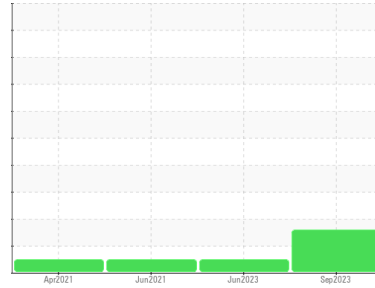


Machine Id  
**514221**

Component  
**Gasoline Engine**

Fluid  
**PETRO CANADA SUPREME 5W30 (--- GAL)**



## DIAGNOSIS

### Recommendation

Nous vous recommandons de vérifier le filtre à air, le système d'induction d'air et tout endroit où la saleté peut entrer dans le composant. Nous avons pris note que l'huile a été vidangée et le filtre remplacé au moment de l'échantillonnage. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

### Wear

Les taux d'usure de tous les autres composants sont normaux.

### Contamination

Les niveaux élémentaires de silicone (Si) et d'aluminium (Al) indiquent l'infiltration d'alumine-silicate (grosses particules de poussière).

### Fluid Condition

Le résultat pour le BN indique que la réserve d'alcalinité est acceptable pour l'huile. L'huile ne peut plus être utilisée en raison de la présence de contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PC0074433</b>	PC0074017	PC0045764
Sample Date	Client Info			<b>27 Sep 2023</b>	13 Jun 2023	17 Jun 2021
Machine Age	kms	Client Info		<b>142892</b>	131683	20568
Oil Age	kms	Client Info		<b>10925</b>	12325	9415
Oil Changed	Client Info			<b>Changed</b>	Changed	N/A
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

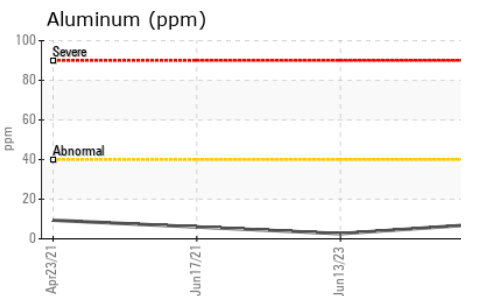
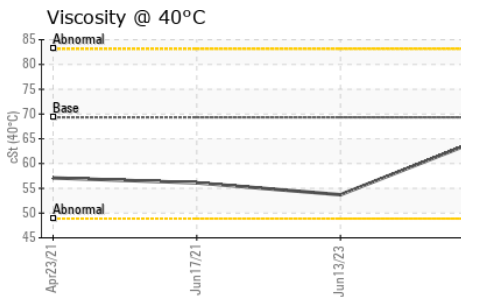
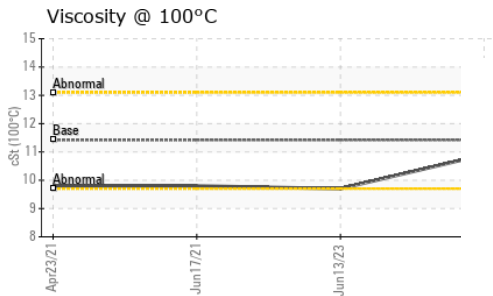
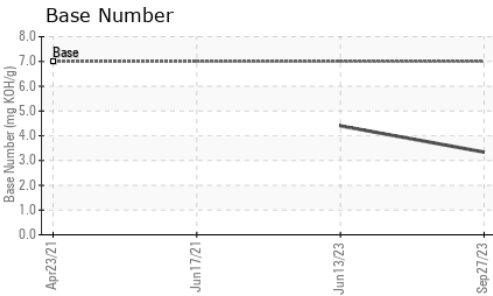
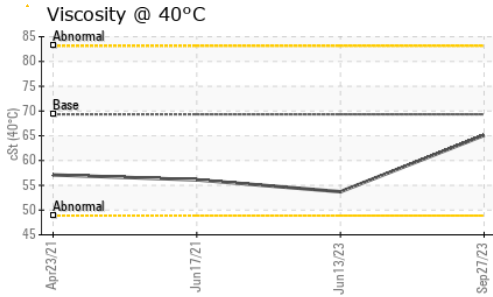
CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method		>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>150	<b>20</b>	11	21
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>40	<b>8</b>	3	6
Lead	ppm	ASTM D5185(m)	>50	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185(m)	>155	<b>3</b>	1	10
Tin	ppm	ASTM D5185(m)	>10	<b>1</b>	<1	2
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	186	<b>25</b>	46	47
Barium	ppm	ASTM D5185(m)	<1	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	79	<b>83</b>	95	79
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	2
Magnesium	ppm	ASTM D5185(m)	578	<b>575</b>	547	535
Calcium	ppm	ASTM D5185(m)	1002	<b>1421</b>	1317	1279
Phosphorus	ppm	ASTM D5185(m)	745	<b>746</b>	755	686
Zinc	ppm	ASTM D5185(m)	837	<b>858</b>	802	778
Sulfur	ppm	ASTM D5185(m)	2502	<b>2177</b>	2209	1977
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>30	<b>▲ 31</b>	22	29
Sodium	ppm	ASTM D5185(m)	>400	<b>6</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>13.7</b>	10.5	11.5
Sulfation	Abs/1mm	ASTM D7415*	>30	<b>30.6</b>	25.2	23.1

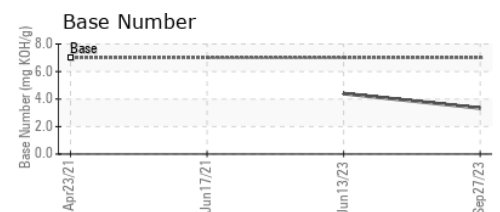
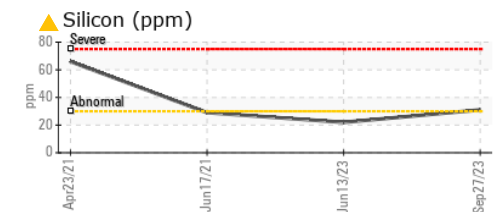
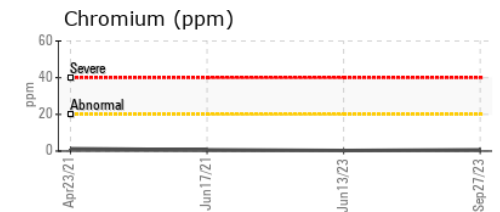
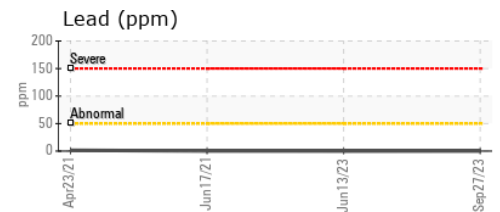
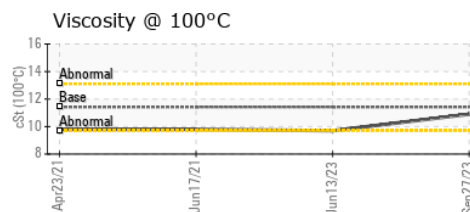
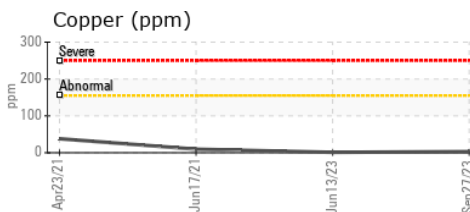
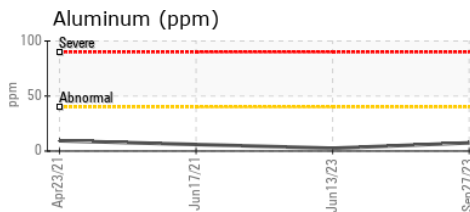
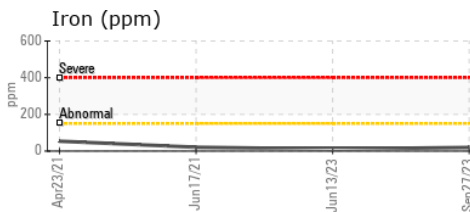


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>27.0</b>	17.9	19.9
Base Number (BN)	mg KOH/g	ASTM D2896*	7.0	<b>3.34</b>	4.40	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	NONE	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	69.33	<b>65.1</b>	53.7	56.1
Visc @ 100°C	cSt	ASTM D7279(m)	11.42	<b>10.9</b>	9.7	9.8
Viscosity Index (VI)	Scale	ASTM D2270*	159	<b>159</b>	167	161

## GRAPHS



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0074433  
**Lab Number** : **02589279**  
**Unique Number** : 5658345  
**Test Package** : MOB 2 ( Additional Tests: Bottom, BottomAnalysis, FilterPatch, KV40, VI )

**Received** : 16 Oct 2023  
**Diagnosed** : 18 Oct 2023  
**Diagnostician** : Kevin Marson

**TRANSDEV LIMOCAR**  
 4243 MARCEL-LACASSE  
 BOISBRIAND, QC  
 CA J7H 1N3

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.

Contact: Benoit Dumoulin

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F: (450)435-1141