



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
JOHN DEERE 223-1604
 Component
Transmission (Manual)
 Fluid
PETRO CANADA DURATRAN (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

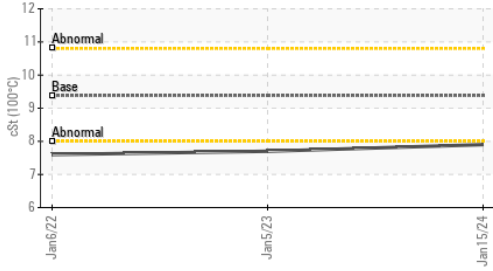
There is no indication of any contamination in the fluid.

FLUID CONDITION

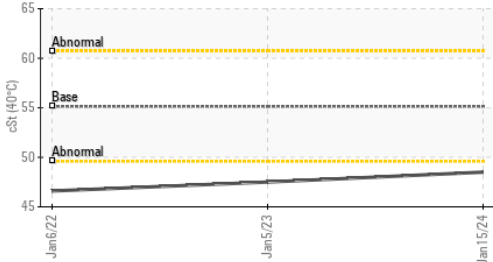
Viscosity of sample indicates oil is within SAE 20 range, advise investigate. The condition of the fluid is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0072572	PC0071086	PC0043128
Sample Date		Client Info		15 Jan 2024	05 Jan 2023	06 Jan 2022
Machine Age	hrs	Client Info		9035	7896	6725
Oil Age	hrs	Client Info		1500	1200	1611
Filter Age	hrs	Client Info		1500	1200	1611
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
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Iron	ppm	ASTM D5185(m)	>200	32	20	21
Chromium	ppm	ASTM D5185(m)	>5	0	0	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>7	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	1	<1	<1
Lead	ppm	ASTM D5185(m)	>45	<1	0	0
Copper	ppm	ASTM D5185(m)	>225	24	4	6
Tin	ppm	ASTM D5185(m)	>10	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
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Silicon	ppm	ASTM D5185(m)	>125	7	8	8
Potassium	ppm	ASTM D5185(m)	>20	8	<1	1
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
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Sodium	ppm	ASTM D5185(m)		5	7	9
Boron	ppm	ASTM D5185(m)	110	62	76	72
Barium	ppm	ASTM D5185(m)	0.0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	0.0	3	3	2
Manganese	ppm	ASTM D5185(m)	1	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	13	29	58	46
Calcium	ppm	ASTM D5185(m)	3610	2834	3028	3003
Phosphorus	ppm	ASTM D5185(m)	1192	1023	1083	1074
Zinc	ppm	ASTM D5185(m)	1455	1132	1222	1258
Sulfur	ppm	ASTM D5185(m)	2641	2624	2599	2654
Visc @ 40°C	cSt	ASTM D7279(m)	55.14	▲ 48.5	▲ 47.5	▲ 46.6
Visc @ 100°C	cSt	ASTM D7279(m)	9.38	▲ 7.9	▲ 7.7	▲ 7.6
Viscosity Index (VI)	Scale	ASTM D2270*	153	132	129	129

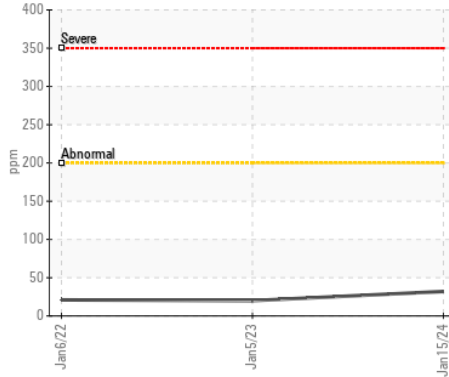
▲ Viscosity @ 100°C



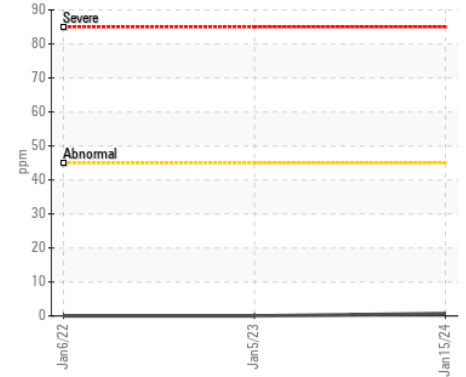
▲ Viscosity @ 40°C



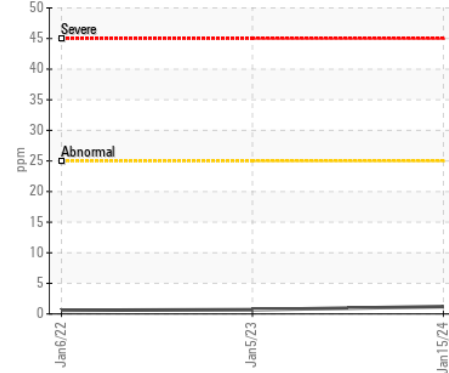
Iron (ppm)



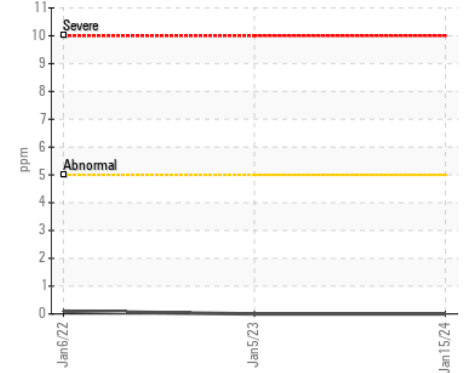
Lead (ppm)



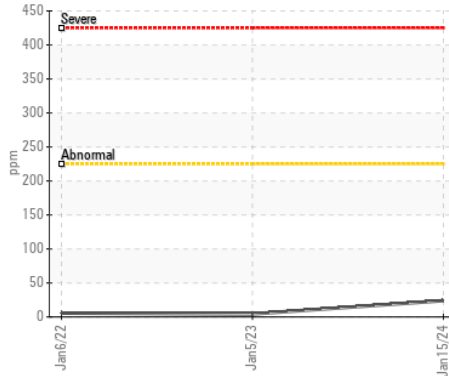
Aluminum (ppm)



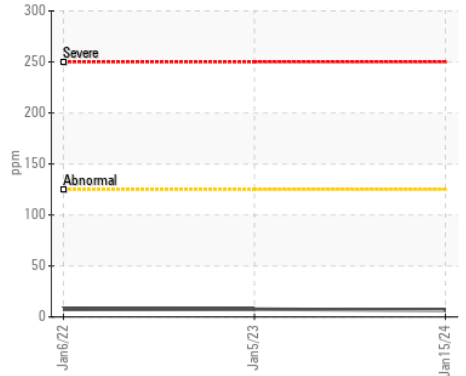
Chromium (ppm)



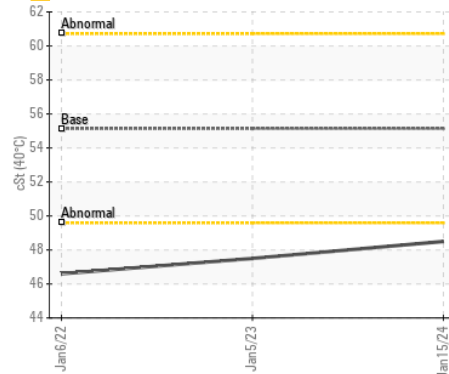
Copper (ppm)



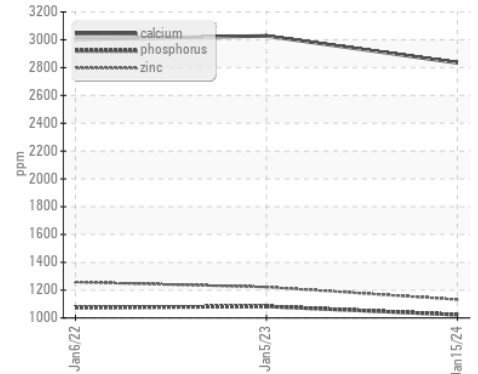
Silicon (ppm)



▲ Viscosity @ 40°C



Additives



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0072572 **Received** : 18 Jan 2024
Lab Number : 02609725 **Diagnosed** : 18 Jan 2024
Unique Number : 5710811 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: KV100, VI)

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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