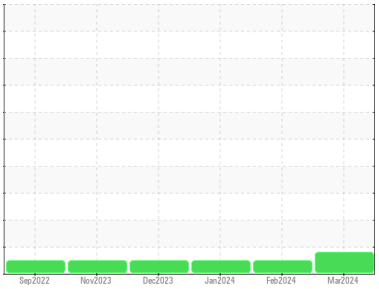
OIL DIAGNOSTICS

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

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

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

▲ Wear

The lead level is abnormal. All other 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		**PCA0117144**	PCA0117139	PCA0111871
Sample Date		Client Info		**05 Mar 2024**	06 Feb 2024	03 Jan 2024
Machine Age	hrs	Client Info		**185258**	184598	183807
Oil Age	hrs	Client Info		**185258**	184598	183807
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**ABNORMAL**	NORMAL	NORMAL

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	**5**	5	6
Chromium	ppm	ASTM D5185m	>4	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>2	**<1**	<1	0
Titanium	ppm	ASTM D5185m		**1**	1	2
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>9	**2**	2	2
Lead	ppm	ASTM D5185m	>30	▲ **39**	5	<1
Copper	ppm	ASTM D5185m	>35	**11**	12	15
Tin	ppm	ASTM D5185m	>4	**1**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	<1
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**1**	<1	2
Manganese	ppm	ASTM D5185m		**<1**	<1	0
Magnesium	ppm	ASTM D5185m		**22**	21	19
Calcium	ppm	ASTM D5185m		**1517**	1404	1396
Phosphorus	ppm	ASTM D5185m		**318**	314	326
Zinc	ppm	ASTM D5185m		**419**	382	351
Sulfur	ppm	ASTM D5185m		**2489**	2469	2573

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	**2**	2	2
Sodium	ppm	ASTM D5185m		**10**	10	4
Potassium	ppm	ASTM D5185m	>20	**2**	2	3
Fuel	%	ASTM D3524	>4.0	**0.3**	0.3	0.0

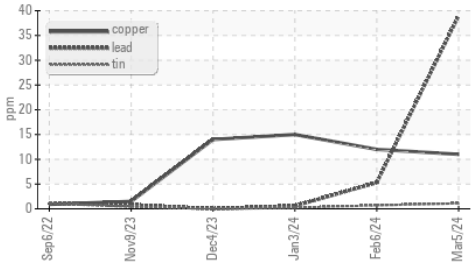
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		**0**	0	0
Nitration	Abs/cm	*ASTM D7624	>20	**7.0**	5.5	4.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	**20.3**	18.0	16.2

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**18.7**	14.2	11.1
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.90**	1.17	0.48
Base Number (BN)	mg KOH/g	ASTM D2896		**3.12**	3.05	2.81

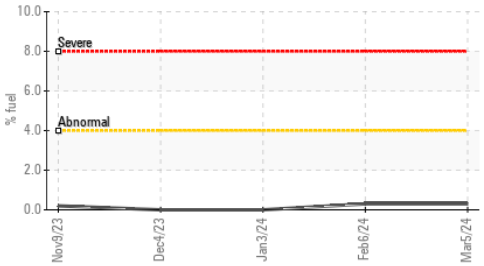
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

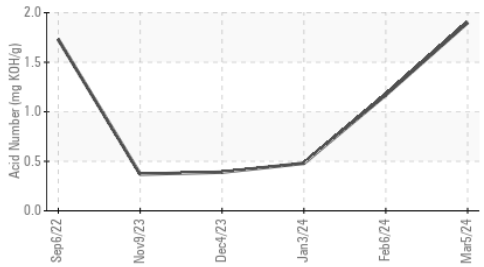
Non-ferrous Metals



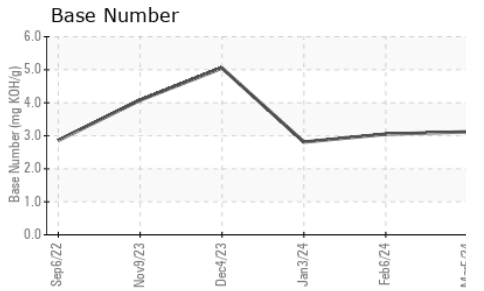
Fuel Dilution



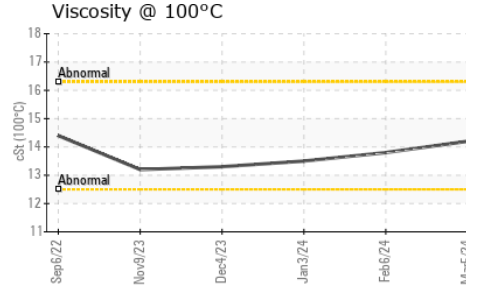
Acid Number



Base Number



Viscosity @ 100°C

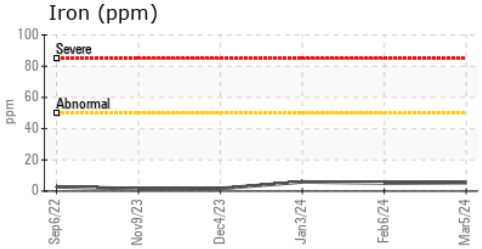


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Sand/Dirt	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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

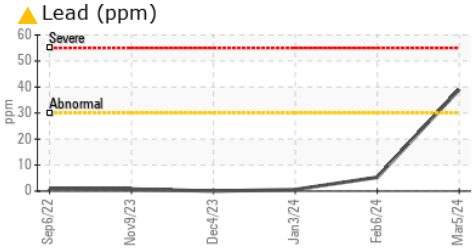
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445		**14.2**	13.8	13.5

GRAPHS

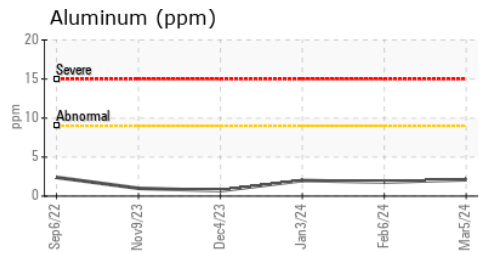
Iron (ppm)



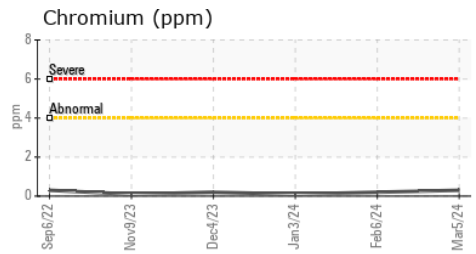
Lead (ppm)



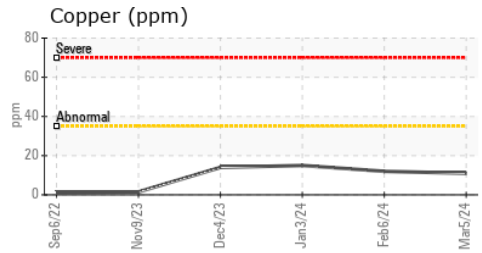
Aluminum (ppm)



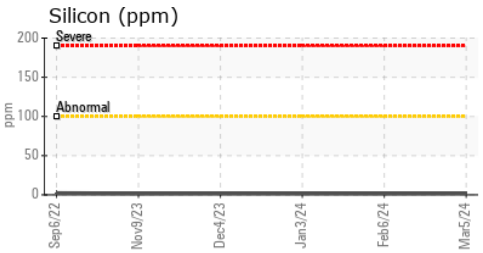
Chromium (ppm)



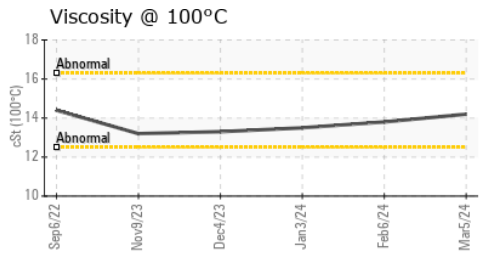
Copper (ppm)



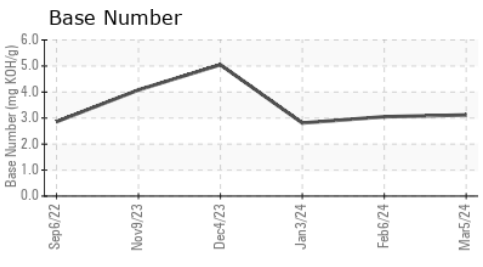
Silicon (ppm)



Viscosity @ 100°C



Base Number



ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0117144
Lab Number : 06113702
Unique Number : 10917199
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

Received : 08 Mar 2024
Tested : 12 Mar 2024
Diagnosed : 12 Mar 2024 - Sean Felton

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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