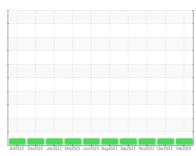


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



GUASCOR 340.105

Component

Biogas Engine

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.

L)		Oct2022 Dec2	022 Jan2023 Mar2023 Jun2	023 Aug2023 Sep2023 Nov2023 Dec2	023 Feb2024	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0092223	PCA0092214	PCA0076105
Sample Date		Client Info		07 Feb 2024	23 Dec 2023	06 Nov 2023
Machine Age	hrs	Client Info		118062	116963	115867
Oil Age	hrs	Client Info		1099	1096	1144
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>45	3	2	5
Chromium	ppm	ASTM D5185m	>2	0	0	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	2	2
Lead	ppm	ASTM D5185m	>5	<1	<1	0
Copper	ppm	ASTM D5185m	>14	0	0	0
Tin	ppm	ASTM D5185m	>13	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method			history1	history2
				Current	Thistory	
Boron	ppm	ASTM D5185m	0	0	<1	0
Boron Barium	ppm				•	· ·
		ASTM D5185m	0	0	<1	0
Barium	ppm	ASTM D5185m ASTM D5185m	0	0	<1	0
Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	0 0 0	<1 0 0	0 0 0
Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	0 0 0 <1	<1 0 0 0 <1	0 0 0
Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 25	0 0 0 <1 17	<1 0 0 0 <1 17	0 0 0 0 20
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 25 4300	0 0 0 <1 17 4407	<1 0 0 0 <1 17 4540	0 0 0 0 20 4727
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 25 4300 1.6	0 0 0 <1 17 4407 3	<1 0 0 <1 17 4540 4	0 0 0 0 20 4727 4
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 25 4300 1.6 2	0 0 0 <1 17 4407 3 0 1679	<1 0 0 <1 17 4540 4 0 1674 history1	0 0 0 0 20 4727 4
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 25 4300 1.6 2 1500	0 0 0 <1 17 4407 3 0 1679 current	<1 0 0 0 <1 17 4540 4 0 1674 history1	0 0 0 0 20 4727 4 6 1750 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 25 4300 1.6 2 1500	0 0 0 <1 17 4407 3 0 1679 current	<1 0 0 <1 17 4540 4 0 1674 history1 3 19	0 0 0 0 20 4727 4 6 1750
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 25 4300 1.6 2 1500	0 0 0 <1 17 4407 3 0 1679 current 3 8 <1	<1 0 0 0 <1 17 4540 4 0 1674 history1 3 19 0	0 0 0 0 20 4727 4 6 1750 history2 4 6 <1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 25 4300 1.6 2 1500 limit/base >200	0 0 0 <1 17 4407 3 0 1679 current 3 8 <1	<1 0 0 <1 17 4540 4 0 1674 history1 3 19	0 0 0 0 20 4727 4 6 1750 history2 4
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m	0 0 0 0 25 4300 1.6 2 1500 limit/base >200	0 0 0 <1 17 4407 3 0 1679 current 3 8 <1	<1 0 0 0 <1 17 4540 4 0 1674 history1 3 19 0	0 0 0 0 20 4727 4 6 1750 history2 4 6 <1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm	ASTM D5185m	0 0 0 0 25 4300 1.6 2 1500 limit/base >200	0 0 0 -<1 17 4407 3 0 1679 current 3 8 -<1 0.2	<1 0 0 <1 17 4540 4 0 1674 history1 3 19 0 0.0 history1	0 0 0 0 20 4727 4 6 1750 history2 4 6 <1 0.2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm	ASTM D5185m	0 0 0 0 25 4300 1.6 2 1500 limit/base >200	0 0 0 <1 17 4407 3 0 1679 current 3 8 <1 0.2	<1 0 0 <1 17 4540 4 0 1674 history1 3 19 0 0.0	0 0 0 0 20 4727 4 6 1750 history2 4 6 <1 0.2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm	ASTM D5185m	0 0 0 0 25 4300 1.6 2 1500 limit/base >200 >4.0	0 0 0 -<1 17 4407 3 0 1679 current 3 8 -<1 0.2	<1 0 0 <1 17 4540 4 0 1674 history1 3 19 0 0.0 history1	0 0 0 0 20 4727 4 6 1750 history2 4 6 <1 0.2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm	ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624	0 0 0 0 25 4300 1.6 2 1500 limit/base >200 >4.0	0 0 0 <1 17 4407 3 0 1679 current 3 8 <1 0.2 current	<1 0 0 17 4540 4 0 1674 history1 3 19 0 0.0 history1 0 12.2	0 0 0 0 20 4727 4 6 1750 history2 4 6 <1 0.2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624	0 0 0 0 25 4300 1.6 2 1500 limit/base >200 >4.0 limit/base >20 >30	0 0 0 -<1 17 4407 3 0 1679 current 3 8 <1 0.2 current 0 12.3 17.9	<1 0 0 <1 17 4540 4 0 1674 history1 3 19 0 0.0 history1 0 12.2 17.0	0 0 0 0 20 4727 4 6 1750 history2 4 6 <1 0.2 history2 0 12.3 16.7
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAI	ppm	ASTM D5185m ASTM D7624 *ASTM D7624 *ASTM D7415 method	0 0 0 0 25 4300 1.6 2 1500 limit/base >200 >4.0 limit/base	0 0 0 17 4407 3 0 1679 current 3 8 <1 0.2 current 0 12.3 17.9 current	<1 0 0 17 4540 4 0 1674 history1 3 19 0 0.0 history1 0 12.2 17.0 history1	0 0 0 0 20 4727 4 6 1750 history2 4 6 <1 0.2 history2 0 12.3 16.7



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No. Lab Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0092223 : 06090365

Received **Tested Unique Number** : 10883218

: 19 Feb 2024 Diagnosed

: 15 Feb 2024

: 19 Feb 2024 - 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)

FARM POWER REXVILLE - FPR

18866 BEAVER MARSH RD MOUNT VERNON, WA

US 98273

Contact: JASON MITCHELL

T: F: