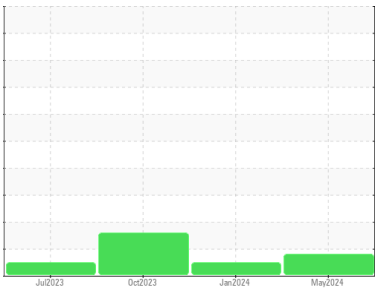
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

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

DIAGNOSIS

Recommendation
Please note that all wear metal and contaminant levels are being considered accumulative. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 2 test kits, this testkit includes BN to determine the suitability of the oil for continued use.

Wear
Lead ppm levels are marginal. A sharp increase in the lead level is noted. Bearing wear is indicated.

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

Fluid Condition
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0915629**	PC0078885	PC0073810
Sample Date		Client Info		**27 May 2024**	31 Jan 2024	27 Oct 2023
Machine Age	hrs	Client Info		**12762**	12045	11485
Oil Age	hrs	Client Info		**717**	570	640
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**MARGINAL**	NORMAL	ABNORMAL

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	**20**	23	29
Chromium	ppm	ASTM D5185(m)	>25	**4**	5	5
Nickel	ppm	ASTM D5185(m)	>5	**2**	<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**	5	6
Lead	ppm	ASTM D5185(m)	>25	▲ **20**	2	3
Copper	ppm	ASTM D5185(m)	>35	**50**	3	6
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	**3**	1	<1
Barium	ppm	ASTM D5185(m)	3	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	0	**2**	<1	<1
Manganese	ppm	ASTM D5185(m)	0	**<1**	0	<1
Magnesium	ppm	ASTM D5185(m)	4	**9**	11	10
Calcium	ppm	ASTM D5185(m)	1727	**2015**	2044	2013
Phosphorus	ppm	ASTM D5185(m)	272	**330**	325	346
Zinc	ppm	ASTM D5185(m)	333	**403**	387	414
Sulfur	ppm	ASTM D5185(m)	3415	**2964**	2874	3011
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

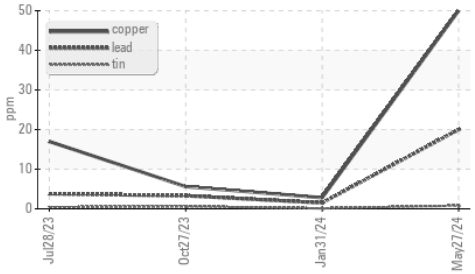
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	**3**	2	3
Sodium	ppm	ASTM D5185(m)		**44**	4	1
Potassium	ppm	ASTM D5185(m)	>20	**4**	<1	<1
Glycol	%	ASTM D7922*		**0.0**	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**7.8**	7.7	8.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	**17.4**	17.5	18.6

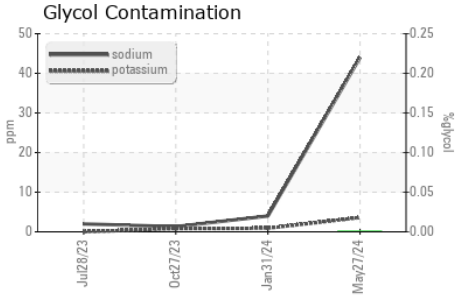
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**12.1**	11.8	12.9

OIL ANALYSIS REPORT

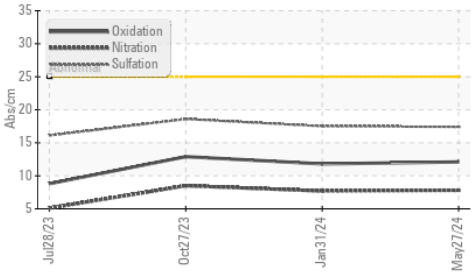
Non-ferrous Metals



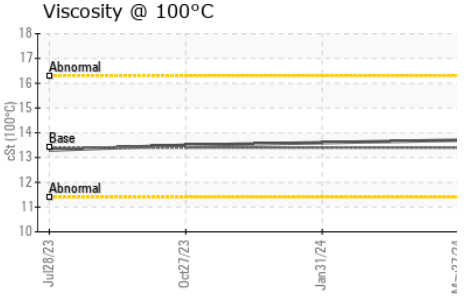
Glycol Contamination



FT-IR (Direct Trend)



Viscosity @ 100°C

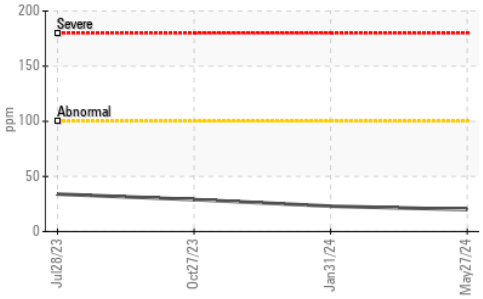


VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	**NEG**	NEG	▲ .2%
Free Water	scalar	Visual*		**NEG**	NEG	NEG

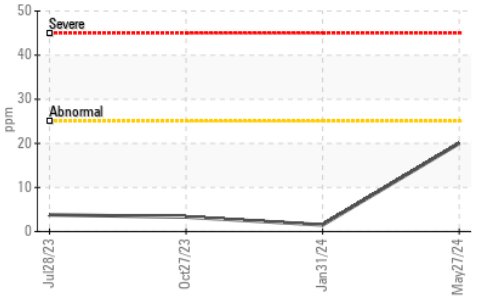
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	13.4	**13.7**	13.6	13.5

GRAPHS

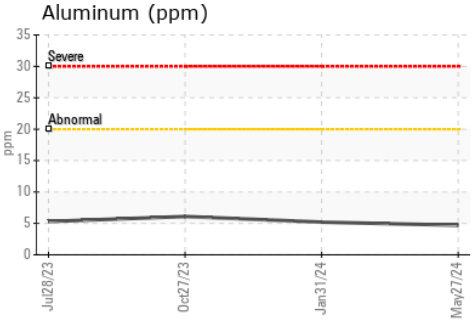
Iron (ppm)



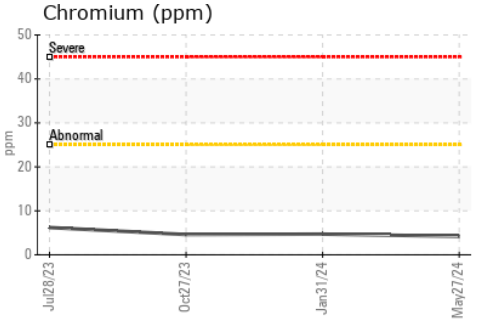
Lead (ppm)



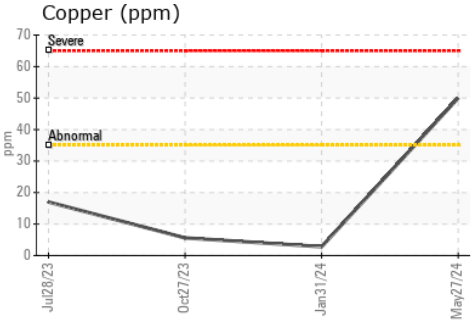
Aluminum (ppm)



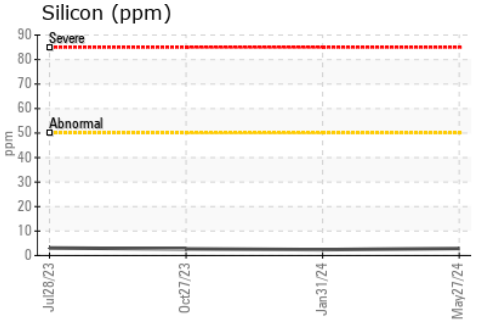
Chromium (ppm)



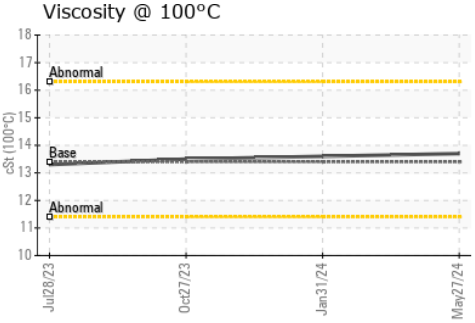
Copper (ppm)



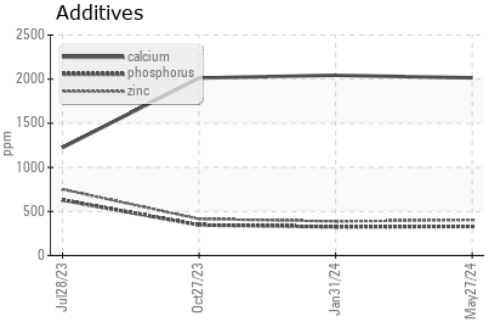
Silicon (ppm)



Viscosity @ 100°C



Additives



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0915629 **Received** : 11 Jul 2024
Lab Number : 02647335 **Tested** : 12 Jul 2024
Unique Number : 5812887 **Diagnosed** : 15 Jul 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: GLYCOL)

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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