

Machine Id
Smith Ridge 1
Component
Natural Gas Engine
Fluid
CITGO PACEMAKER GAS ENGIN 1700 SERIES 40W (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0111871	PCA0103408	PCA0103402
Sample Date		Client Info		03 Jan 2024	04 Dec 2023	09 Nov 2023
Machine Age	hrs	Client Info		183807	183068	182398
Oil Age	hrs	Client Info		183807	183068	182398
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	6	2	2
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		2	2	3
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>9	2	<1	1
Lead	ppm	ASTM D5185m	>30	<1	0	<1
Copper	ppm	ASTM D5185m	>35	15	14	2
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

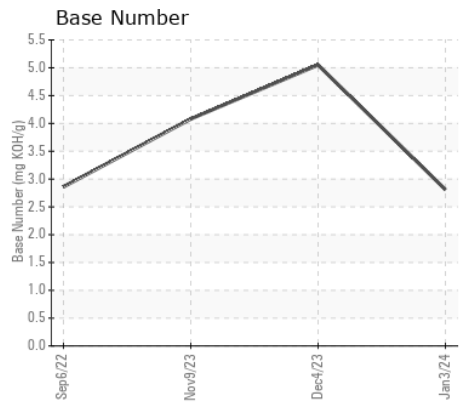
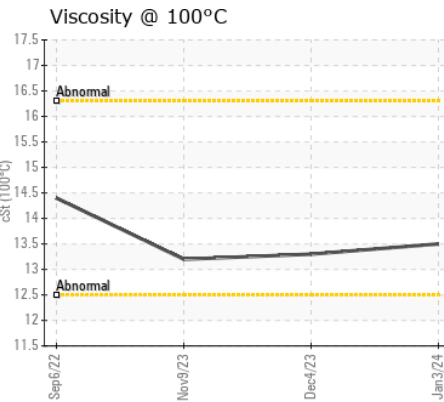
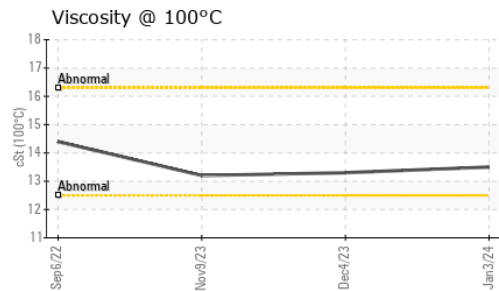
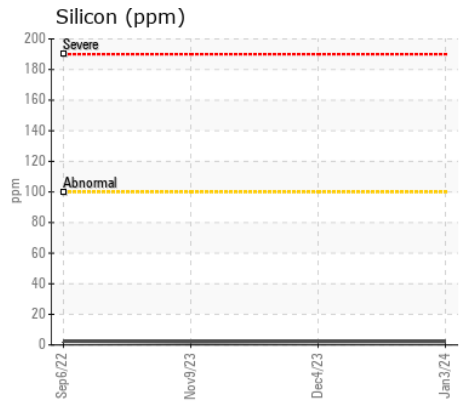
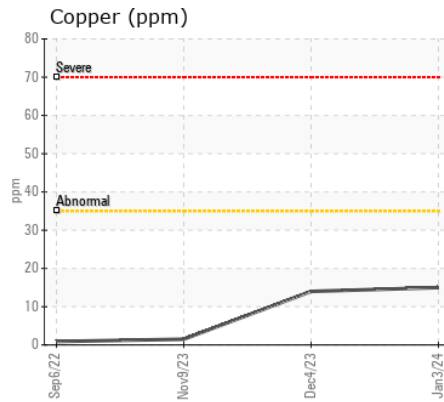
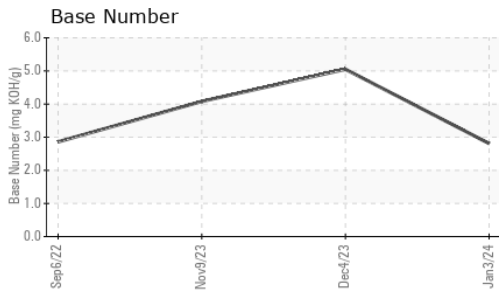
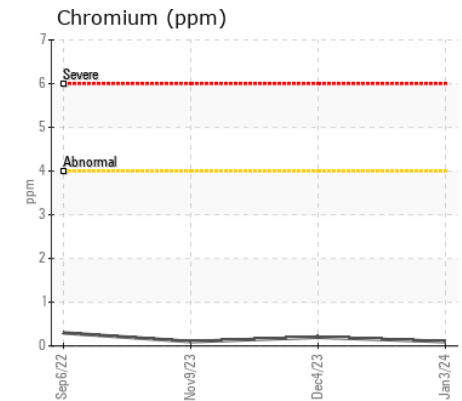
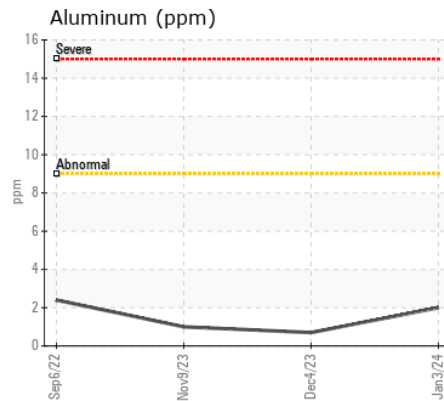
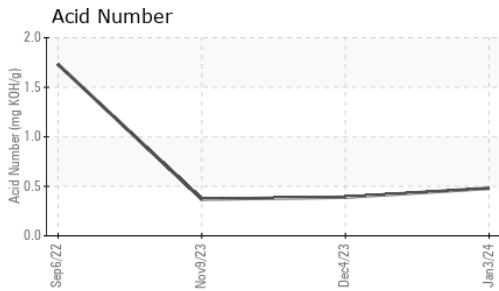
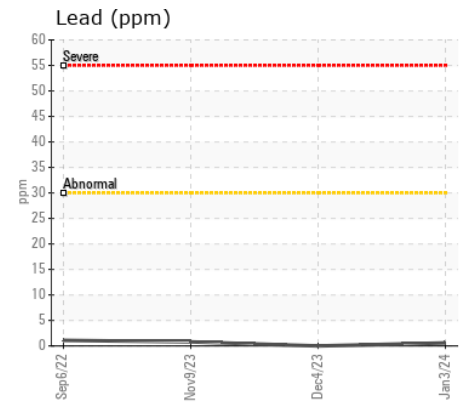
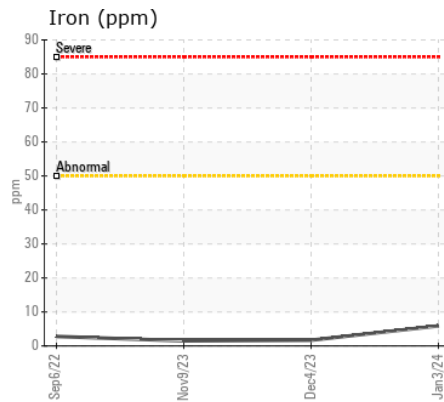
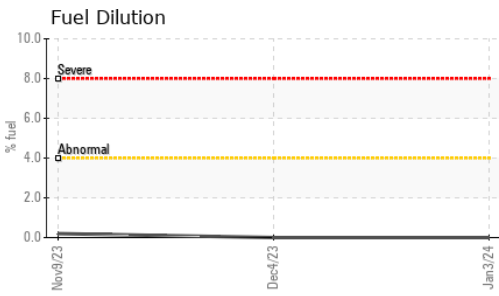
Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	2	2	2
Potassium	ppm	ASTM D5185m	>20	3	<1	<1
Fuel	%	ASTM D3524	>4.0	0.0	0.0	0.2
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	4.6	4.2	3.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.2	15.2	14.2
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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		4	7	7
Boron	ppm	ASTM D5185m		<1	<1	4
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	0	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		19	20	21
Calcium	ppm	ASTM D5185m		1396	1335	1285
Phosphorus	ppm	ASTM D5185m		326	287	278
Zinc	ppm	ASTM D5185m		351	360	344
Sulfur	ppm	ASTM D5185m		2573	2483	2466
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.1	9.4	8.1
Acid Number (AN)	mg KOH/g	ASTM D8045		0.48	0.39	0.37
Base Number (BN)	mg KOH/g	ASTM D2896		2.81	5.05	4.08
Visc @ 100°C	cSt	ASTM D445		13.5	13.3	13.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0111871 **Received** : 10 Jan 2024
Lab Number : 06057443 **Diagnosed** : 12 Jan 2024
Unique Number : 10823392 **Diagnostician** : Sean Felton
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

ENERVEST OPERATING - SMITH RIDGE
 2305 SMITH RIDGE
 MCCLURE, VA
 US 24269
 Contact: Service Manager

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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