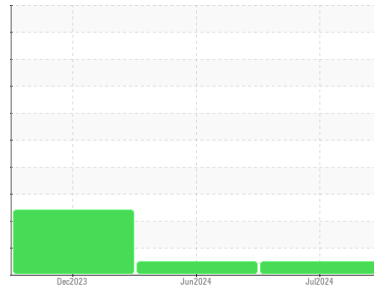


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL


Machine Id

24

Component

Natural Gas Engine

Fluid

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

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

Tests indicate that there is no fuel present in the oil. 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			PCA0117274	PCA0112046	PCA0111955
Sample Date	Client Info			08 Jul 2024	03 Jun 2024	04 Dec 2023
Machine Age	hrs	Client Info		175524	174690	170359
Oil Age	hrs	Client Info		2782	1948	324
Oil Changed	Client Info			Not Chngd	Not Chngd	Not Chngd
Sample Status				NORMAL	NORMAL	ATTENTION

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	6	3	0
Chromium	ppm	ASTM D5185m	>4	<1	<1	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	2	1	0
Lead	ppm	ASTM D5185m	>30	<1	3	0
Copper	ppm	ASTM D5185m	>35	3	6	0
Tin	ppm	ASTM D5185m	>4	2	2	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

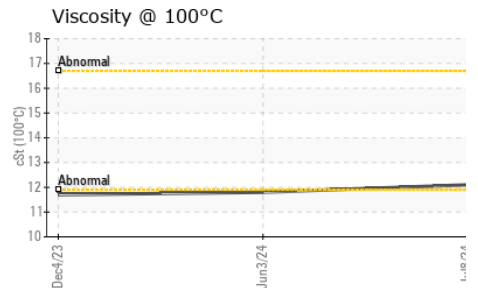
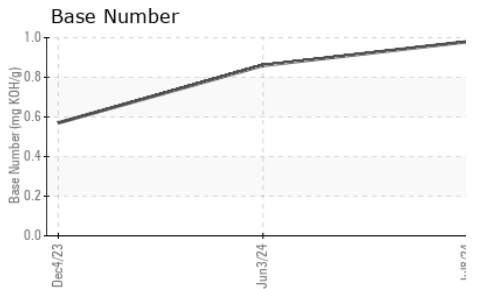
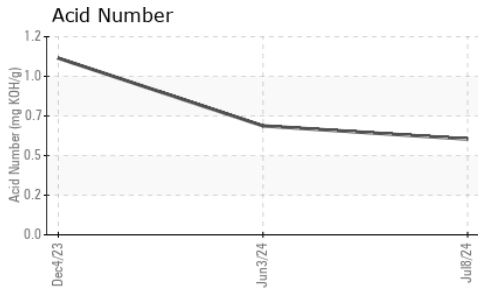
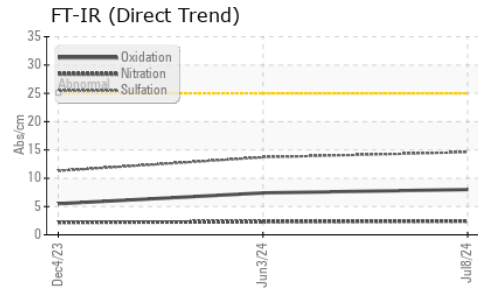
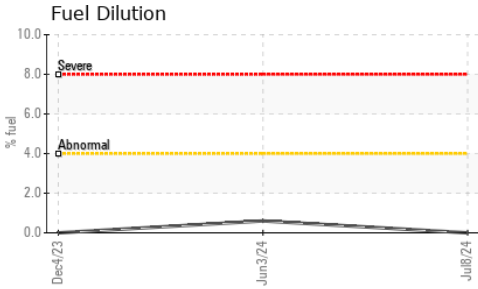
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		43	39	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	4	0
Manganese	ppm	ASTM D5185m		0	2	0
Magnesium	ppm	ASTM D5185m		2	2	2
Calcium	ppm	ASTM D5185m		47	43	13
Phosphorus	ppm	ASTM D5185m		601	684	643
Zinc	ppm	ASTM D5185m		154	222	407
Sulfur	ppm	ASTM D5185m		624	1185	2051

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	1	2	<1
Sodium	ppm	ASTM D5185m		0	2	0
Potassium	ppm	ASTM D5185m	>20	1	5	0
Fuel	%	ASTM D3524	>4.0	0.0	0.6	0.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	2.4	2.3	2.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	14.6	13.7	11.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	8.0	7.4	5.5
Acid Number (AN)	mg KOH/g	ASTM D8045		0.58	0.66	1.07
Base Number (BN)	mg KOH/g	ASTM D2896		0.98	0.86	0.57

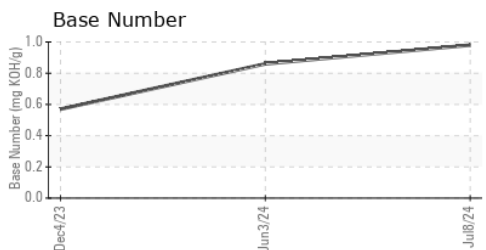
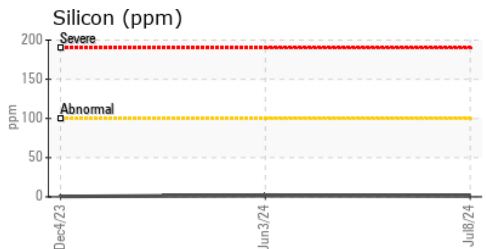
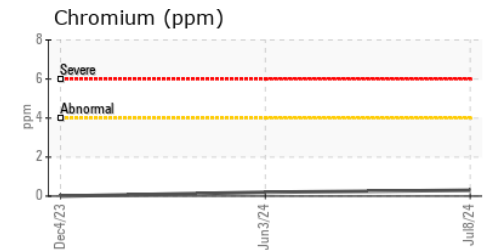
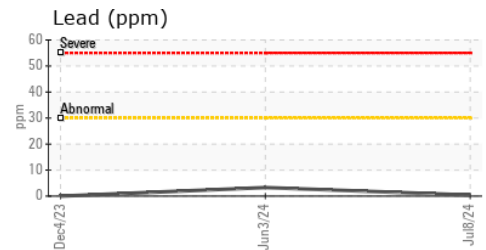
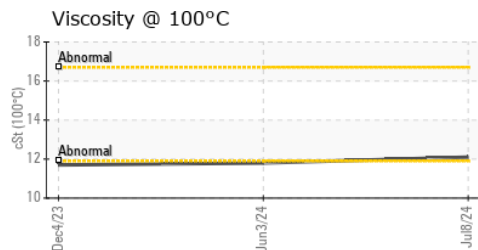
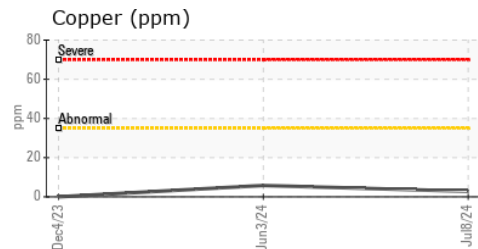
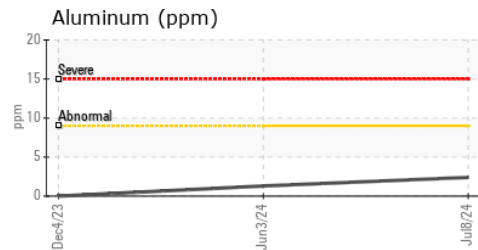
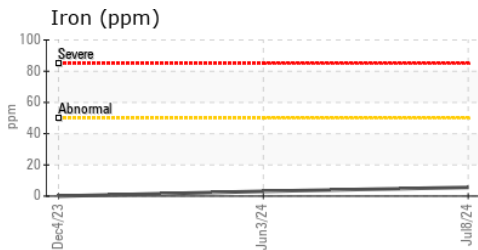
OIL ANALYSIS REPORT



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	12.1	11.8	11.7

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0117274 **Received** : 16 Jul 2024
Lab Number : 06238567 **Tested** : 17 Jul 2024
Unique Number : 11127401 **Diagnosed** : 17 Jul 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

ENERVEST OPERATING - HAYSI B
 1812 CRANESNEST ROAD
 HAYSI, VA
 US 24256
 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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