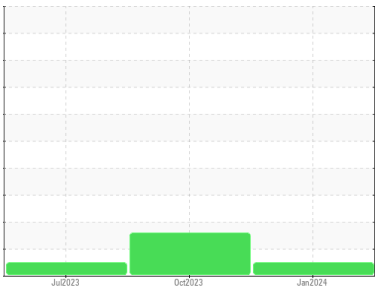
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
DAEWOO TOWERSIDE PG1
Component
Propane Engine
Fluid
PETRO CANADA SENTRON LD 5000 (--- GAL)

DIAGNOSIS

Recommendation
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 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		**PC0078885**	PC0073810	PC0073694
Sample Date		Client Info		**31 Jan 2024**	27 Oct 2023	28 Jul 2023
Machine Age	hrs	Client Info		**12045**	11485	10835
Oil Age	hrs	Client Info		**570**	640	0
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	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 D5185(m)	>100	**23**	29	34
Chromium	ppm	ASTM D5185(m)	>25	**5**	5	6
Nickel	ppm	ASTM D5185(m)	>5	**<1**	1	1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)	>5	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>20	**5**	6	5
Lead	ppm	ASTM D5185(m)	>25	**2**	3	4
Copper	ppm	ASTM D5185(m)	>35	**3**	6	17
Tin	ppm	ASTM D5185(m)	>8	**<1**	<1	<1
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**	<1	1
Barium	ppm	ASTM D5185(m)	3	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	0	**<1**	<1	<1
Manganese	ppm	ASTM D5185(m)	0	**0**	<1	1
Magnesium	ppm	ASTM D5185(m)	4	**11**	10	5
Calcium	ppm	ASTM D5185(m)	1727	**2044**	2013	1223
Phosphorus	ppm	ASTM D5185(m)	272	**325**	346	629
Zinc	ppm	ASTM D5185(m)	333	**387**	414	751
Sulfur	ppm	ASTM D5185(m)	3415	**2874**	3011	2331
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

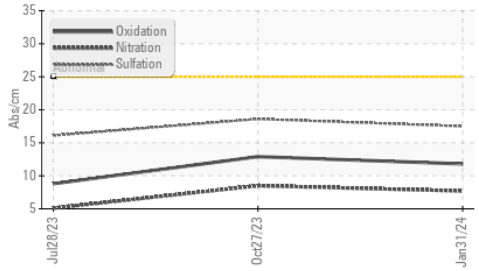
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	**2**	3	3
Sodium	ppm	ASTM D5185(m)		**4**	1	2
Potassium	ppm	ASTM D5185(m)	>20	**<1**	<1	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**7.7**	8.5	5.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	**17.5**	18.6	16.1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**11.8**	12.9	8.8
Acid Number (AN)	mg KOH/g	ASTM D974*	1.1	**2.51**	2.86	1.69

OIL ANALYSIS REPORT

FT-IR (Direct Trend)

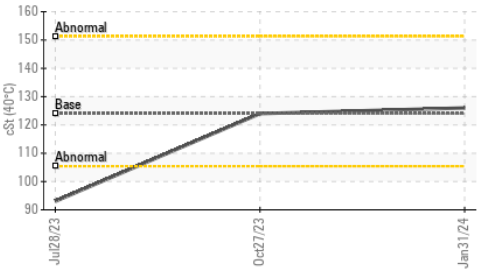


VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	**NEG**	▲ .2%	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

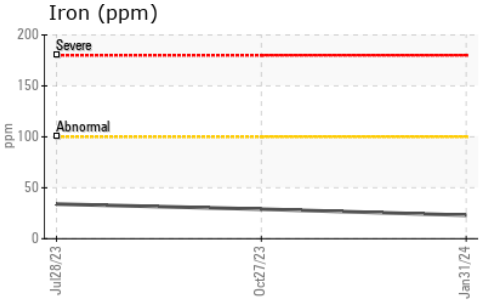
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	124.0	**126**	124	93.0
Visc @ 100°C	cSt	ASTM D7279(m)	13.4	**13.6**	13.5	13.3
Viscosity Index (VI)	Scale	ASTM D2270*	104	**103**	104	142

GRAPHS

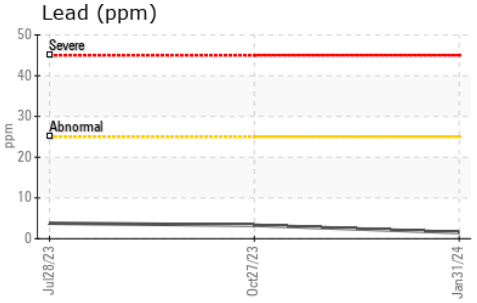
Viscosity @ 40°C



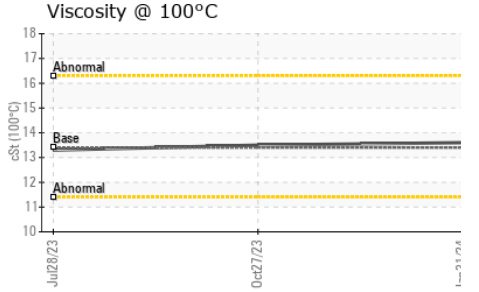
Iron (ppm)



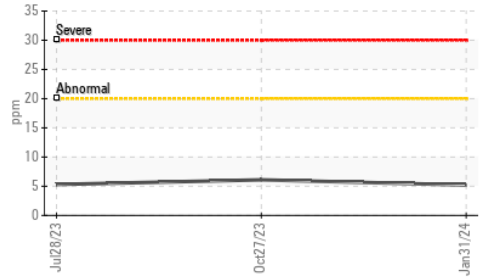
Lead (ppm)



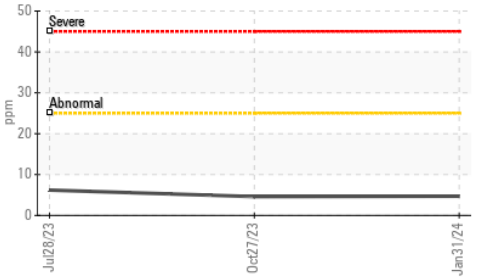
Viscosity @ 100°C



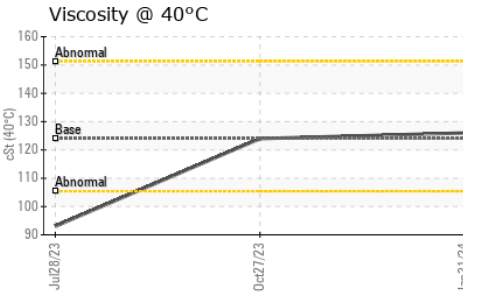
Aluminum (ppm)



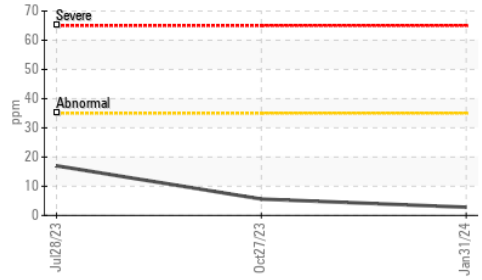
Chromium (ppm)



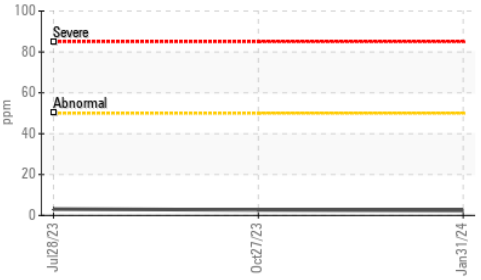
Viscosity @ 40°C



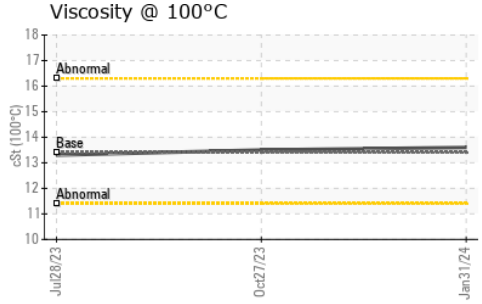
Copper (ppm)



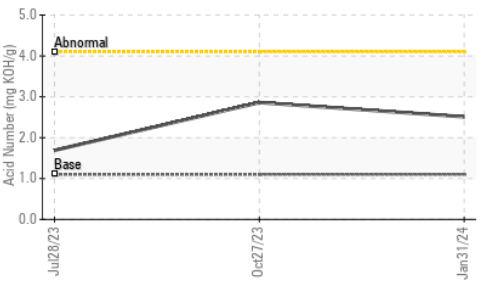
Silicon (ppm)



Viscosity @ 100°C



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0078885 **Received** : 04 Apr 2024
Lab Number : 02626590 **Tested** : 05 Apr 2024
Unique Number : 5759722 **Diagnosed** : 05 Apr 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: KV40, 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.

Martin Energy Group Canada
5531 Schummer Line
Linwood, ON
CA N0B 2A0
Contact: J Wagler
jwagler@martinenergygroup.com
T:
F: