

Machine Id
G200
Component
Biogas Engine
Fluid
PETRO CANADA SENTRON LD 5000 (--- GAL)

RECOMMENDATION

We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0069020	PCA0069080	PCA0069057
Sample Date		Client Info		15 Jun 2024	01 May 2024	23 Feb 2024
Machine Age	hrs	Client Info		12731	11988	11146
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	N/A	Not Changd
Filter Changed		Client Info		Not Changd	N/A	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>45	13	12	6
Chromium	ppm	ASTM D5185m	>2	1	2	1
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>10	1	2	1
Lead	ppm	ASTM D5185m	>5	1	3	2
Copper	ppm	ASTM D5185m	>14	0	1	<1
Tin	ppm	ASTM D5185m	>13	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

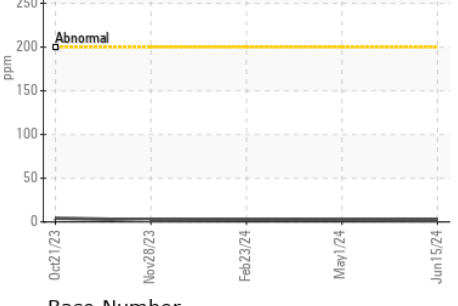
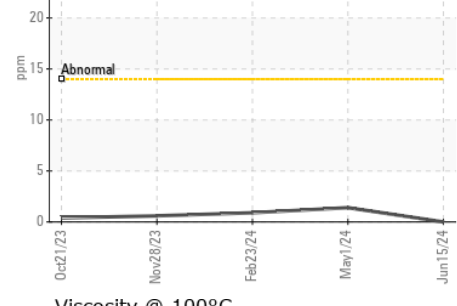
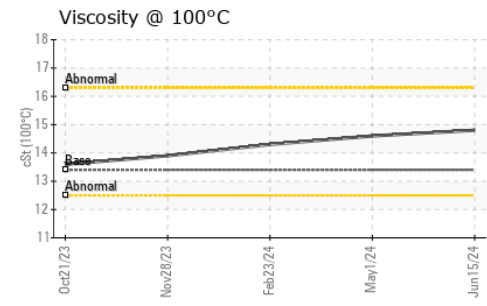
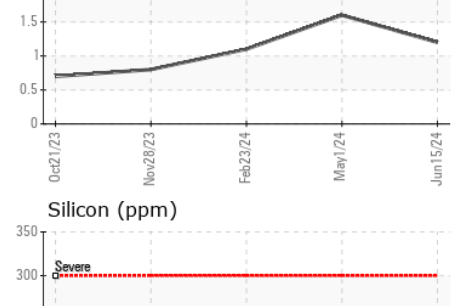
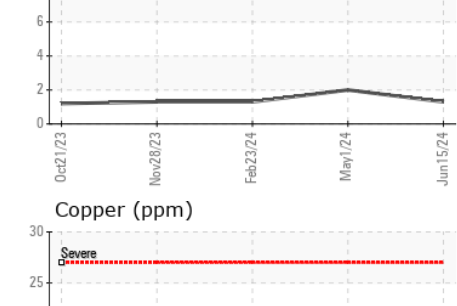
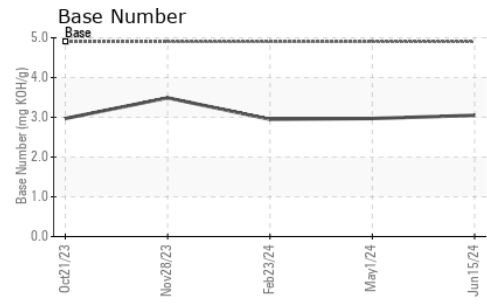
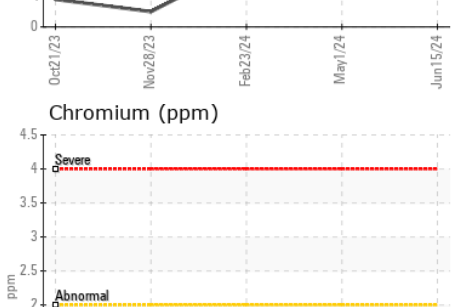
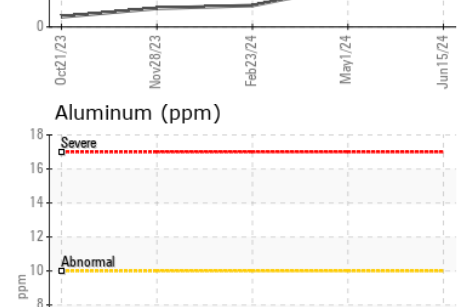
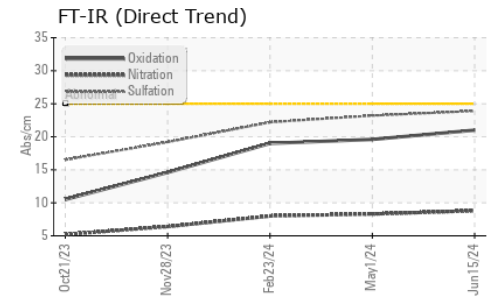
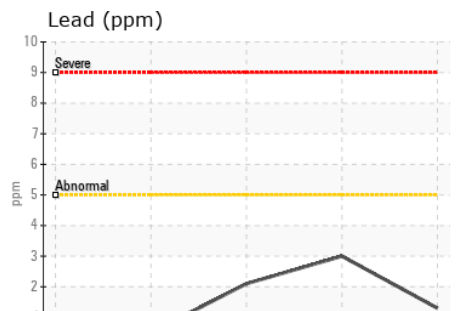
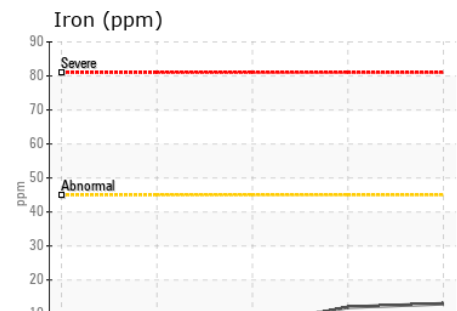
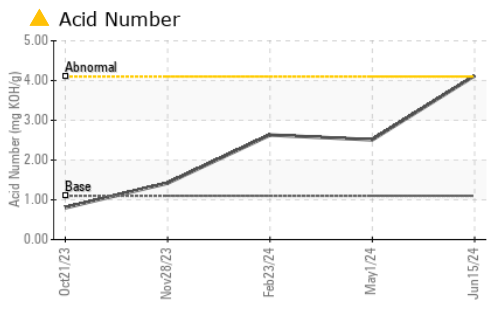
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>200	2	3	3
Potassium	ppm	ASTM D5185m	>20	2	4	<1
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.8	8.3	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.9	23.2	22.2
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

FLUID CONDITION

The AN level is above the recommended limit.

Sodium	ppm	ASTM D5185m		5	<1	4
Boron	ppm	ASTM D5185m	2	1	0	0
Barium	ppm	ASTM D5185m	3	0	1	0
Molybdenum	ppm	ASTM D5185m	0	<1	3	<1
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	4	24	23	22
Calcium	ppm	ASTM D5185m	1727	2212	2221	1957
Phosphorus	ppm	ASTM D5185m	272	357	416	326
Zinc	ppm	ASTM D5185m	333	452	467	419
Sulfur	ppm	ASTM D5185m	3415	4144	4465	3331
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.0	19.6	19.0
Acid Number (AN)	mg KOH/g	ASTM D8045	1.1	4.121	2.51	2.63
Base Number (BN)	mg KOH/g	ASTM D2896	4.9	3.05	2.97	2.95
Visc @ 100°C	cSt	ASTM D445	13.4	14.8	14.6	14.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0069020 **Received** : 03 Jul 2024
Lab Number : 06227681 **Tested** : 15 Jul 2024
Unique Number : 11111174 **Diagnosed** : 15 Jul 2024 - Sean Felton
Test Package : MOB 2

YAAMAVA RESORT AND CASINO
 777 SAN MANUEL BLVD
 HIGHLAND, CA
 US 92346
 Contact: JOSHUA AVILA
 joshua.avila@yaamava.com
 T:
 F:

Certificate L2367
 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)