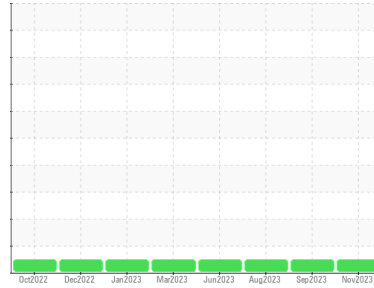


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
GUASCOR 340.105

Component
Biogas Engine

Fluid
PETRO CANADA RALUBE 40 CFS (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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

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		PCA0076105	PCA0076104	PCA0076106
Sample Date	Client Info		06 Nov 2023	19 Sep 2023	02 Aug 2023
Machine Age	hrs	Client Info	115867	114723	113609
Oil Age	hrs	Client Info	1144	1114	988
Oil Changed	Client Info		Changed	Changed	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >45	5	3	6
Chromium	ppm	ASTM D5185m >2	0	0	<1
Nickel	ppm	ASTM D5185m >2	0	0	<1
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m >5	0	0	0
Aluminum	ppm	ASTM D5185m >10	2	3	2
Lead	ppm	ASTM D5185m >5	0	0	2
Copper	ppm	ASTM D5185m >14	0	<1	4
Tin	ppm	ASTM D5185m >13	0	<1	<1
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0	0
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	2
Manganese	ppm	ASTM D5185m 0	0	0	2
Magnesium	ppm	ASTM D5185m 25	20	11	19
Calcium	ppm	ASTM D5185m 4300	4727	2981	4110
Phosphorus	ppm	ASTM D5185m 1.6	4	4	3
Zinc	ppm	ASTM D5185m 2	6	0	0
Sulfur	ppm	ASTM D5185m 1500	1750	924	1431

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >200	4	3	6
Sodium	ppm	ASTM D5185m	6	6	17
Potassium	ppm	ASTM D5185m >20	<1	0	8
Fuel	%	ASTM D3524 >4.0	0.2	0.1	0.3

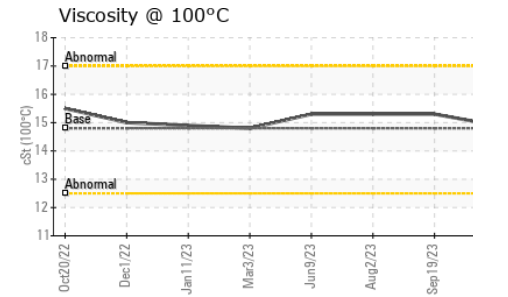
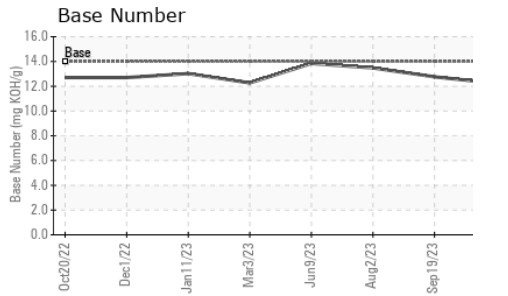
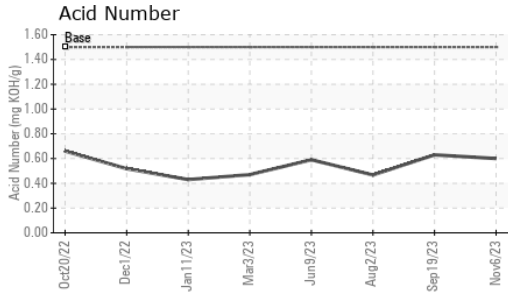
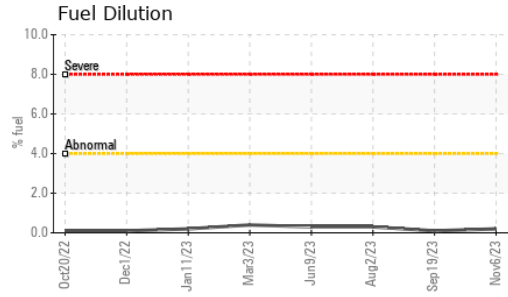
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0	0
Nitration	Abs/cm	*ASTM D7624 >20	12.3	13.1	12.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	16.7	15.3	14.0

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	9.9	10.6	9.7
Acid Number (AN)	mg KOH/g	ASTM D8045 1.50	0.60	0.63	0.467
Base Number (BN)	mg KOH/g	ASTM D2896 14.0	12.24	12.76	13.48

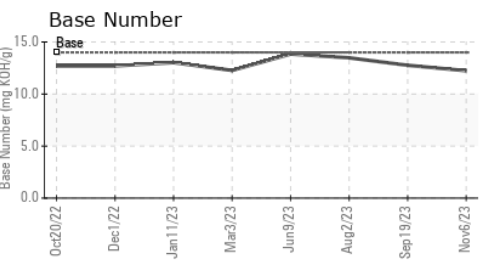
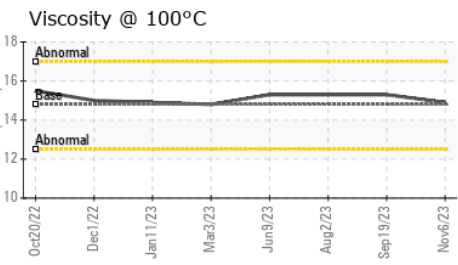
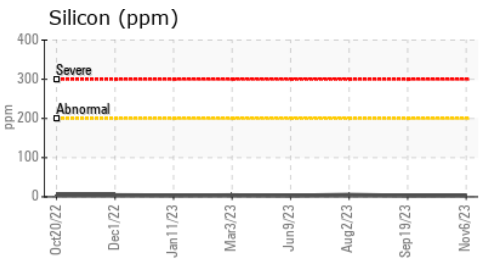
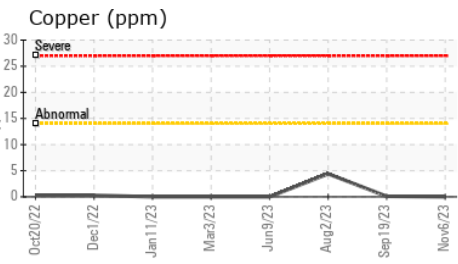
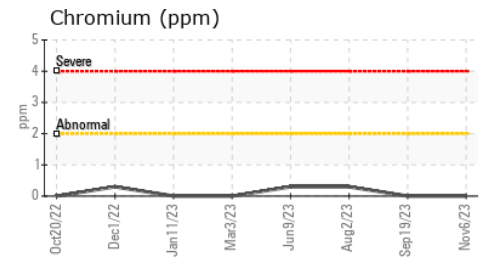
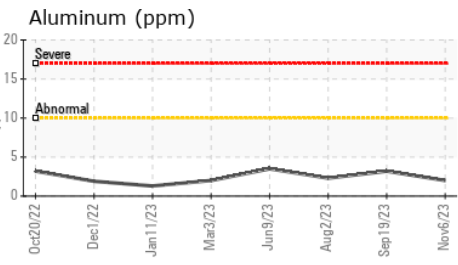
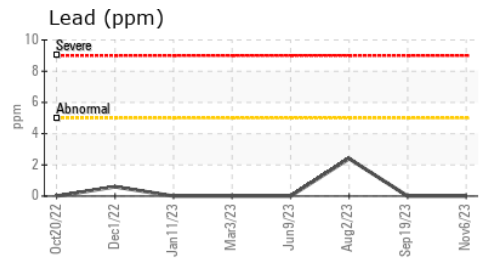
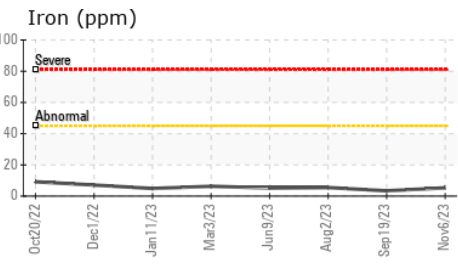
OIL ANALYSIS REPORT



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	14.8	14.9	15.3

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0076105 **Received** : 14 Nov 2023
Lab Number : 06007123 **Diagnosed** : 16 Nov 2023
Unique Number : 10740885 **Diagnostician** : Sean Felton
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

FARM POWER REXVILLE - FPR
 18866 BEAVER MARSH RD
 MOUNT VERNON, WA
 US 98273
 Contact: JASON MITCHELL

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)

T:
F: