



# OIL ANALYSIS REPORT

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

Machine Id  
**DR191**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA SUPREME SYNTHETIC 5W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0078379</b>	PC0078050	PC0075763
Sample Date		Client Info		<b>19 Dec 2023</b>	25 Aug 2023	17 Jun 2023
Machine Age	hrs	Client Info		<b>6911</b>	1422	1170
Oil Age	hrs	Client Info		<b>250</b>	250	250
Filter Age	hrs	Client Info		<b>250</b>	250	250
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	---	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>6</b>	7	8
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	3	2
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

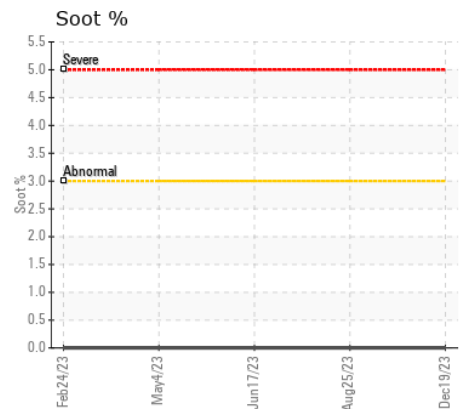
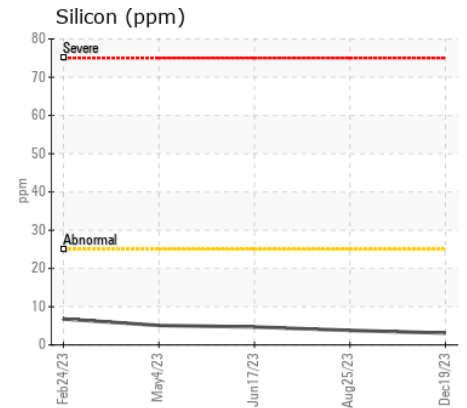
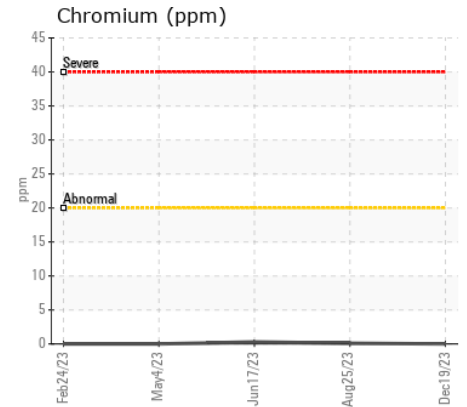
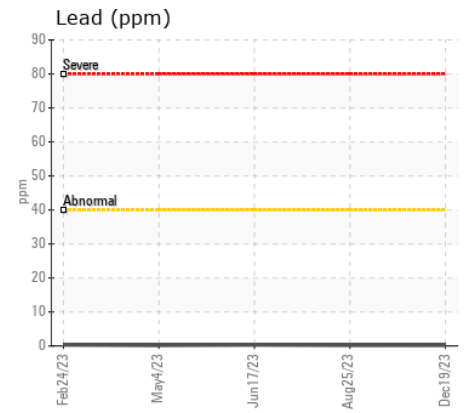
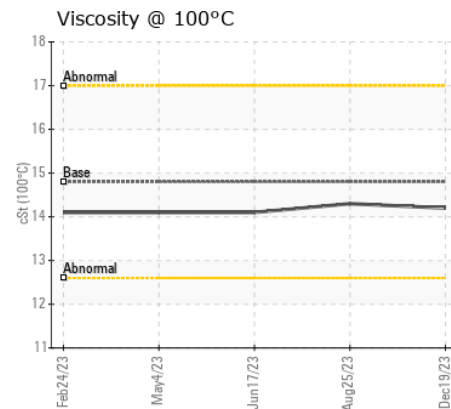
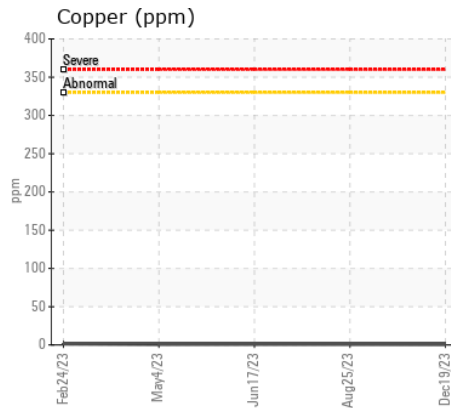
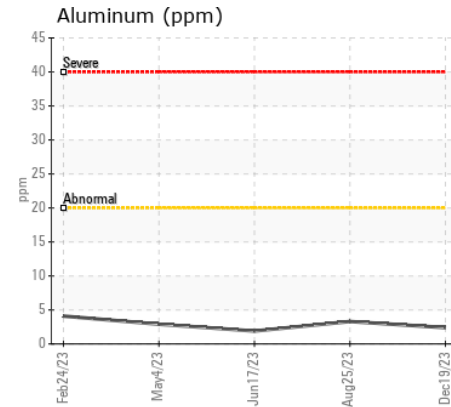
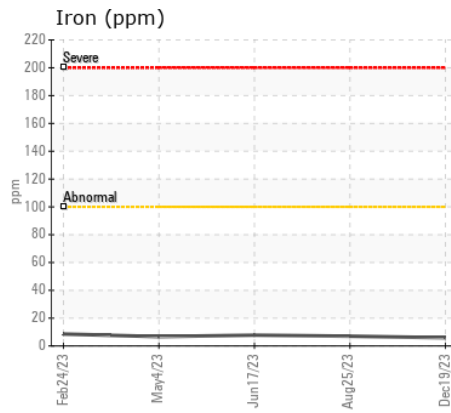
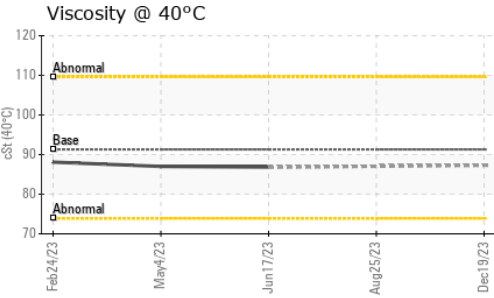
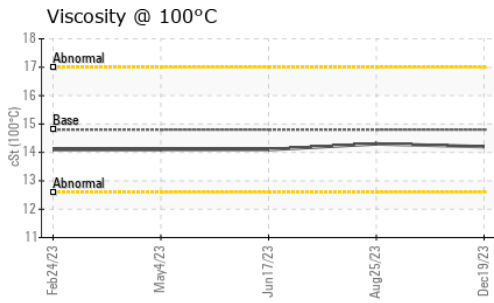
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	4	5
Potassium	ppm	ASTM D5185(m)	>20	<b>4</b>	7	4
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.6</b>	8.9	8.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.6</b>	20.8	20.9
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>3</b>	3	4
Boron	ppm	ASTM D5185(m)	190	<b>29</b>	26	30
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	79	<b>55</b>	57	59
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	564	<b>1057</b>	1050	1091
Calcium	ppm	ASTM D5185(m)	993	<b>792</b>	802	826
Phosphorus	ppm	ASTM D5185(m)	763	<b>951</b>	943	1009
Zinc	ppm	ASTM D5185(m)	835	<b>1137</b>	1127	1167
Sulfur	ppm	ASTM D5185(m)	2536	<b>2748</b>	2728	2736
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>18.7</b>	18.8	19.0
Visc @ 40°C	cSt	ASTM D7279(m)	91.3	<b>87.3</b>	---	86.8
Visc @ 100°C	cSt	ASTM D7279(m)	14.8	<b>14.2</b>	14.3	14.1
Viscosity Index (VI)	Scale	ASTM D2270*	170	<b>168</b>	---	167



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GPI) - 286 - Shoring & Foundations  
**Sample No.** : PC0078379 **Received** : 10 Jan 2024 151 Ram Forest Rd,  
**Lab Number** : 02607741 **Diagnosed** : 10 Jan 2024 Stouffville, ON  
**Unique Number** : 5708827 **Diagnostician** : Wes Davis CA L4A 2G8  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI ) Contact: Shannon Abbott  
 sabbott@gipi.com

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.