MOB I

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
60085
Component
Diesel Engine
Fluid
VALVOLINE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

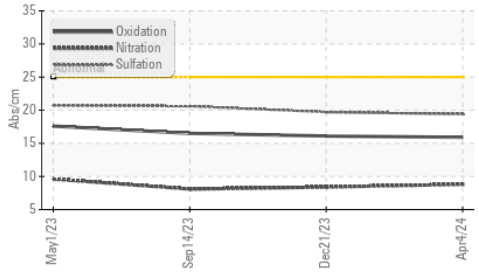
There is no indication of any contamination in the oil.

FLUID CONDITION

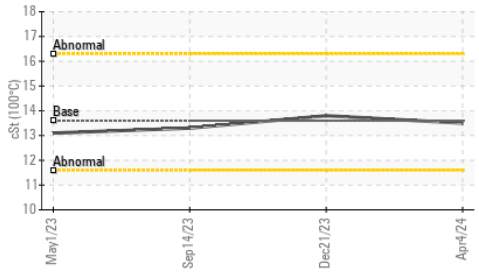
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0911683**	WC0887265	WC0809078
Sample Date		Client Info		**04 Apr 2024**	21 Dec 2023	14 Sep 2023
Machine Age	kms	Client Info		**97347**	73545	48744
Oil Age	kms	Client Info		**10000**	10000	10000
Filter Age	kms	Client Info		**10000**	10000	10000
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>75	**11**	15	21
Chromium	ppm	ASTM D5185(m)	>5	**<1**	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	**0**	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	**0**	0	0
Silver	ppm	ASTM D5185(m)	>2	**0**	<1	1
Aluminum	ppm	ASTM D5185(m)	>15	**1**	2	2
Lead	ppm	ASTM D5185(m)	>25	**0**	0	<1
Copper	ppm	ASTM D5185(m)	>100	**2**	3	21
Tin	ppm	ASTM D5185(m)	>4	**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Silicon	ppm	ASTM D5185(m)	>25	**2**	4	7
Potassium	ppm	ASTM D5185(m)	>20	**<1**	7	2
Fuel		WC Method	>3.0	**<1.0**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	ASTM D7844*	>6	**0.2**	0.2	0.2
Nitration	Abs/cm	ASTM D7624*	>20	**8.8**	8.4	8.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	**19.4**	19.7	20.6
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185(m)		**4**	4	5
Boron	ppm	ASTM D5185(m)	39	**1**	<1	4
Barium	ppm	ASTM D5185(m)	1	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	49	**58**	59	59
Manganese	ppm	ASTM D5185(m)	1	**0**	0	<1
Magnesium	ppm	ASTM D5185(m)	616	**962**	982	961
Calcium	ppm	ASTM D5185(m)	1554	**1021**	1063	1060
Phosphorus	ppm	ASTM D5185(m)	899	**975**	1002	1042
Zinc	ppm	ASTM D5185(m)	1069	**1165**	1212	1192
Sulfur	ppm	ASTM D5185(m)	2624	**2429**	2679	2414
Oxidation	Abs/.1mm	ASTM D7414*	>25	**15.9**	16.1	16.5
Visc @ 100°C	cSt	ASTM D7279(m)	13.6	**13.5**	13.8	13.3

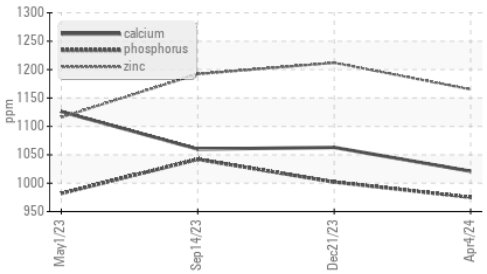
FT-IR (Direct Trend)



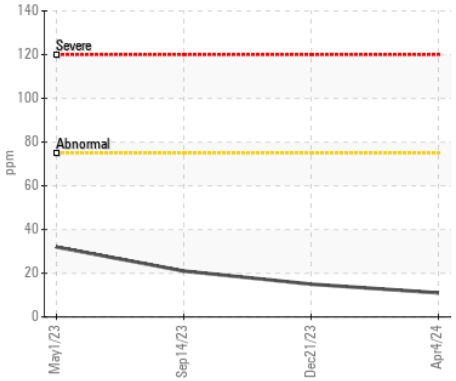
Viscosity @ 100°C



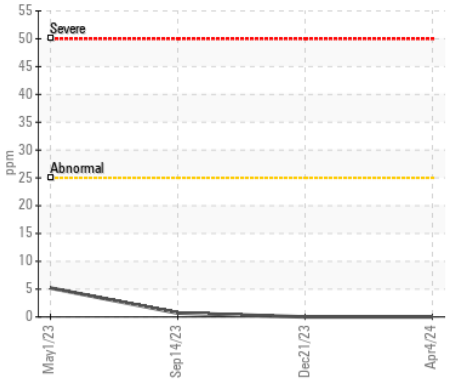
Additives



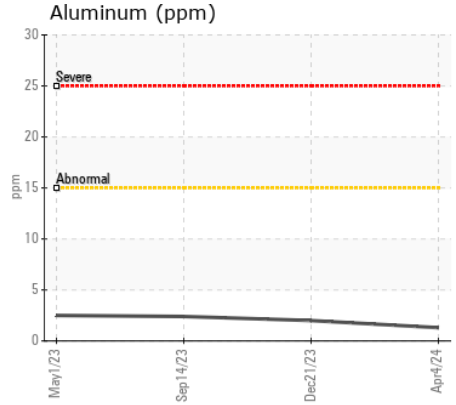
Iron (ppm)



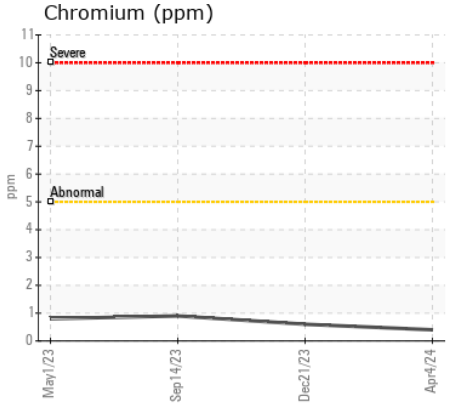
Lead (ppm)



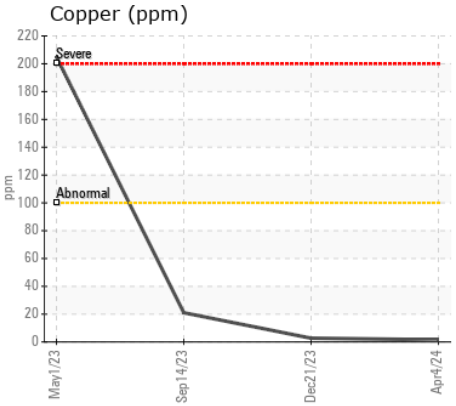
Aluminum (ppm)



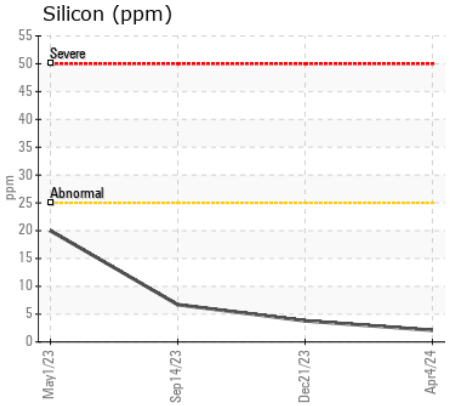
Chromium (ppm)



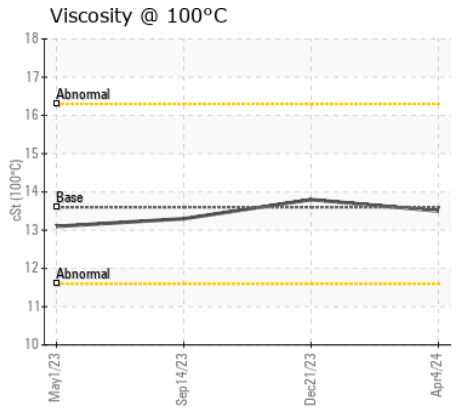
Copper (ppm)



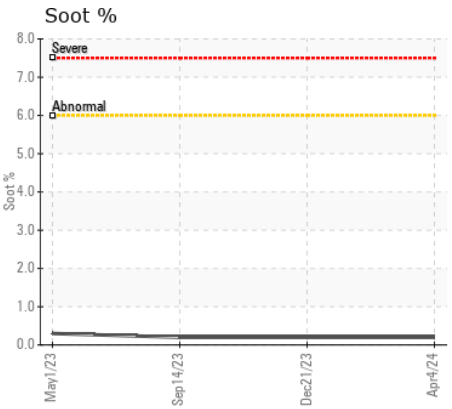
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0911683
Lab Number : 02626916
Unique Number : 5760048
Test Package : MOB 1

Received : 05 Apr 2024
Tested : 05 Apr 2024
Diagnosed : 05 Apr 2024 - Wes Davis

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.

CITY OF PETERBOROUGH
791 WEBBER AVENUE,, MUNICIPAL OPERATIONS CENTRE
PETERBOROUGH, ON
CA K9J 8N3
Contact: Bryan Powers
bpowers@peterborough.ca
T: (705)745-1386
F: (705)743-3223