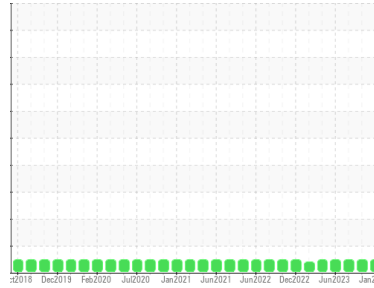




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Toronto Shunt
 Machine Id
Autocar 5011
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (26 LTR)

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		WC0805735	WC0864548	WC0848017
Sample Date	Client Info		14 Jan 2024	05 Nov 2023	16 Sep 2023
Machine Age	hrs	Client Info	201114	19710	19203
Oil Age	hrs	Client Info	404	507	430
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

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)	>50	8	14	12
Chromium	ppm	ASTM D5185(m)	>4	<1	1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>9	2	3	2
Lead	ppm	ASTM D5185(m)	>30	<1	1	1
Copper	ppm	ASTM D5185(m)	>35	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>4	0	<1	0
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	2
Barium	ppm	ASTM D5185(m)	0	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)	50	62	75	68
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	950	999	1205	1102
Calcium	ppm	ASTM D5185(m)	1050	1104	1250	1186
Phosphorus	ppm	ASTM D5185(m)	995	1059	1232	1128
Zinc	ppm	ASTM D5185(m)	1180	1237	1479	1346
Sulfur	ppm	ASTM D5185(m)	2600	2759	2703	2619
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>+100	2	3	3
Sodium	ppm	ASTM D5185(m)		2	2	2
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1

INFRA-RED

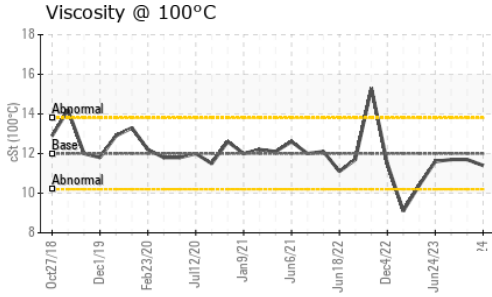
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	6.2	8.5	7.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.6	20.3	18.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.9	15.3	14.7



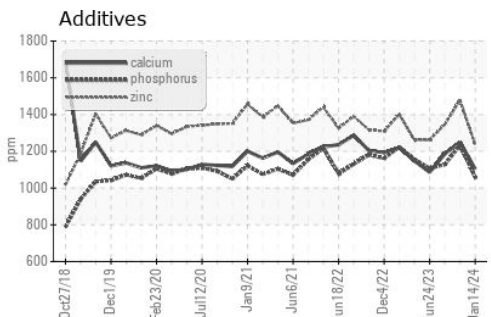
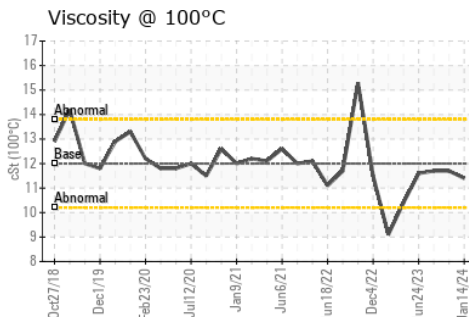
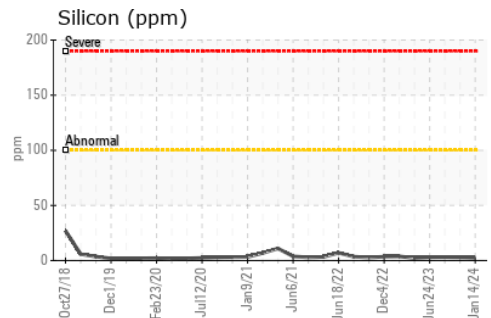
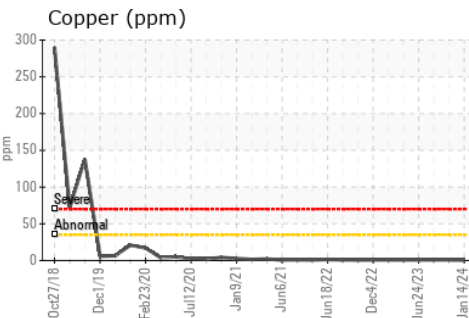
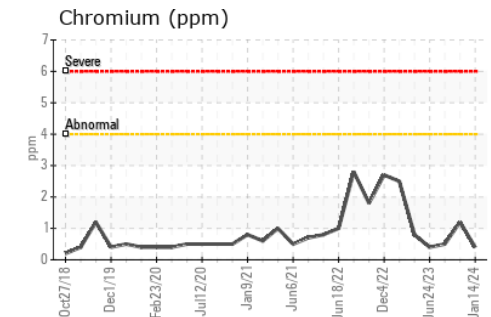
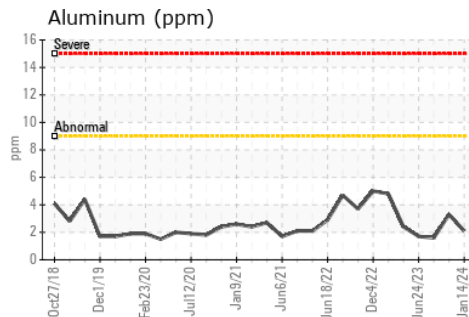
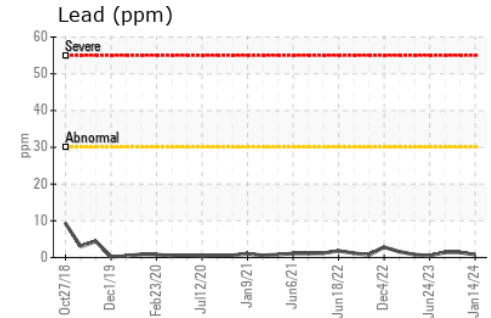
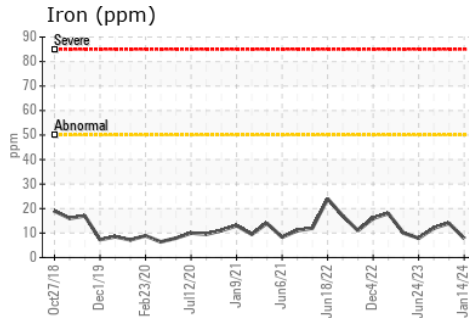
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.4	11.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **MANITOU LIN TRANSPORT (GARAGE)**
Sample No. : WC0805735 **Received** : 16 Jan 2024 **1335 SHAWSON DRIVE**
Lab Number : 02608876 **Diagnosed** : 16 Jan 2024 **MISSISSAUGA, ON**
Unique Number : 5709962 **Diagnostician** : Wes Davis **CA L4W 1C4**
Test Package : MOB 1

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.

Contact: Travis Spence
 tspence@manitoulintransport.com
 T:
 F: (905)564-6361