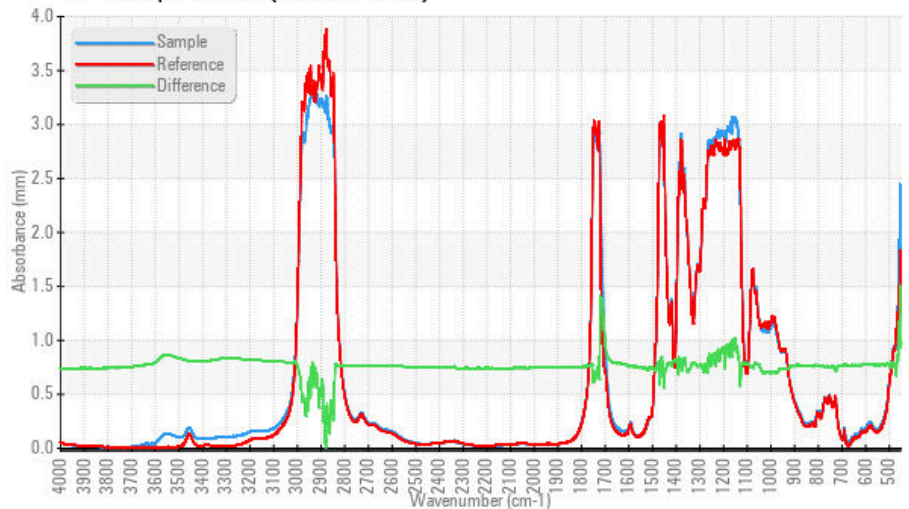
FT-IR - Esters I



FT-IR - Esters II



FT-IR Spectrum (Absorbance)



ISO 17025:2017
 Accredited
 Laboratory

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