

OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Machine Id
JOHN DEERE 350GLC NOUNITPC0062537
Component
Hydraulic System
Fluid
PANOLIN HLP SYNTH 46 (483 LTR)



DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

▲ Wear

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

▲ Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC0062537	---	---
Sample Date	Client Info	08 Jan 2024	---	---
Machine Age	hrs	Client Info	8018	---
Oil Age	hrs	Client Info	2	---
Oil Changed	Client Info	N/A	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method	>0.05	NEG	---

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	>50	0	---
Iron	ppm	ASTM D5185(m)	>32	▲ 54
Chromium	ppm	ASTM D5185(m)	>9	1
Nickel	ppm	ASTM D5185(m)	>5	<1
Titanium	ppm	ASTM D5185(m)		0
Silver	ppm	ASTM D5185(m)		0
Aluminum	ppm	ASTM D5185(m)	>9	<1
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

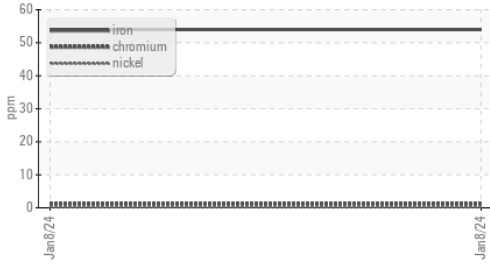
method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	0
Barium	ppm	ASTM D5185(m)	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0
Manganese	ppm	ASTM D5185(m)	0	0
Magnesium	ppm	ASTM D5185(m)	0	<1
Calcium	ppm	ASTM D5185(m)	0	1
Phosphorus	ppm	ASTM D5185(m)	1700	1424
Zinc	ppm	ASTM D5185(m)	0	11
Sulfur	ppm	ASTM D5185(m)	1350	1398
Lithium	ppm	ASTM D5185(m)		<1

CONTAMINANTS

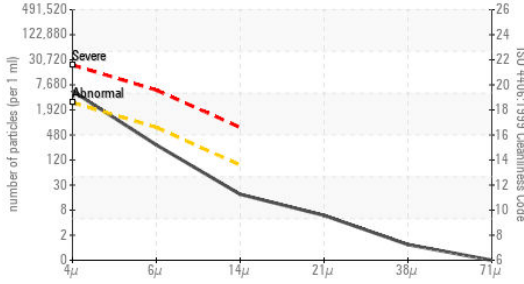
method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>11	1
Sodium	ppm	ASTM D5185(m)	>21	1
Potassium	ppm	ASTM D5185(m)	>20	<1

OIL ANALYSIS REPORT

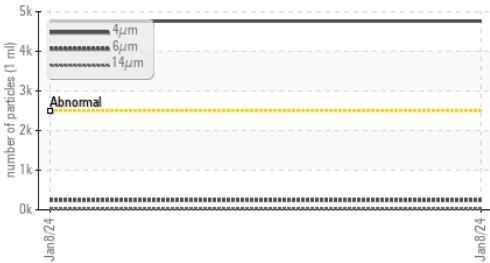
▲ Ferrous Alloys



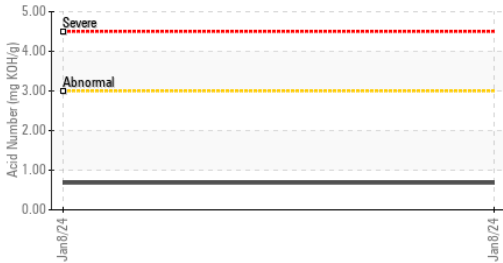
▲ Particle Count



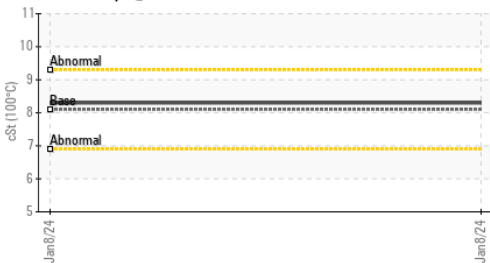
▲ Particle Trend



Acid Number



Viscosity @ 100°C



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 4764	---	---
Particles >6µm	ASTM D7647	>640	244	---	---
Particles >14µm	ASTM D7647	>80	16	---	---
Particles >21µm	ASTM D7647	>20	5	---	---
Particles >38µm	ASTM D7647	>4	1	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 19/15/11	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*		0.68	---	---

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	42.7	---	---
Visc @ 100°C	cSt ASTM D7279(m)	8.1	8.3	---	---
Viscosity Index (VI)	Scale ASTM D2270*	146	173	---	---

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



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0062537 **Received** : 16 Jan 2024
Lab Number : 02608987 **Diagnosed** : 17 Jan 2024
Unique Number : 5710073 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: KV100, PQ, VI)

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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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F: