



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**JOHN DEERE 644K 8018**  
Component  
**Front Differential**  
Fluid  
**PETRO CANADA DURATRAN (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0078897</b>	PC0069164	PC0060121
Sample Date		Client Info		<b>18 Mar 2024</b>	17 Apr 2023	28 Jun 2022
Machine Age	hrs	Client Info		<b>5373</b>	4435	3633
Oil Age	hrs	Client Info		<b>0</b>	1000	0
Filter Age	hrs	Client Info		<b>0</b>	1000	0
Oil Changed		Client Info		<b>Not Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>420	<b>16</b>	13	29
Chromium	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	1	1
Lead	ppm	ASTM D5185(m)	>95	<b>25</b>	23	1
Copper	ppm	ASTM D5185(m)	>170	<b>10</b>	13	12
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

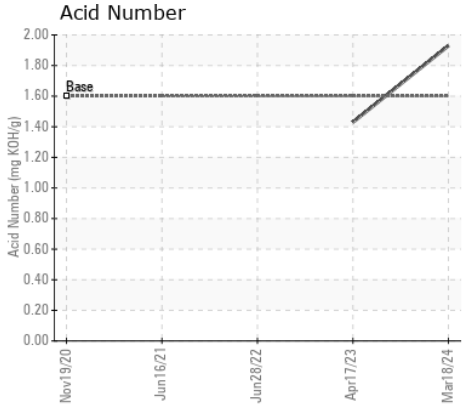
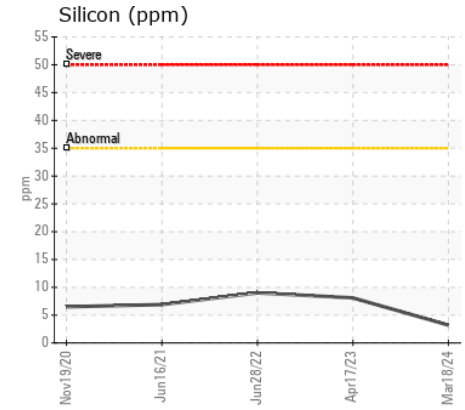
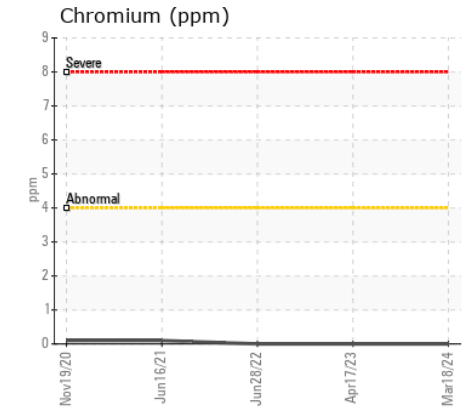
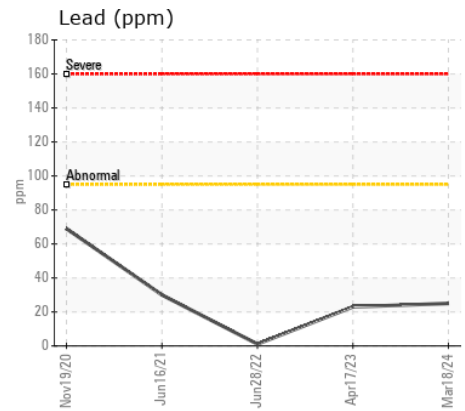
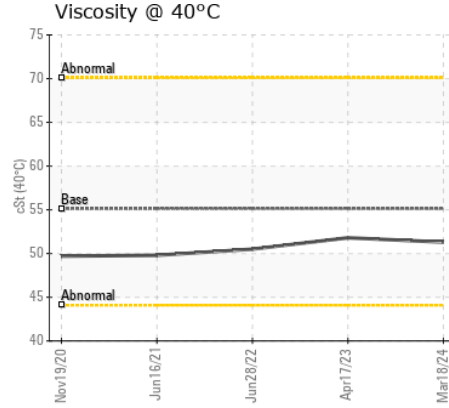
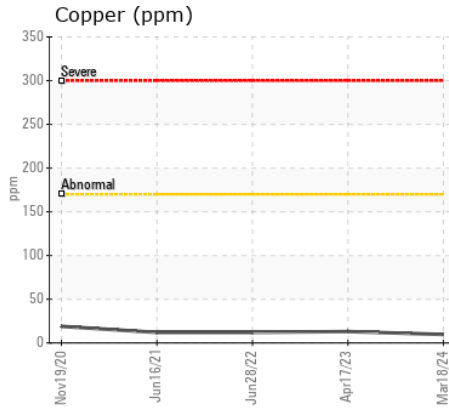
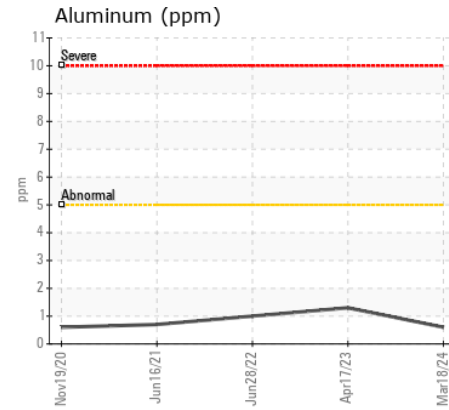
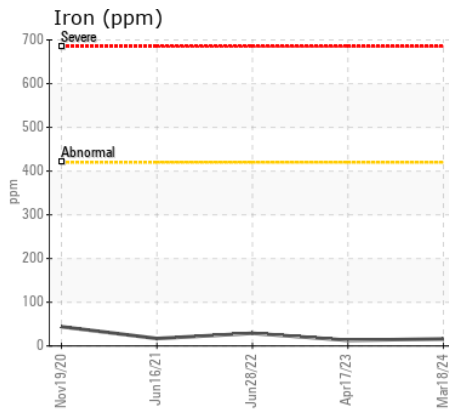
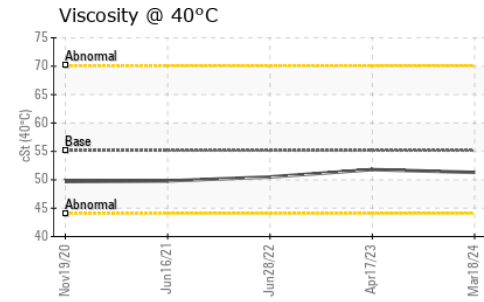
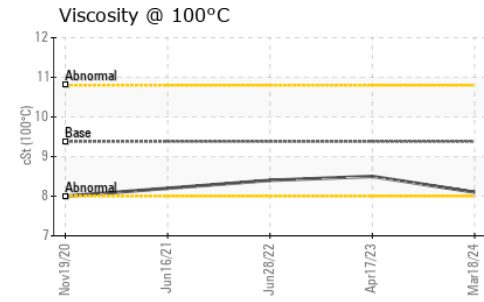
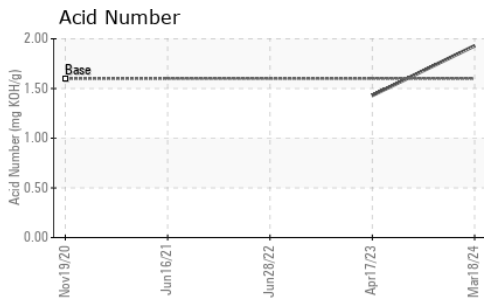
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	<b>3</b>	8	9
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	1
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>VLITE</b>	NONE	LIGHT
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

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

Sodium	ppm	ASTM D5185(m)		<b>1</b>	1	8
Boron	ppm	ASTM D5185(m)	110	<b>28</b>	96	84
Barium	ppm	ASTM D5185(m)	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0.0	<b>0</b>	1	15
Manganese	ppm	ASTM D5185(m)	1	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	13	<b>74</b>	12	15
Calcium	ppm	ASTM D5185(m)	3610	<b>3233</b>	3369	3066
Phosphorus	ppm	ASTM D5185(m)	1192	<b>1018</b>	1211	1054
Zinc	ppm	ASTM D5185(m)	1455	<b>1202</b>	1344	1263
Sulfur	ppm	ASTM D5185(m)	2641	<b>3054</b>	2862	2782
Acid Number (AN)	mg KOH/g	ASTM D974*	1.6	<b>1.93</b>	1.43	---
Visc @ 40°C	cSt	ASTM D7279(m)	55.14	<b>51.3</b>	51.8	50.5
Visc @ 100°C	cSt	ASTM D7279(m)	9.38	<b>8.1</b>	8.5	8.4
Viscosity Index (VI)	Scale	ASTM D2270*	153	<b>128</b>	139	141



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0078897  
**Lab Number** : 02628966  
**Unique Number** : 5762098  
**Test Package** : MOB 2 ( Additional Tests: KV100, TAN Man, VI )

**Received** : 15 Apr 2024  
**Tested** : 16 Apr 2024  
**Diagnosed** : 16 Apr 2024 - Wes Davis

**TRUCK AND EQUIPMENT SOLUTION**  
 2 BERTRAM INDUSTRIAL PKWY.  
 MIDHURST, ON  
 CA L9X 1L2  
 Contact: Julie Holden  
 parts@tesbarrie.com  
 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.