



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>SEVERE</b>
FLUID CONDITION	<b>ABNORMAL</b>

Machine Id  
**MANITOU MT625 FOR410 (S/N MLT625-75H-ST3B)**

Component  
**Diesel Engine**

Fluid  
**SHELL 15W40 (--- GAL)**

## RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0892402</b>	WC0650144	WC0584456
Sample Date		Client Info		<b>03 Jan 2024</b>	02 May 2023	10 Jul 2021
Machine Age	hrs	Client Info		<b>14578</b>	12872	9535
Oil Age	hrs	Client Info		<b>0</b>	0	250
Filter Age	hrs	Client Info		<b>0</b>	0	250
Oil Changed		Client Info		<b>N/A</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>SEVERE</b>	NORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>7</b>	11	47
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	2	3
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	2	2
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

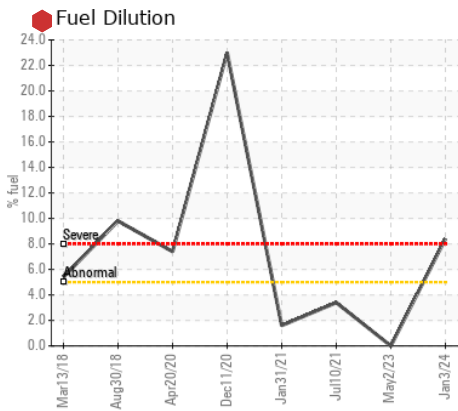
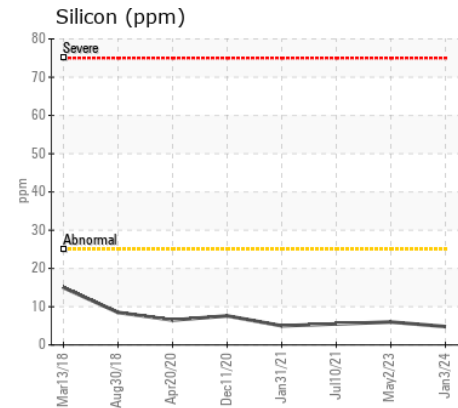
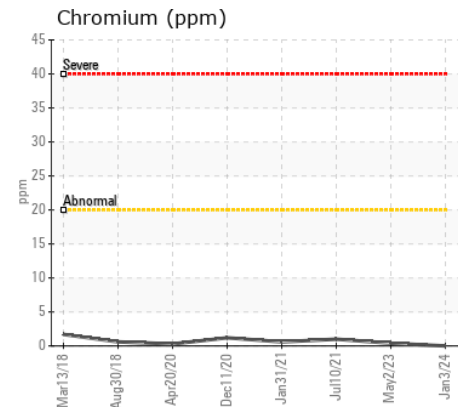
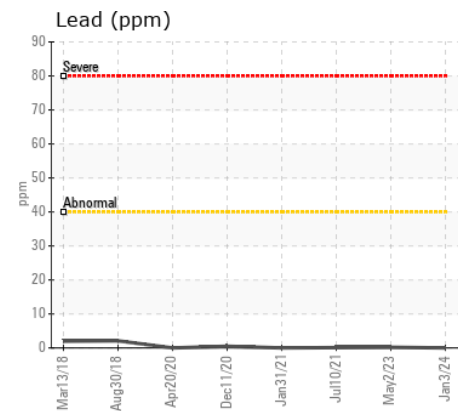
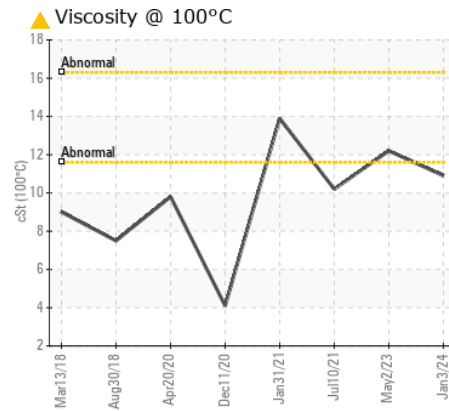
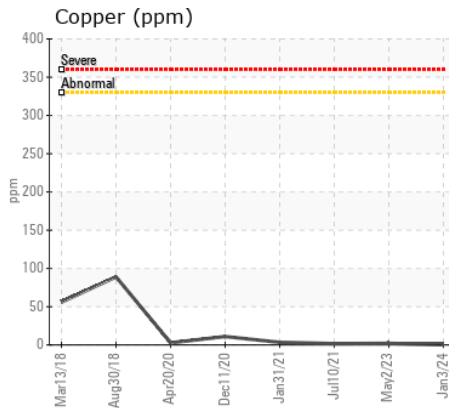
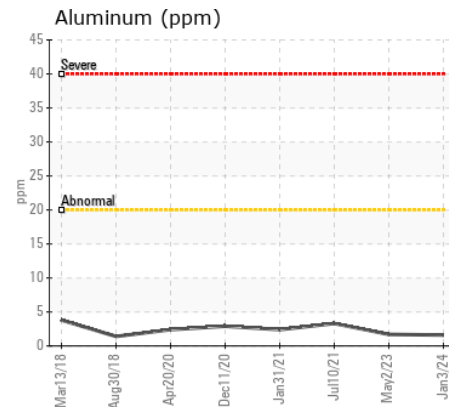
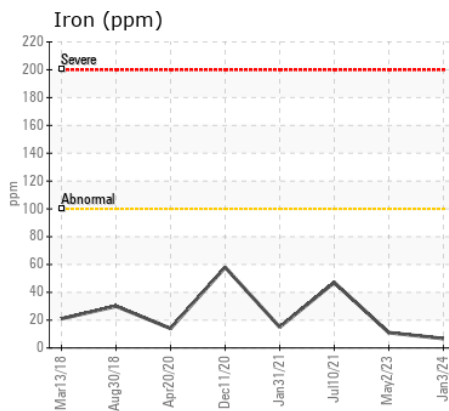
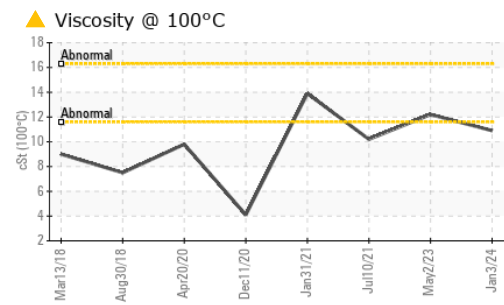
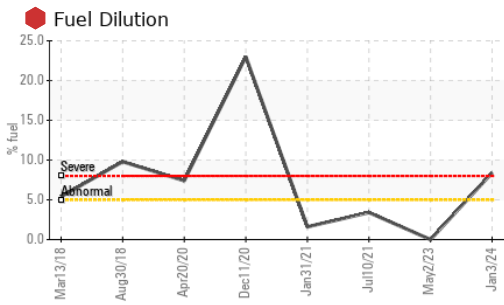
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>5</b>	6	6
Potassium	ppm	ASTM D5185(m)	>20	<b>7</b>	4	2
Fuel	%	ASTM D7593*	>5	<b>8.4</b>	<1.0	3.4
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0.1</b>	0	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.1</b>	8.3	11.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.1</b>	20.9	38.2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)	>150	<b>3</b>	2	5
Boron	ppm	ASTM D5185(m)		<b>33</b>	95	2
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>36</b>	12	44
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>451</b>	117	751
Calcium	ppm	ASTM D5185(m)		<b>1557</b>	2051	1096
Phosphorus	ppm	ASTM D5185(m)		<b>696</b>	978	832
Zinc	ppm	ASTM D5185(m)		<b>790</b>	1042	980
Sulfur	ppm	ASTM D5185(m)		<b>2017</b>	2840	2097
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>21.7</b>	18.7	53.5
Visc @ 100°C	cSt	ASTM D7279(m)		<b>10.9</b>	12.2	10.2



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0892402 **Received** : 11 Jan 2024  
**Lab Number** : 02608132 **Diagnosed** : 12 Jan 2024  
**Unique Number** : 5709218 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )

**Agnico Eagle Canada**  
 1350 Government Rd. W, MACASSA COMPLEX  
 Kirkland Lake, ON  
 CA P2N 3J1  
 Contact: Jay Gould  
 MacassaMobileUGPlanning@agnicoeagle.com  
 T: (705)567-5208  
 F: (705)567-5221

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.