



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
GANDER OFFICE (S/N PE6068L951966)

Component
Diesel Engine

Fluid
{not provided} (32 LTR)

RECOMMENDATION

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. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0445149	WC985089	WC985069
Sample Date		Client Info		19 Oct 2022	05 Mar 2020	13 Feb 2019
Machine Age	hrs	Client Info		179	139	118
Oil Age	hrs	Client Info		179	139	0
Filter Age	hrs	Client Info		0	139	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Not Changed	Not Changed	Not Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>51	24	24	19
Chromium	ppm	ASTM D5185(m)	>11	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	0	0	0
Titanium	ppm	ASTM D5185(m)		<1	<1	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>31	7	7	6
Lead	ppm	ASTM D5185(m)	>26	2	2	2
Copper	ppm	ASTM D5185(m)	>26	9	8	7
Tin	ppm	ASTM D5185(m)	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINATION

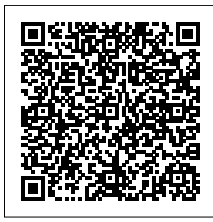
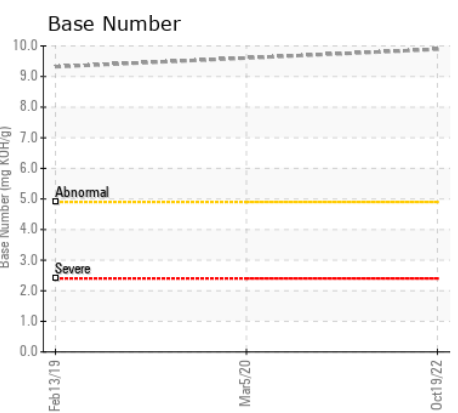
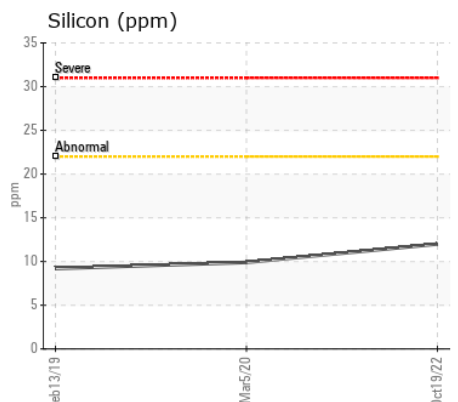
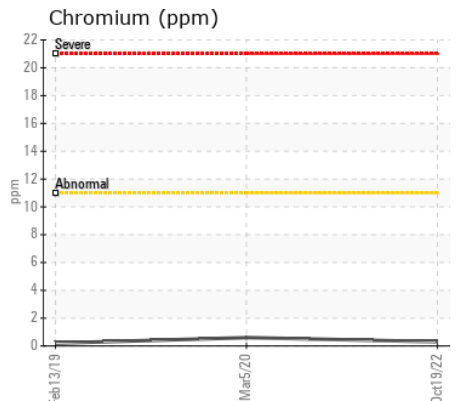
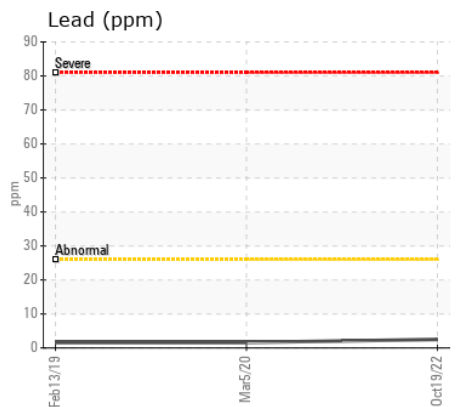
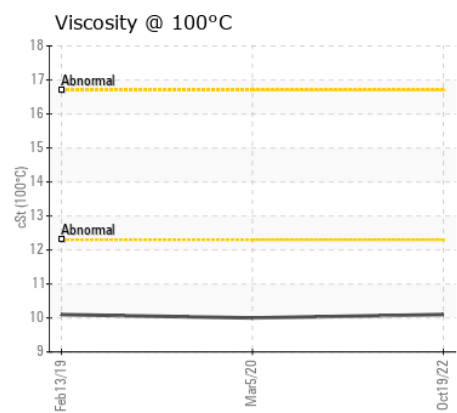
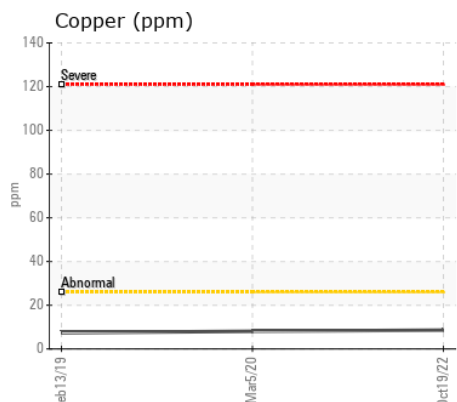
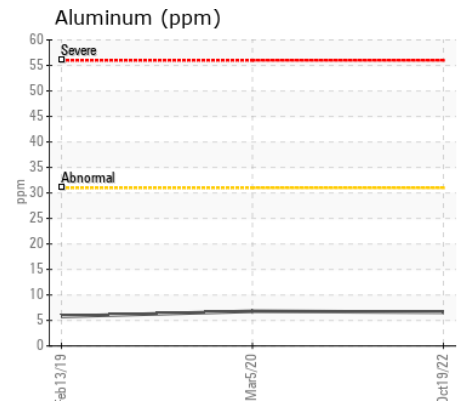
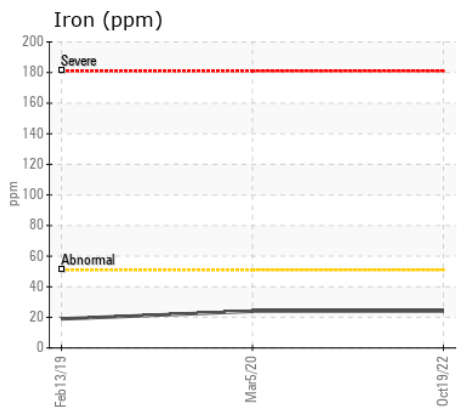
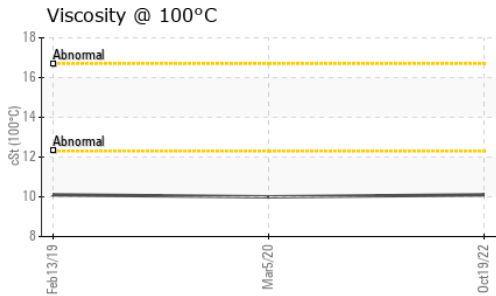
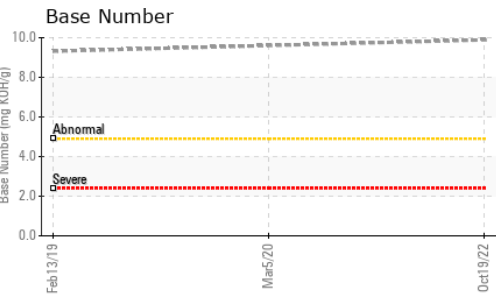
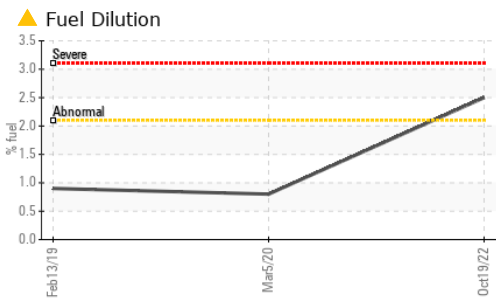
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>22	12	10	9
Potassium	ppm	ASTM D5185(m)	>20	2	3	2
Fuel	%	ASTM D7593*	>2.1	▲ 2.5	0.8	0.9
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	7.6	8.1	7.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.0	25.0	21.3
Emulsified Water	scalar	Visual*	>0.21	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)	>31	4	10	5
Boron	ppm	ASTM D5185(m)		259	279	267
Barium	ppm	ASTM D5185(m)		<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)		246	252	241
Manganese	ppm	ASTM D5185(m)		2	2	2
Magnesium	ppm	ASTM D5185(m)		813	853	787
Calcium	ppm	ASTM D5185(m)		1412	1418	1344
Phosphorus	ppm	ASTM D5185(m)		958	951	895
Zinc	ppm	ASTM D5185(m)		1021	1092	1025
Sulfur	ppm	ASTM D5185(m)		2727	2806	2697
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.7	15.4	15.8
Base Number (BN)	mg KOH/g	ASTM D2896*		9.89	---	9.32
Visc @ 100°C	cSt	ASTM D7279(m)		10.1	10.0	10.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0445149 **Received** : 20 Oct 2022
Lab Number : 02517451 **Diagnosed** : 21 Oct 2022
Unique Number : 5474431 **Diagnostician** : Kevin Marson
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

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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.