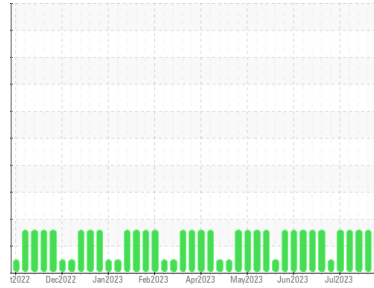




# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**GZJ00403**  
Component  
**Biogas Engine**  
Fluid  
**PETRO CANADA SENTRON CG 40 (--- GAL)**

## DIAGNOSIS

**Recommendation**  
No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: Total oil added 114 gallons )

**Wear**  
All component wear rates are normal.

**Contamination**  
Fuel content negligible. Elemental level of silicon (Si) above normal.

**Fluid Condition**  
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0836449</b>	WC0799210	WC0799207
Sample Date	Client Info		<b>15 Aug 2023</b>	07 Aug 2023	31 Jul 2023
Machine Age	hrs	Client Info	<b>116580</b>	116387	116218
Oil Age	hrs	Client Info	<b>983</b>	790	621
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >45	<b>11</b>	8	8
Chromium	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m >5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>4</b>	2	2
Lead	ppm	ASTM D5185m >5	<b>5</b>	2	1
Copper	ppm	ASTM D5185m >14	<b>2</b>	2	1
Tin	ppm	ASTM D5185m >13	<b>8</b>	6	4
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 1	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m 2	<b>2</b>	<1	1
Manganese	ppm	ASTM D5185m 1	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 9	<b>11</b>	15	15
Calcium	ppm	ASTM D5185m 2712	<b>3254</b>	3099	3036
Phosphorus	ppm	ASTM D5185m 292	<b>307</b>	308	303
Zinc	ppm	ASTM D5185m 342	<b>393</b>	376	375
Sulfur	ppm	ASTM D5185m 2575	<b>3953</b>	4201	4232

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >200	<b>▲ 473</b>	▲ 404	▲ 369
Sodium	ppm	ASTM D5185m	<b>0</b>	1	<1
Potassium	ppm	ASTM D5185m >20	<b>1</b>	0	0
Fuel	%	ASTM D3524 >4.0	<b>0.0</b>	0.3	0.4

## INFRA-RED

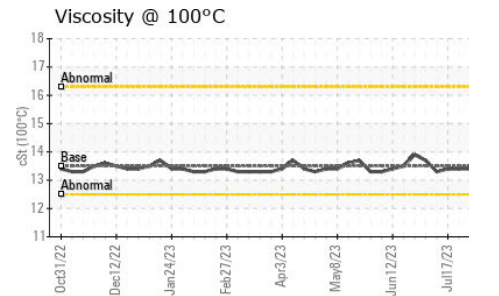
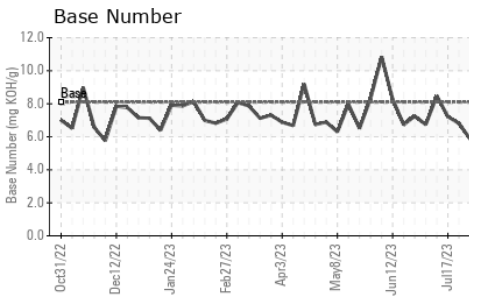
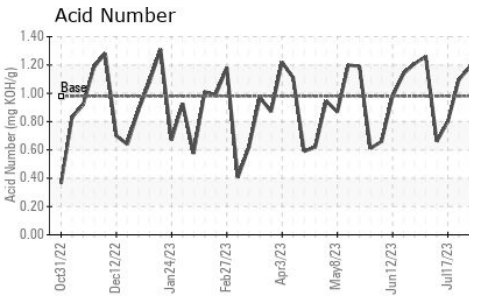
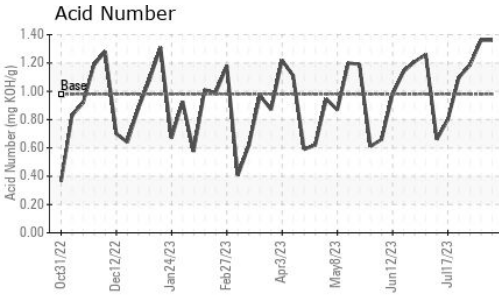
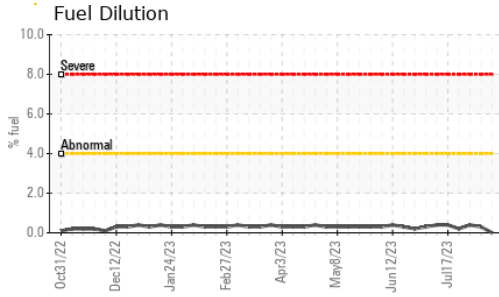
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.3</b>	6.0	5.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>23.3</b>	22.4	21.2

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.9</b>	13.9	12.5
Acid Number (AN)	mg KOH/g	ASTM D8045 0.98	<b>1.36</b>	1.36	1.185
Base Number (BN)	mg KOH/g	ASTM D2896 8.1	<b>7.07</b>	7.07	5.88



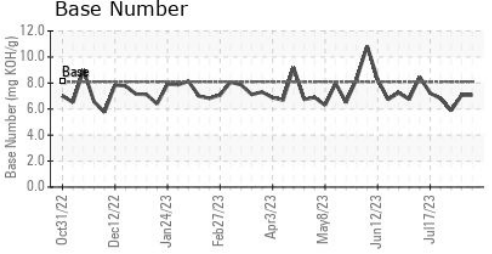
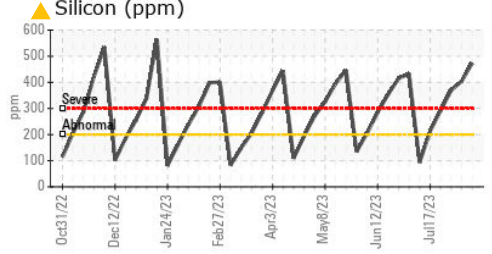
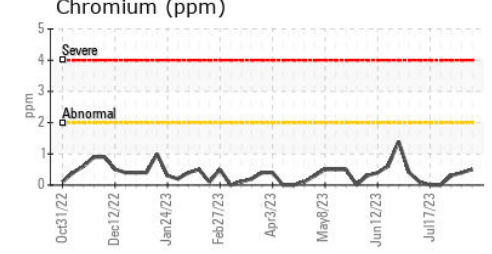
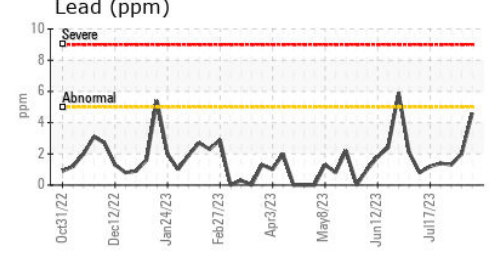
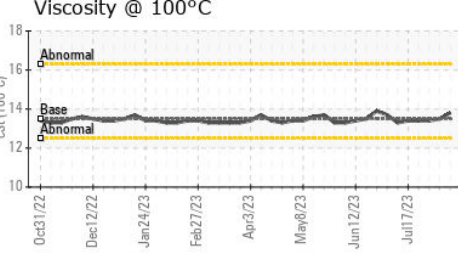
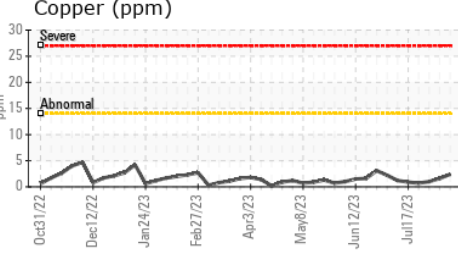
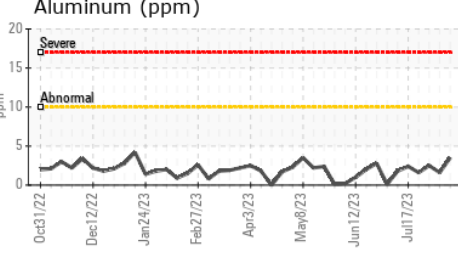
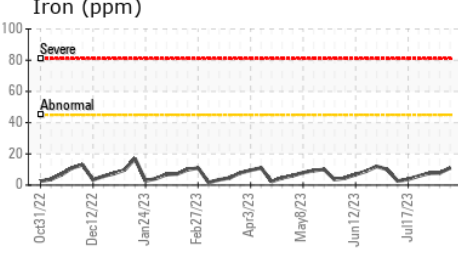
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	13.5	13.8	13.5

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0836449 **Received** : 18 Aug 2023  
**Lab Number** : 05928875 **Diagnosed** : 22 Aug 2023  
**Unique Number** : 10608822 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: FuelDilution, PercentFuel )

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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