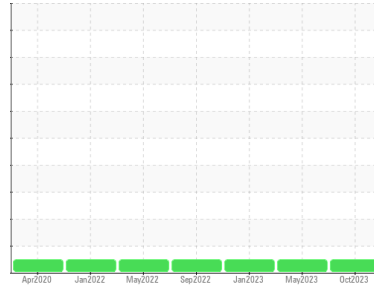




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
60080
 Component
Diesel Engine
 Fluid
VALVOLINE 15W40 (--- 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 condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0809128	WC0770734	WC0770713
Sample Date	Client Info			17 Oct 2023	02 May 2023	05 Jan 2023
Machine Age	kms	Client Info		274112	248525	223861
Oil Age	kms	Client Info		10000	10000	10000
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	20	9	10
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	<1	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	2	2	2
Lead	ppm	ASTM D5185(m)	>40	1	<1	<1
Copper	ppm	ASTM D5185(m)	>330	7	5	3
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Antimony	ppm	ASTM D5185(m)		0	<1	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)	39	3	31	4
Barium	ppm	ASTM D5185(m)	1	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	49	67	15	59
Manganese	ppm	ASTM D5185(m)	1	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	616	1099	761	959
Calcium	ppm	ASTM D5185(m)	1554	1213	1459	1108
Phosphorus	ppm	ASTM D5185(m)	899	1082	1119	1057
Zinc	ppm	ASTM D5185(m)	1069	1380	1197	1207
Sulfur	ppm	ASTM D5185(m)	2624	2755	3064	2572
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

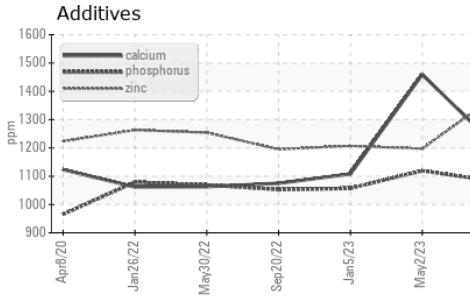
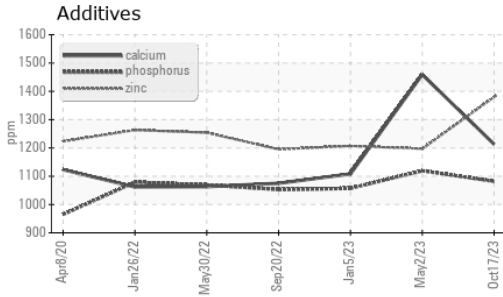
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	5	4	3
Sodium	ppm	ASTM D5185(m)		8	2	6
Potassium	ppm	ASTM D5185(m)	>20	<1	1	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.5	0.3	0.1
Nitration	Abs/cm	ASTM D7624*	>20	9.6	8.9	8.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.1	21.6	21.1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.0	16.2	17.6



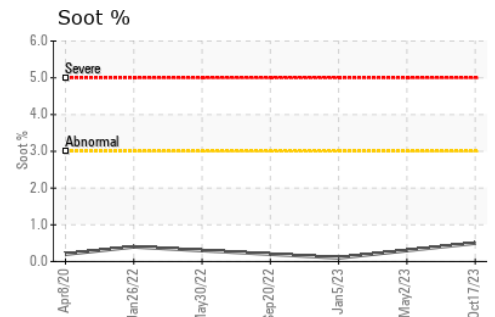
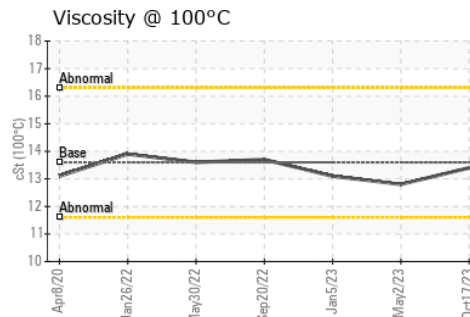
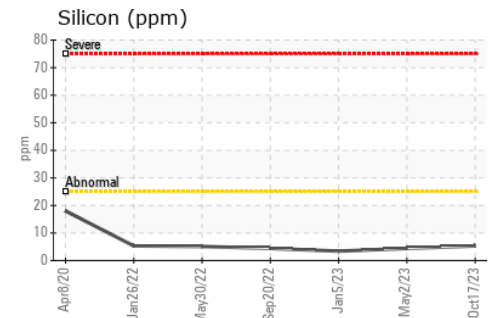
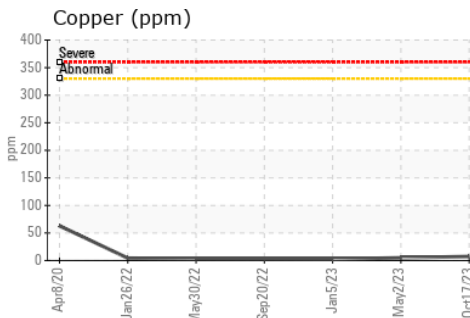
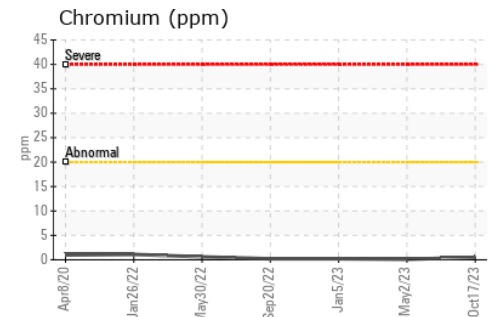
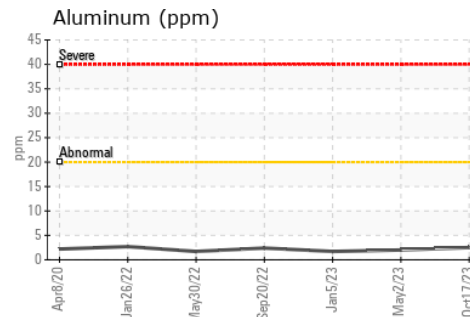
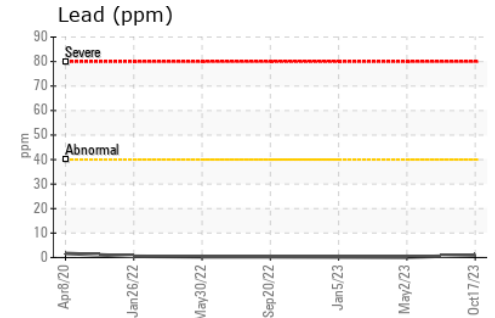
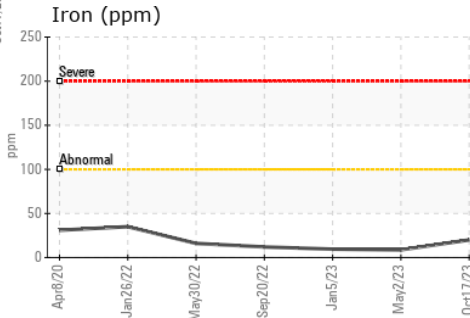
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	13.6	13.4	12.8

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0809128
Lab Number : 02592881
Unique Number : 5669960
Test Package : MOB 1

CITY OF PETERBOROUGH
 791 WEBBER AVENUE., MUNICIPAL OPERATIONS CENTRE
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 CA K9J 8N3
 Contact: Frank Curran
 fcurran@peterborough.ca
 T: (705)742-7777
 F: (705)743-3223

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.