



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
JOHN DEERE 38-20
 Component
Rear Transmission (Manual)
 Fluid
PETRO CANADA DURATRAN (--- LTR)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as PETRO CANADA DURATRAN, however, a fluid match indicates that this fluid is SAE 20 Transmission/Drive Train Oil. Please confirm the fluid type and grade on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

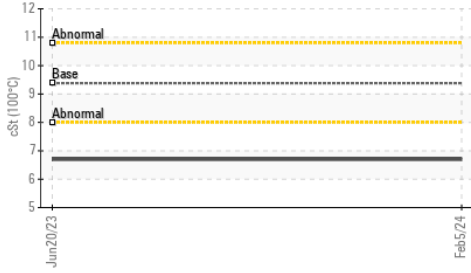
There is no indication of any contamination in the fluid.

FLUID CONDITION

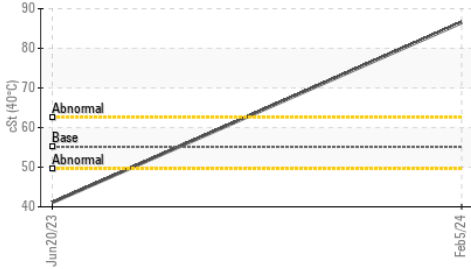
Viscosity of sample indicates oil is within SAE 20 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the fluid is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0067888	PC0075731	---
Sample Date		Client Info		05 Feb 2024	20 Jun 2023	---
Machine Age	hrs	Client Info		8184	4343	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Not Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---
Iron	ppm	ASTM D5185(m)	>200	37	32	---
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>5	0	0	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)	>7	0	0	---
Aluminum	ppm	ASTM D5185(m)	>25	3	3	---
Lead	ppm	ASTM D5185(m)	>45	<1	<1	---
Copper	ppm	ASTM D5185(m)	>225	6	6	---
Tin	ppm	ASTM D5185(m)	>10	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	VLITE	---
Silicon	ppm	ASTM D5185(m)	>125	19	20	---
Potassium	ppm	ASTM D5185(m)	>20	2	2	---
Water		WC Method	>0.1	NEG	NEG	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	---
Sodium	ppm	ASTM D5185(m)		16	20	---
Boron	ppm	ASTM D5185(m)	110	5	7	---
Barium	ppm	ASTM D5185(m)	0.0	<1	1	---
Molybdenum	ppm	ASTM D5185(m)	0.0	<1	<1	---
Manganese	ppm	ASTM D5185(m)	1	<1	<1	---
Magnesium	ppm	ASTM D5185(m)	13	79	83	---
Calcium	ppm	ASTM D5185(m)	3610	2937	2971	---
Phosphorus	ppm	ASTM D5185(m)	1192	946	1002	---
Zinc	ppm	ASTM D5185(m)	1455	845	944	---
Sulfur	ppm	ASTM D5185(m)	2641	3099	2899	---
Visc @ 40°C	cSt	ASTM D7279(m)	55.14	▲ 86.5	▲ 41.1	---
Visc @ 100°C	cSt	ASTM D7279(m)	9.38	▲ 6.7	▲ 6.7	---
Viscosity Index (VI)	Scale	ASTM D2270*	153	---	117	---

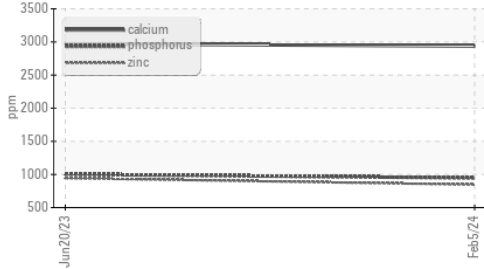
▲ Viscosity @ 100°C



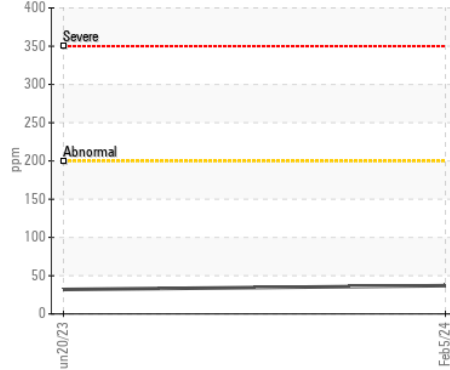
▲ Viscosity @ 40°C



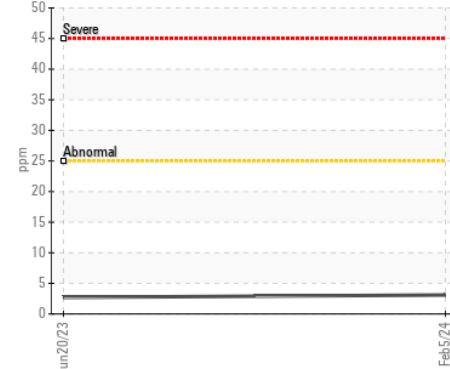
Additives



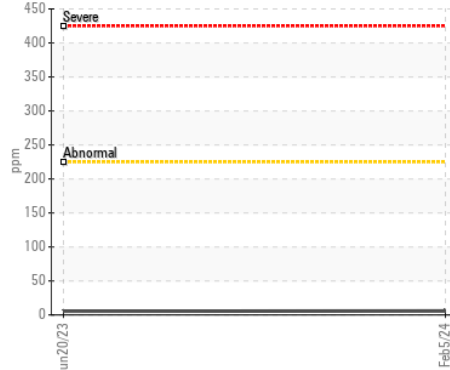
Iron (ppm)



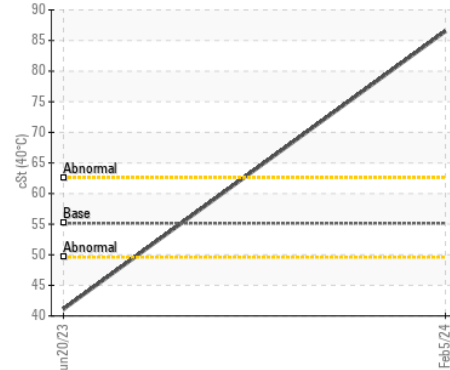
Aluminum (ppm)



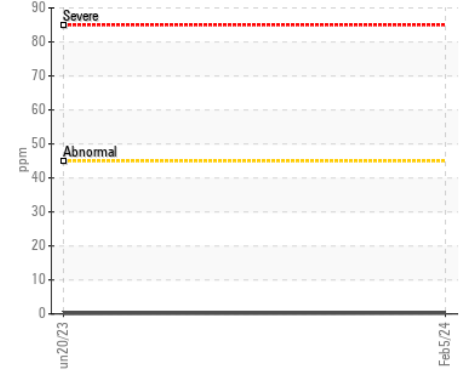
Copper (ppm)



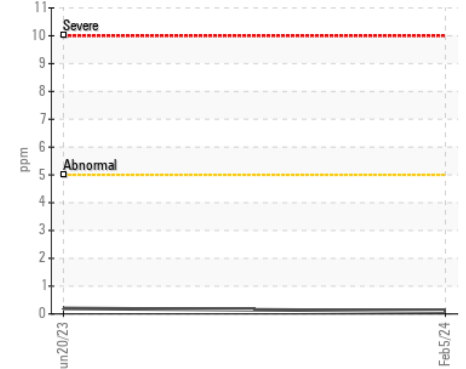
▲ Viscosity @ 40°C



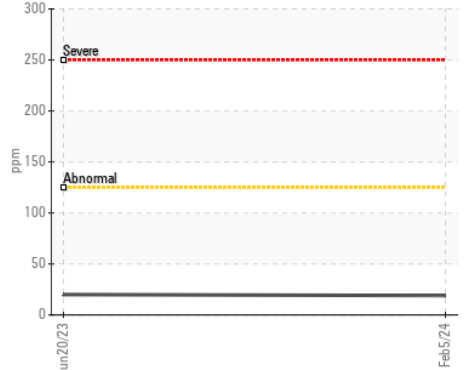
Lead (ppm)



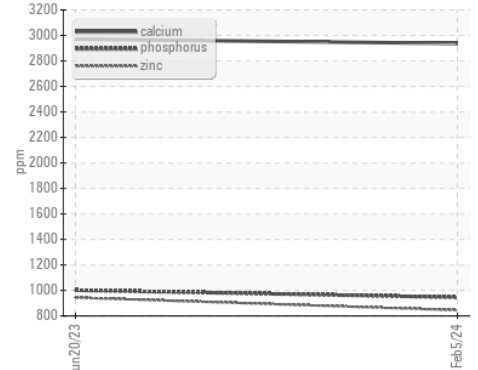
Chromium (ppm)



Silicon (ppm)



Additives



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : PC0067888

Lab Number : 02616721

Unique Number : 5733831

Test Package : MOB 1 (Additional Tests: KV100, VI)

Received : 20 Feb 2024

Tested : 21 Feb 2024

Diagnosed : 21 Feb 2024 - Kevin Marson

TRUCK AND EQUIPMENT SOLUTION

2 BERTRAM INDUSTRIAL PKWY.

MIDHURST, ON

CA L9X 1L2

Contact: John Irwin

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T: (705)792-7620

F: (705)725-5425

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.