



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
1685
 Component
Rear Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0925689	WC0905419	WC0887380
Sample Date		Client Info		11 Apr 2024	21 Feb 2024	04 Jan 2024
Machine Age	hrs	Client Info		24816	24333	23822
Oil Age	hrs	Client Info		483	511	512
Filter Age	hrs	Client Info		483	511	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	22	18	16
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	3	2	2
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
Copper	ppm	ASTM D5185(m)	>330	1	1	1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

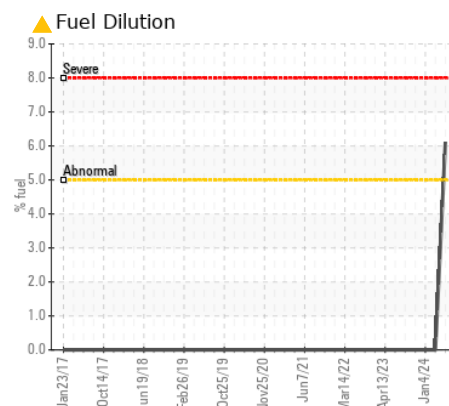
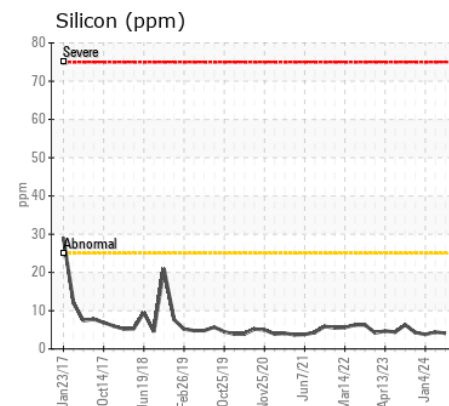
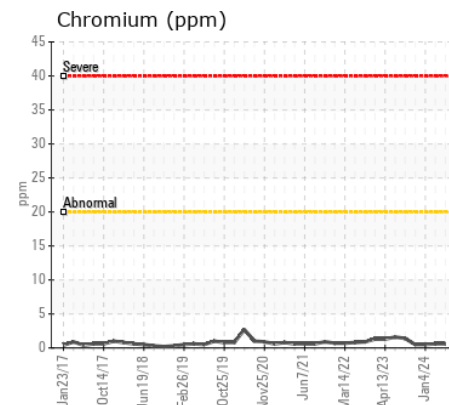
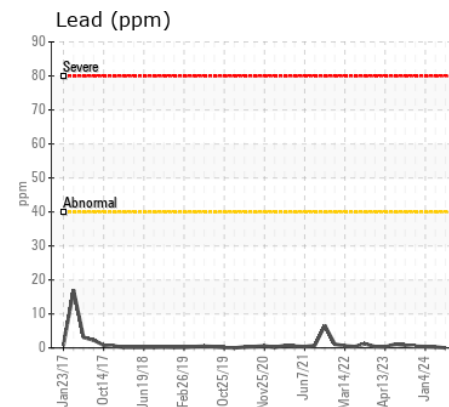
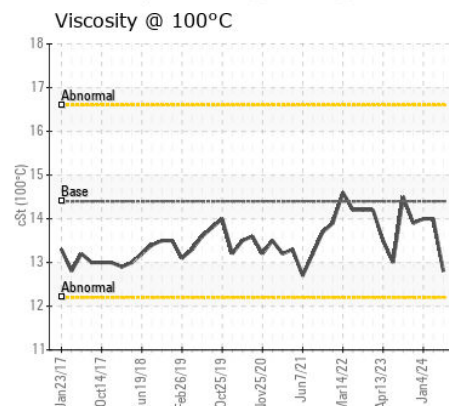
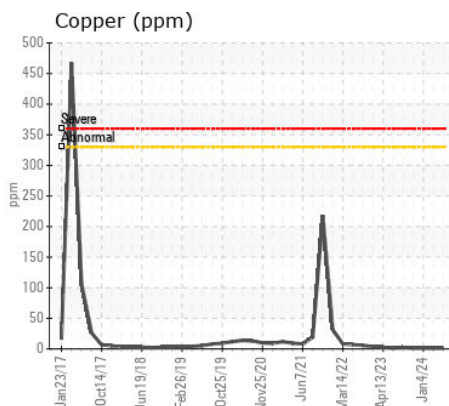
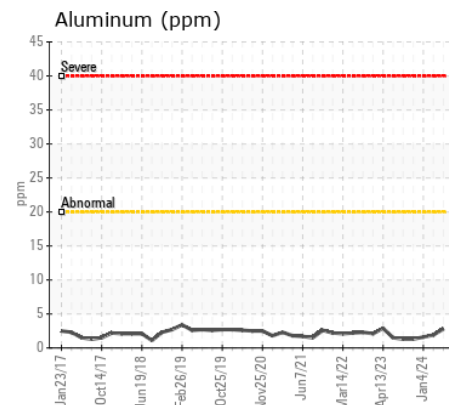
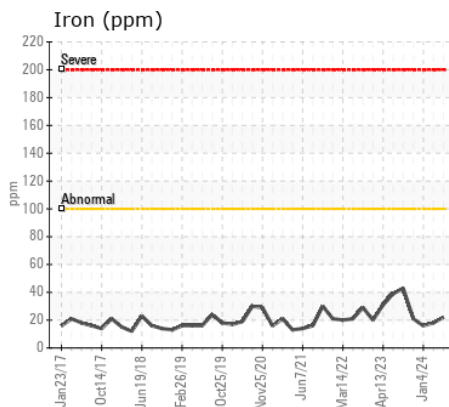
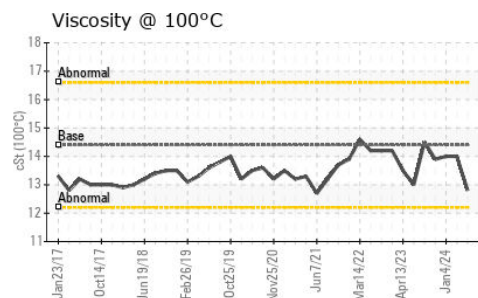
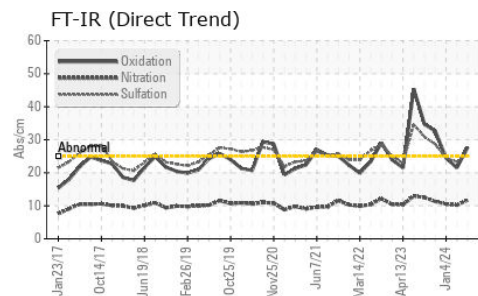
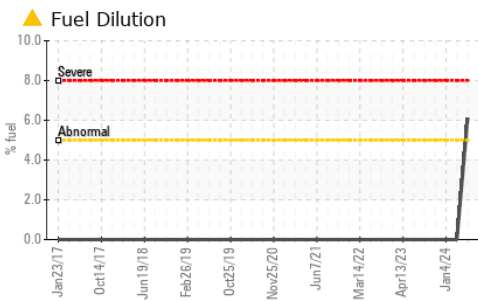
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	4	4
Potassium	ppm	ASTM D5185(m)	>20	0	<1	0
Fuel	%	ASTM D7593*	>5	▲ 6.1	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.9	0.8	0.6
Nitration	Abs/cm	ASTM D7624*	>20	11.7	10.2	10.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.0	23.3	24.5
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)	>158	2	1	1
Boron	ppm	ASTM D5185(m)	250	2	1	3
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	56	57	59
Manganese	ppm	ASTM D5185(m)		<1	0	0
Magnesium	ppm	ASTM D5185(m)	450	931	932	956
Calcium	ppm	ASTM D5185(m)	3000	1007	1153	1059
Phosphorus	ppm	ASTM D5185(m)	1150	941	981	975
Zinc	ppm	ASTM D5185(m)	1350	1124	1175	1156
Sulfur	ppm	ASTM D5185(m)	4250	2304	2730	2573
Oxidation	Abs/.1mm	ASTM D7414*	>25	27.7	21.5	24.5
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	12.8	14.0	14.0



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0925689 **Received** : 25 Apr 2024
Lab Number : 02631278 **Tested** : 26 Apr 2024
Unique Number : 5772431 **Diagnosed** : 26 Apr 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: FUELDILUTION, PercentFuel)

KINGSTON TRANSIT
 1181 JOHN COUNTER BLVD
 KINGSTON, ON
 CA K7K 6C7
 Contact: Brent Gunter
 bgunter@cityofkingston.ca
 T: (613)546-4291
 F: (613)542-1504

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.