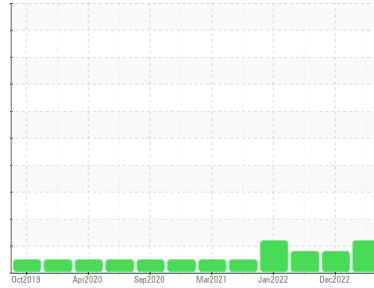




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area
[7503]
 Machine Id
9498

Component
Diesel Engine
 Fluid

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring.

Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0853061	WC0737787	WC0654365
Sample Date	Client Info		09 Dec 2023	11 Dec 2022	17 Feb 2022
Machine Age	kms	Client Info	603827	527598	498619
Oil Age	kms	Client Info	0	0	0
Oil Changed	Client Info		Changed	Not Changd	Changed
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>90	36	20	10
Chromium	ppm	ASTM D5185(m)	>20	2	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	5	4	2
Lead	ppm	ASTM D5185(m)	>40	11	8	1
Copper	ppm	ASTM D5185(m)	>330	3	<1	<1
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
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)	250	25	40	53
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	1	7	3
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	705	655	677
Calcium	ppm	ASTM D5185(m)	3000	1319	1310	1308
Phosphorus	ppm	ASTM D5185(m)	1150	631	700	684
Zinc	ppm	ASTM D5185(m)	1350	712	719	766
Sulfur	ppm	ASTM D5185(m)	4250	2538	2390	2473
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	4	4	3
Sodium	ppm	ASTM D5185(m)	>158	3	3	3
Potassium	ppm	ASTM D5185(m)	>20	7	6	6
Fuel	%	ASTM D7593*	>3.0	▲ 2.5	▲ 5.2	▲ 5.9

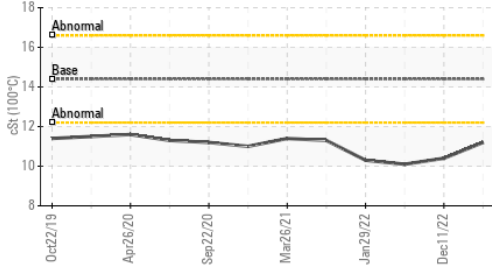
INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	0.6	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	12.2	11.4	10.2
Sulfation	Abs./1mm	ASTM D7415*	>30	27.6	25.7	21.8

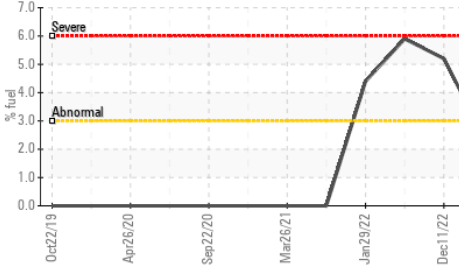


OIL ANALYSIS REPORT

▲ Viscosity @ 100°C



▲ Fuel Dilution



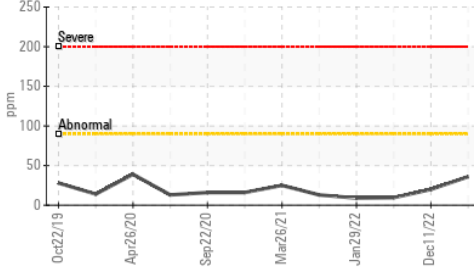
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	25.5	23.1	17.6

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

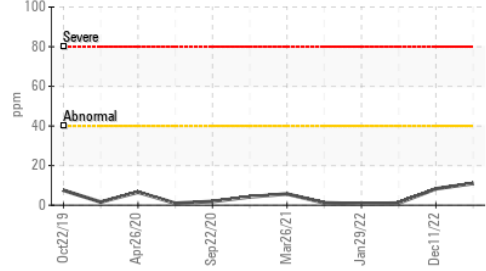
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	▲ 11.2	10.4	10.1

GRAPHS

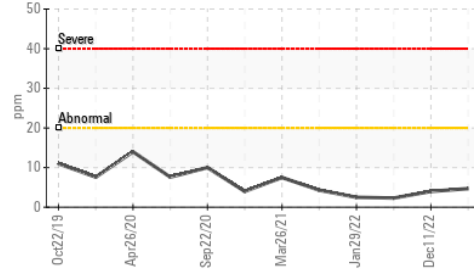
Iron (ppm)



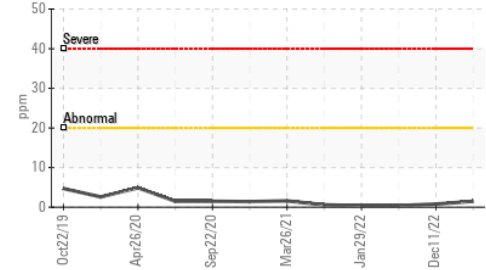
Lead (ppm)



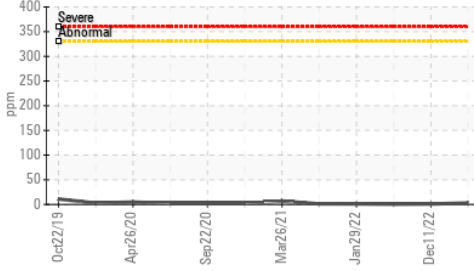
Aluminum (ppm)



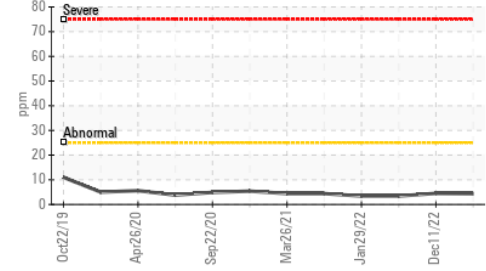
Chromium (ppm)



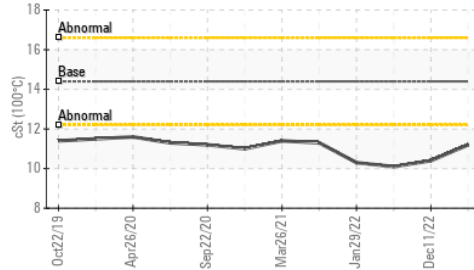
Copper (ppm)



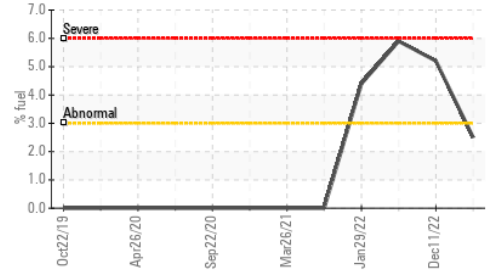
Silicon (ppm)



▲ Viscosity @ 100°C



▲ Fuel Dilution



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0853061 **Received** : 09 Jan 2024
Lab Number : **02607459** **Diagnosed** : 10 Jan 2024
Unique Number : 5708545 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: PercentFuel)

Rush Truck Centres
 7450 Torbram Rd.
 Mississauga, ON
 CA L4T 1G9
 Contact: Serdar Okur
 sokur@rushtruckcentres.ca
 T: (905)671-7600
 F:

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.