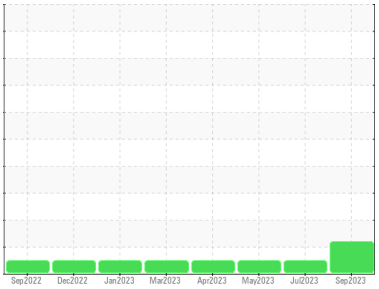
OIL ANALYSIS REPORT

Sample Rating Trend



PH

Machine Id
SIEMENS PINNACLE NG 1
Component
Natural Gas Engine
Fluid
PETRO CANADA SENTRON LD 5000 (--- GAL)

DIAGNOSIS

Recommendation
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil.

Fluid Condition
The i-pH level is abnormally low. The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PC0073818**	PC0074650	PC0074656
Sample Date		Client Info		**08 Sep 2023**	17 Jul 2023	31 May 2023
Machine Age	hrs	Client Info		**8077**	6812	5691
Oil Age	hrs	Client Info		**1265**	1121	1040
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	**3**	2	2
Chromium	ppm	ASTM D5185(m)	>4	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>2	**<1**	<1	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)	>3	**<1**	<1	<1
Aluminum	ppm	ASTM D5185(m)	>9	**1**	2	2
Lead	ppm	ASTM D5185(m)	>30	**1**	<1	<1
Copper	ppm	ASTM D5185(m)	>35	**1**	<1	<1
Tin	ppm	ASTM D5185(m)	>4	**0**	0	0
Antimony	ppm	ASTM D5185(m)		**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	**1**	2	2
Barium	ppm	ASTM D5185(m)	3	**<1**	<1	<1
Molybdenum	ppm	ASTM D5185(m)	0	**<1**	1	<1
Manganese	ppm	ASTM D5185(m)	0	**0**	0	0
Magnesium	ppm	ASTM D5185(m)	4	**14**	19	21
Calcium	ppm	ASTM D5185(m)	1727	**2079**	1996	1990
Phosphorus	ppm	ASTM D5185(m)	272	**308**	312	311
Zinc	ppm	ASTM D5185(m)	333	**389**	388	395
Sulfur	ppm	ASTM D5185(m)	3415	**2892**	2895	2888
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	**2**	2	2
Sodium	ppm	ASTM D5185(m)		**1**	1	1
Potassium	ppm	ASTM D5185(m)	>20	**0**	0	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**5.7**	5.7	5.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	**19.4**	18.6	18.5

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**12.2**	10.9	10.9
Acid Number (AN)	mg KOH/g	ASTM D974*	1.1	**2.38**	2.22	2.45
Base Number (BN)	mg KOH/g	ASTM D2896*	4.9	**3.53**	3.81	3.89
i-pH	Scale 0-14	ASTM D7946*	<4.5	▲ **4.48**	5.12	5.19

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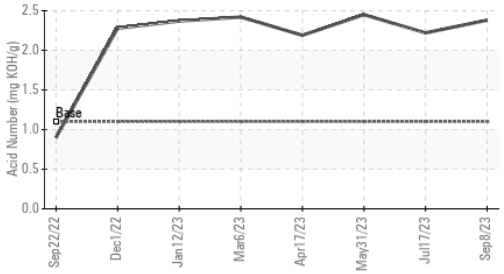
Acid Number

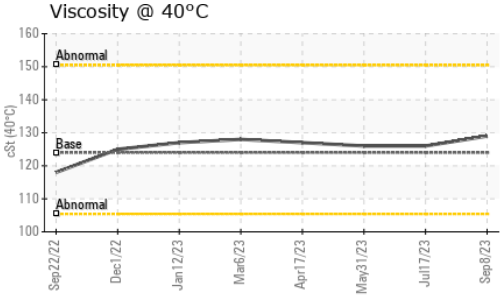


VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

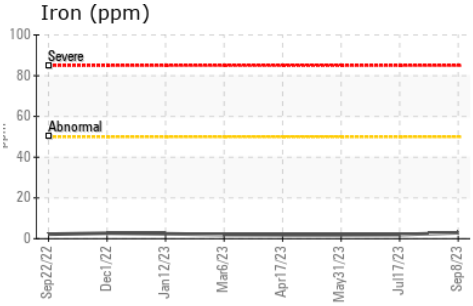
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	124	**129**	126	126
Visc @ 100°C	cSt	ASTM D7279(m)	13.48	**13.8**	13.7	13.7
Viscosity Index (VI)	Scale	ASTM D2270*	104	**103**	105	105

GRAPHS

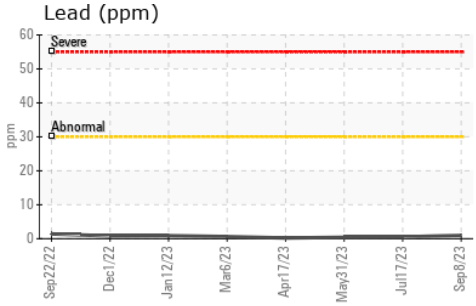
Viscosity @ 40°C



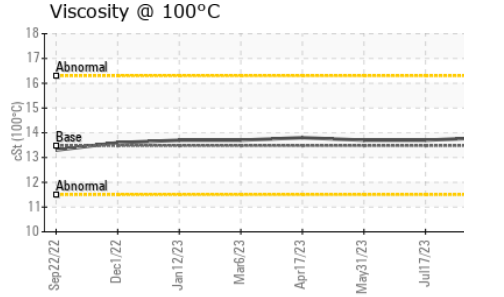
Iron (ppm)



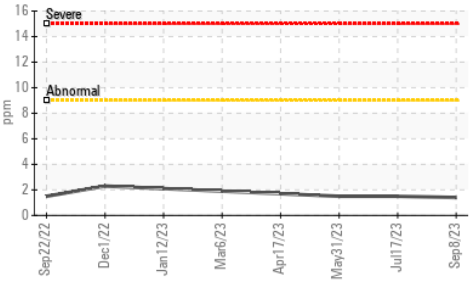
Lead (ppm)



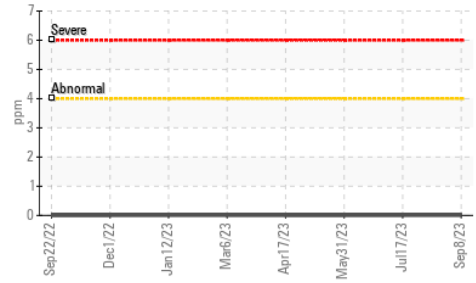
Viscosity @ 100°C



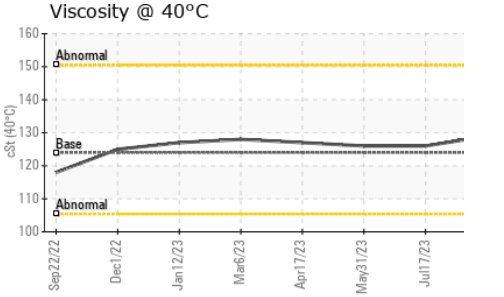
Aluminum (ppm)



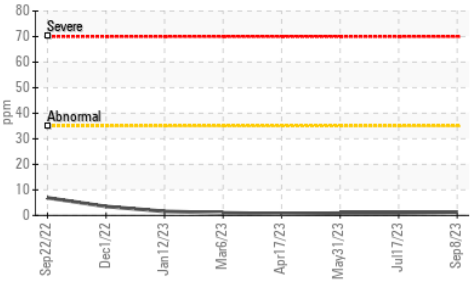
Chromium (ppm)



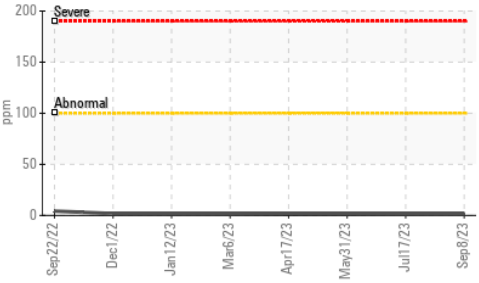
Viscosity @ 40°C



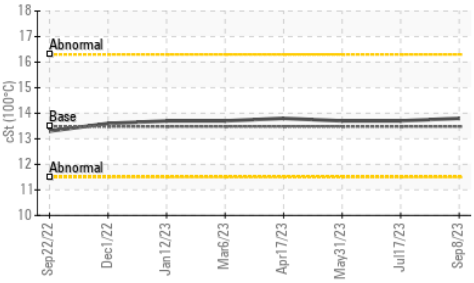
Copper (ppm)



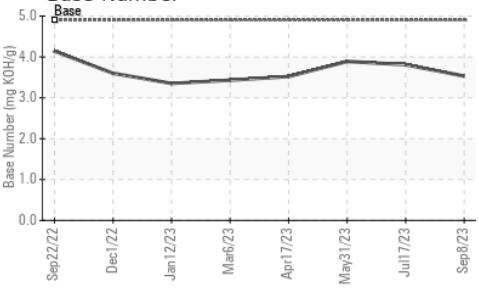
Silicon (ppm)



Viscosity @ 100°C



Base Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0073818 **Received** : 19 Oct 2023
Lab Number : 02590245 **Diagnosed** : 20 Oct 2023
Unique Number : 5659311 **Diagnostician** : Kevin Marson
Test Package : MOB 2 (Additional Tests: i-pH, KV40, TAN Auto, TAN Man, VI)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

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