IND II LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
JOHN DEERE 9510R 9510R
Component
Hydraulic System
Fluid
JOHN DEERE HY-GARD HYD/TRANS (230 LTR)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

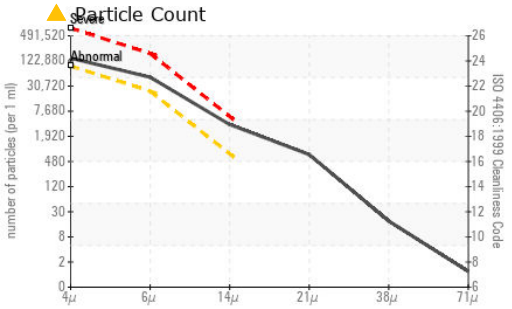
There is a moderate amount of particulates (2 to 100 microns in size) present in the oil.

FLUID CONDITION

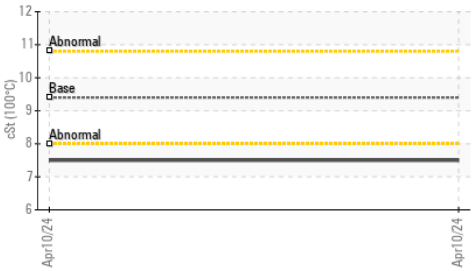
The oil viscosity is lower than typical, possibly indicating the addition of lighter grade oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0076079	---	---
Sample Date		Client Info		10 Apr 2024	---	---
Machine Age	hrs	Client Info		5500	---	---
Oil Age	hrs	Client Info		1500	---	---
Filter Age	hrs	Client Info		750	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185(m)	>23	21	---	---
Chromium	ppm	ASTM D5185(m)	>9	0	---	---
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	1	---	---
Lead	ppm	ASTM D5185(m)	>28	2	---	---
Copper	ppm	ASTM D5185(m)	>51	25	---	---
Tin	ppm	ASTM D5185(m)	>5	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>31	8	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Water		WC Method	>0.075	NEG	---	---
Particles >4µm		ASTM D7647	>80000	● 123644	---	---
Particles >6µm		ASTM D7647	>20000	▲ 43298	---	---
Particles >14µm		ASTM D7647	>640	▲ 3213	---	---
Particles >21µm		ASTM D7647	>160	▲ 617	---	---
Particles >38µm		ASTM D7647	>40	16	---	---
Particles >71µm		ASTM D7647	>10	1	---	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	▲ 24/23/19	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	LIGHT	---	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.075	NEG	---	---
Sodium	ppm	ASTM D5185(m)	>21	2	---	---
Boron	ppm	ASTM D5185(m)	6	25	---	---
Barium	ppm	ASTM D5185(m)	0	<1	---	---
Molybdenum	ppm	ASTM D5185(m)	0	<1	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)	145	73	---	---
Calcium	ppm	ASTM D5185(m)	3570	3462	---	---
Phosphorus	ppm	ASTM D5185(m)	1290	995	---	---
Zinc	ppm	ASTM D5185(m)	1640	1189	---	---
Sulfur	ppm	ASTM D5185(m)		3156	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*	1.8	1.69	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	57.0	▲ 46.9	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	9.4	▲ 7.5	---	---
Viscosity Index (VI)	Scale	ASTM D2270*		124	---	---

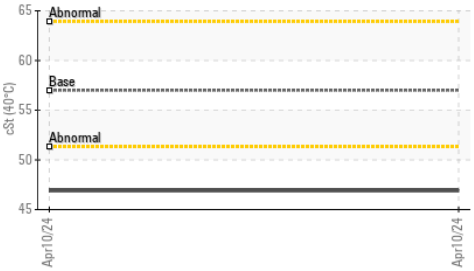
Particle Count



Viscosity @ 100°C

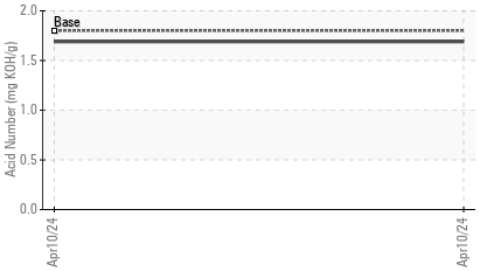


Viscosity @ 40°C

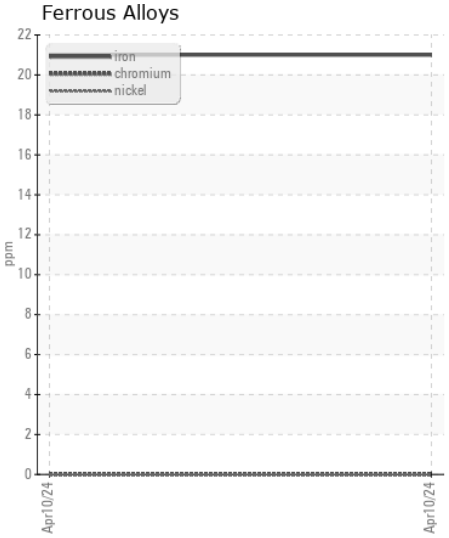


Particle Trend

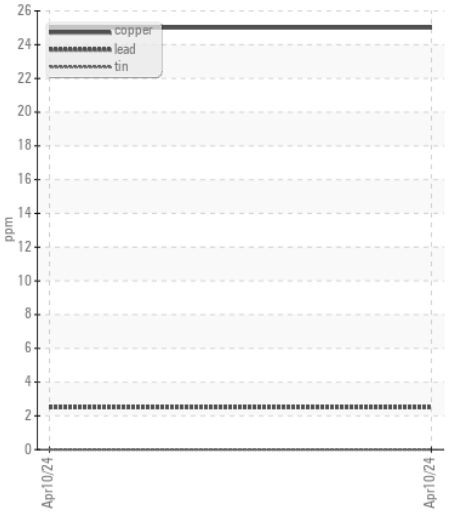
Acid Number



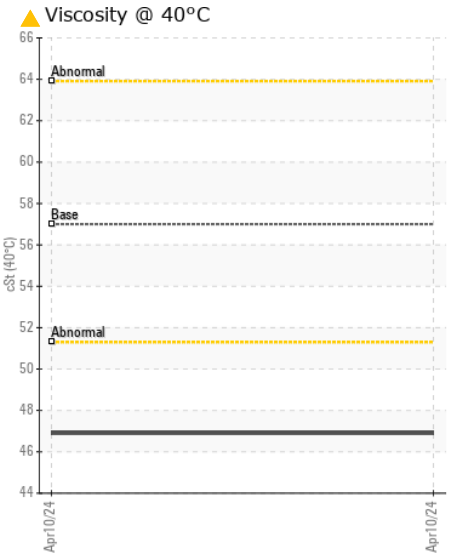
Ferrous Alloys



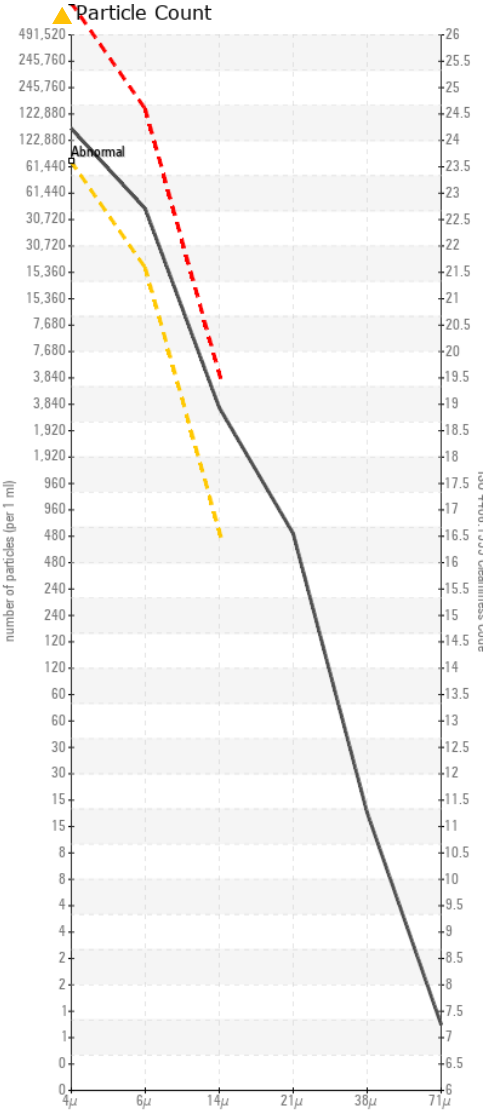
Non-ferrous Metals



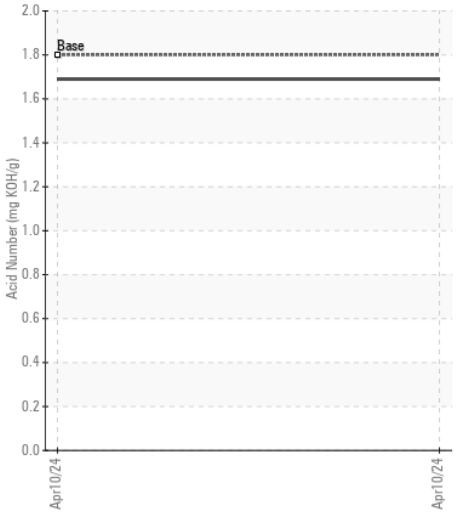
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0076079
Lab Number : 02630229
Unique Number : 5763361
Test Package : IND 2 (Additional Tests: KV100, VI)

Received : 19 Apr 2024
Tested : 22 Apr 2024
Diagnosed : 22 Apr 2024 - Kevin Marson

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.

WEST HILL FARMS
BOX 224
MIAMI, MB
CA R0G 1H0
Contact: Don Hill
T:
F: