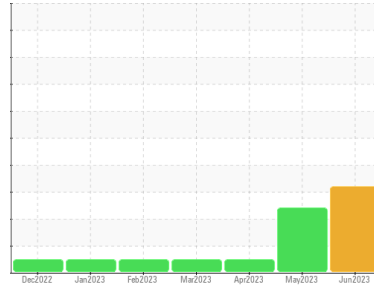


OIL ANALYSIS REPORT

Sample Rating Trend

DEGRADATION


Machine Id
Poplar Gap B

Component
Natural Gas Engine

Fluid
PETRO CANADA SENTRON LD 3000 (--- GAL)

DIAGNOSIS
Recommendation

The oil is near the end of its useful service life, recommend schedule an oil change. Resample at the next service interval to monitor.

Wear

The lead level is abnormal. Bearing and/or bushing wear is indicated.

Contamination

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

Fluid Condition

The AN level is above the recommended limit. The BN level is low.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0091290	PCA0091295	PCA0091287
Sample Date	Client Info	06 Jun 2023	01 May 2023	03 Apr 2023
Machine Age	hrs	80296	79438	78786
Oil Age	hrs	5607	4749	4097
Oil Changed	Client Info	Not Chngd	Not Chngd	Not Chngd
Sample Status		ABNORMAL	ABNORMAL	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	11	10	10
Chromium	ppm	ASTM D5185m >4	<1	0	<1
Nickel	ppm	ASTM D5185m >2	<1	0	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	<1	0	0
Aluminum	ppm	ASTM D5185m >9	3	6	<1
Lead	ppm	ASTM D5185m >30	▲ 32	23	17
Copper	ppm	ASTM D5185m >35	5	2	3
Tin	ppm	ASTM D5185m >4	<1	0	<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 5	0	0	<1
Barium	ppm	ASTM D5185m 1	0	0	0
Molybdenum	ppm	ASTM D5185m 2	4	6	5
Manganese	ppm	ASTM D5185m 1	<1	0	<1
Magnesium	ppm	ASTM D5185m 5	18	39	21
Calcium	ppm	ASTM D5185m 1220	1761	1815	1553
Phosphorus	ppm	ASTM D5185m 298	342	366	316
Zinc	ppm	ASTM D5185m 350	457	430	407
Sulfur	ppm	ASTM D5185m 1995	3459	3184	2493

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >+100	2	2	3
Sodium	ppm	ASTM D5185m	1	2	<1
Potassium	ppm	ASTM D5185m >20	1	1	1
Fuel	%	ASTM D3524 >4.0	0.5	0.2	0.4

INFRA-RED

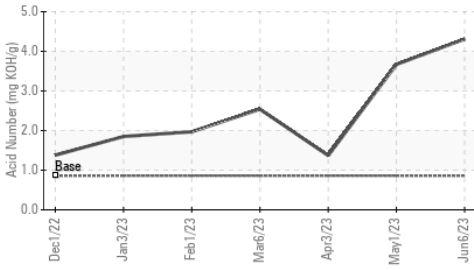
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	0.1	0	0
Nitration	Abs/cm	*ASTM D7624 >20	13.1	12.2	11.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	26.3	23.1	23.4

FLUID DEGRADATION

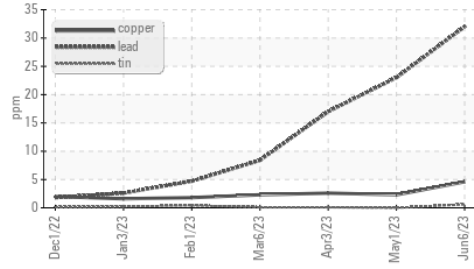
method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	29.3	25.7	24.0
Acid Number (AN)	mg KOH/g	ASTM D8045 0.86	▲ 4.31	▲ 3.67	1.37
Base Number (BN)	mg KOH/g	ASTM D2896 3.85	▲ 3.28	▲ 2.09	3.74

OIL ANALYSIS REPORT

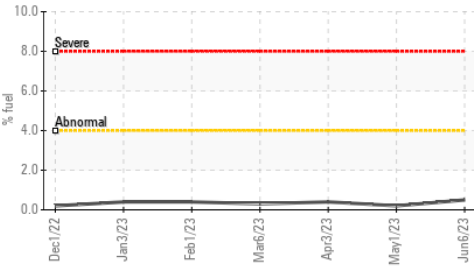
▲ Acid Number



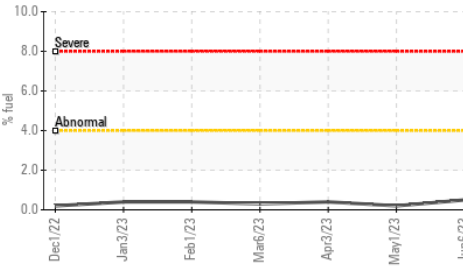
▲ Non-ferrous Metals



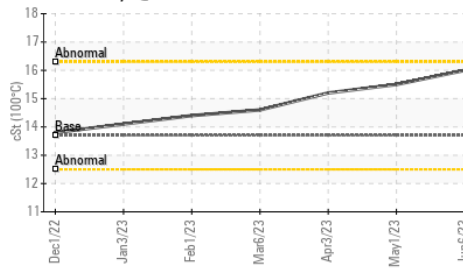
▲ Fuel Dilution



▲ Fuel Dilution



▲ Viscosity @ 100°C

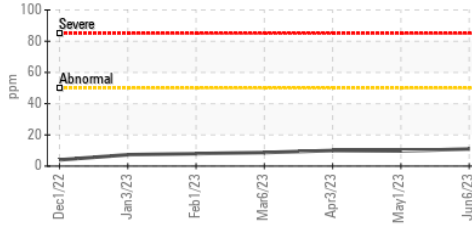


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

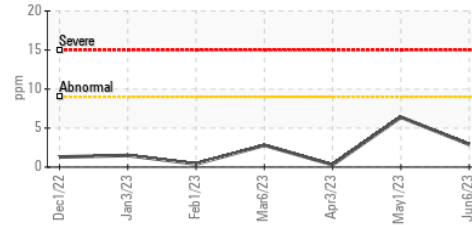
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	13.7	16.0	15.5

GRAPHS

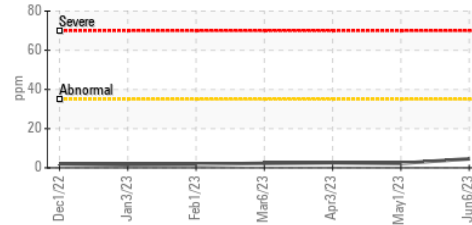
Iron (ppm)



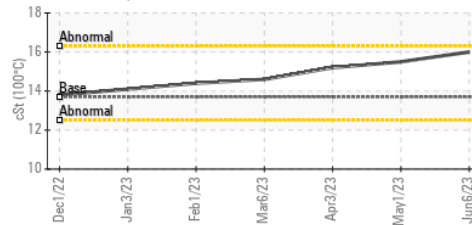
Aluminum (ppm)



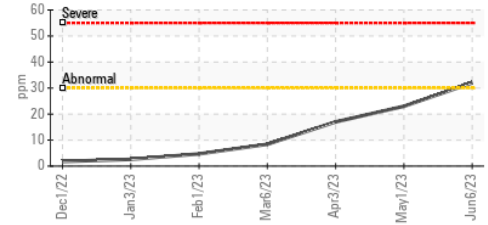
Copper (ppm)



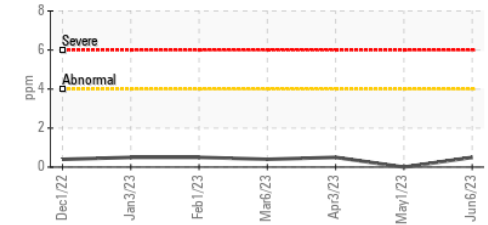
Viscosity @ 100°C



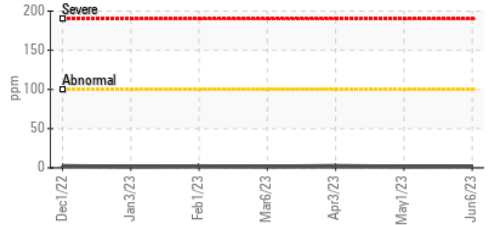
▲ Lead (ppm)



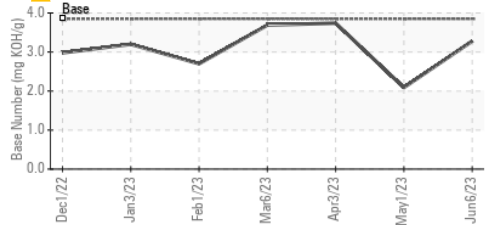
Chromium (ppm)



Silicon (ppm)



▲ Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0091290 **Received** : 13 Jun 2023
Lab Number : 05872790 **Tested** : 15 Jun 2023
Unique Number : 10512574 **Diagnosed** : 15 Jun 2023 - Angela Borella
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

ENERVEST OPERATING - POPLAR GAP B
 1663 CRESCENT ROAD
 GRUNDY, VA
 US 24614
 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)

T:
F: