



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
M1 (S/N 1457445)
 Component
Biogas Engine
 Fluid
PETRO CANADA SENTRON LD 8000 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0129790	PCA0120741	PCA0106213
Sample Date		Client Info		08 Jul 2024	17 Jun 2024	26 Jan 2024
Machine Age	hrs	Client Info		10944	10444	9948
Oil Age	hrs	Client Info		7550	7050	6557
Filter Age	hrs	Client Info		0	7050	6557
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

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

CONTAMINATION

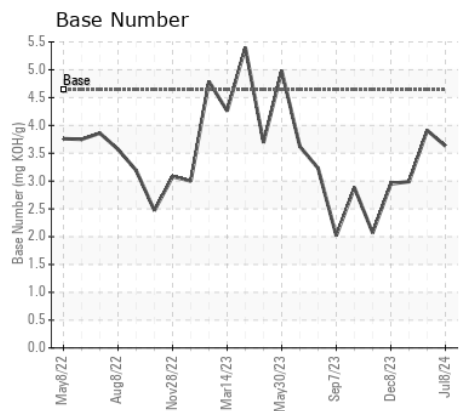
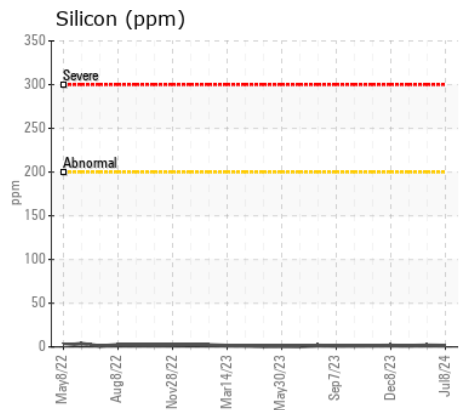
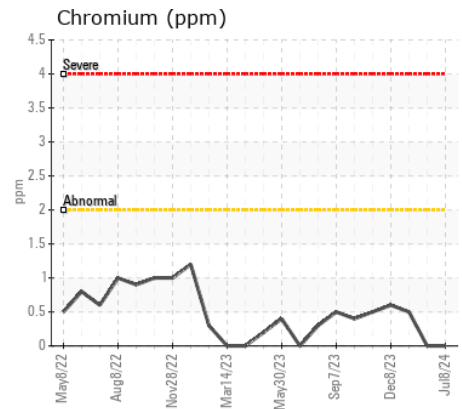
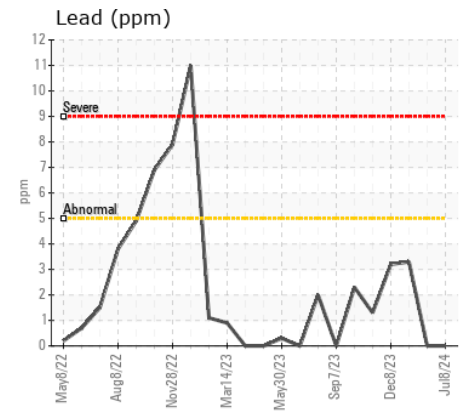
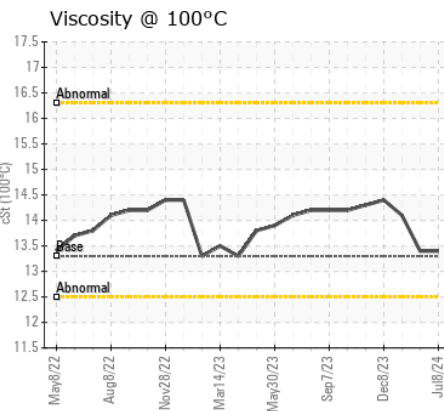
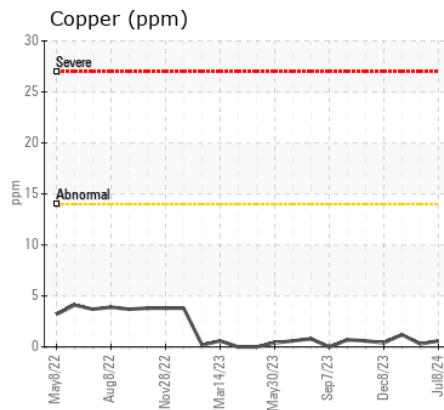
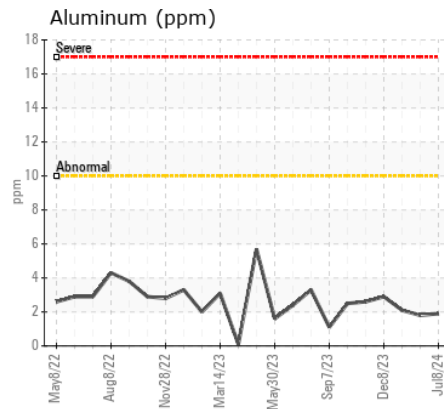
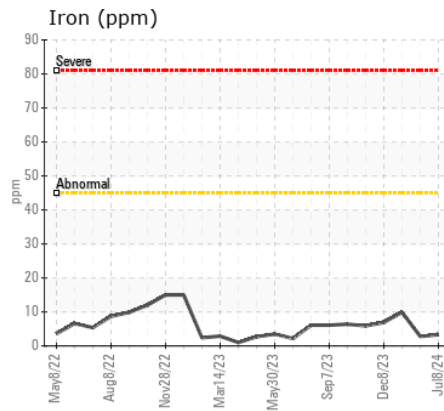
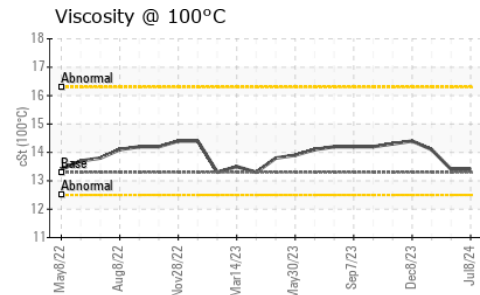
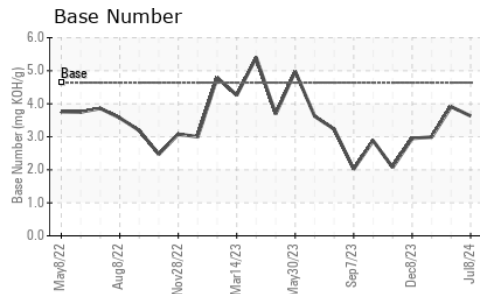
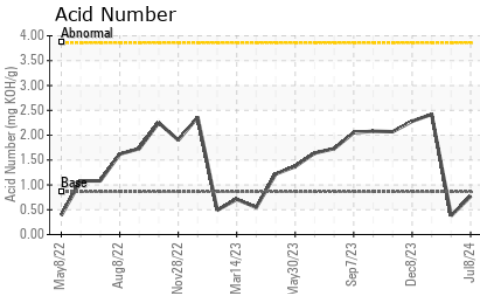
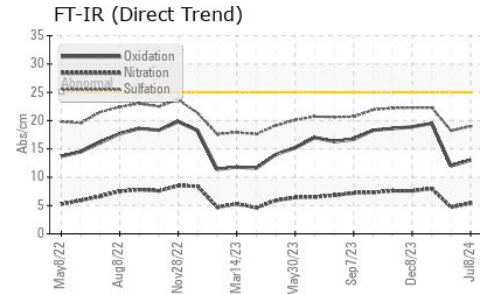
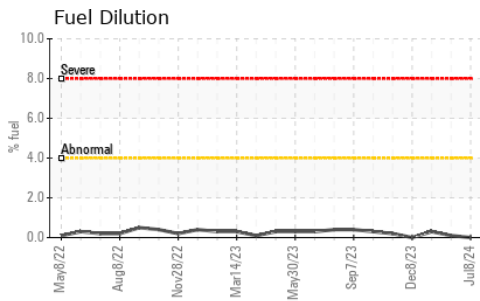
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>200	2	2	2
Potassium	ppm	ASTM D5185m	>20	<1	<1	3
Fuel	%	ASTM D3524	>4.0	0.0	0.1	0.3
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	5.4	4.7	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	18.2	22.3
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 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.

Sodium	ppm	ASTM D5185m		12	10	3
Boron	ppm	ASTM D5185m		0	<1	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		9	9	11
Calcium	ppm	ASTM D5185m	1351	1615	1640	1706
Phosphorus	ppm	ASTM D5185m	302	294	306	300
Zinc	ppm	ASTM D5185m	358	365	388	445
Sulfur	ppm	ASTM D5185m	2758	3241	3532	3154
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.0	12.0	19.5
Acid Number (AN)	mg KOH/g	ASTM D8045	0.86	0.77	0.38	2.42
Base Number (BN)	mg KOH/g	ASTM D2896	4.64	3.63	3.91	2.99
Visc @ 100°C	cSt	ASTM D445	13.3	13.4	13.4	14.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0129790
Lab Number : 06232392
Unique Number : 11115885
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

Received : 10 Jul 2024
Tested : 12 Jul 2024
Diagnosed : 12 Jul 2024 - Sean Felton

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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)