

# **OIL ANALYSIS REPORT**

Sample Rating Trend

### DEGRADATION



## CITGO PACEMAKER GAS ENGINE OIL 1015 15W40 (--- GAL)

#### DIAGNOSIS

#### Recommendation

We advise an early resample to confirm this situation. Please confirm the component type with your next sample.

#### Wear

All component wear rates are normal.

#### Contamination

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

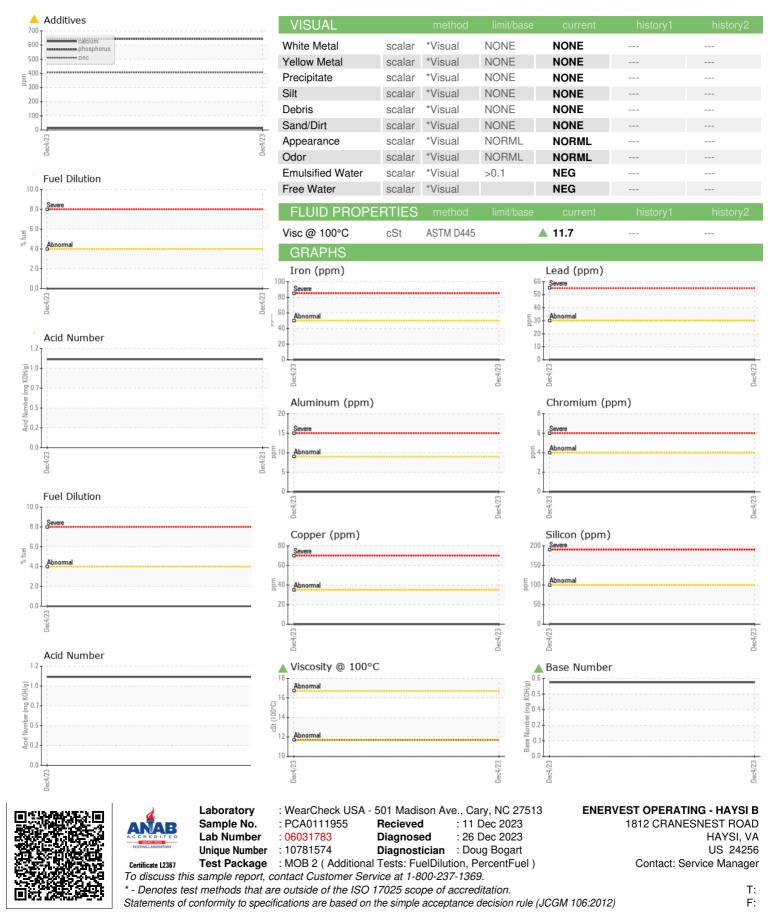
#### Fluid Condition

The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. The BN level is low. Confirm oil type. The AN level is acceptable for this fluid.

5 15W40 ( GA	L)			Dec2023		
SAMPLE INFORM	NOITAN	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0111955		
Sample Date		Client Info		04 Dec 2023		
Machine Age	hrs	Client Info		170359		
Oil Age	hrs	Client Info		324		
Oil Changed		Client Info		Not Changd		
Sample Status				ATTENTION		
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG		
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0		
Chromium	ppm	ASTM D5185m	>4	0		
Nickel	ppm	ASTM D5185m	>2	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>9	0		
Lead	ppm	ASTM D5185m	>30	0		
Copper	ppm	ASTM D5185m	>35	0		
Tin	ppm	ASTM D5185m	>4	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m		2		
Calcium	ppm	ASTM D5185m		<b>1</b> 3		
Phosphorus	ppm	ASTM D5185m		643		
Zinc	ppm	ASTM D5185m		<b>407</b>		
Sulfur	ppm	ASTM D5185m		2051		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	<1		
Sodium	ppm	ASTM D5185m		0		
Potassium	ppm	ASTM D5185m	>20	0		
Fuel	%	ASTM D3524	>4.0	0.0		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0		
Nitration	Abs/cm	*ASTM D7624	>20	2.2		
Sulfation	Abs/.1mm	*ASTM D7415	>30	11.3		
FLUID DEGRAD	OATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	5.5		
	Abs/.1mm mg KOH/g	*ASTM D7414 ASTM D8045	>25	5.5 1.07		



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Contact/Location: Service Manager - ENEHAYHB