



**POWER SYSTEMS**  
**SYSTÈMES DE PUISSANCE**

**OIL ANALYSIS REPORT**

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

Area  
**VITRAN EXPRESS [235803]**  
Machine Id  
**GENERAC A03116**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- LTR)**

**RECOMMENDATION**

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WA0020909</b>	WA0018117	WA0016170
Sample Date		Client Info		<b>15 Feb 2024</b>	27 May 2022	10 Mar 2021
Machine Age	hrs	Client Info		<b>95</b>	91	75
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>SEVERE</b>	SEVERE	SEVERE

**WEAR**

Metal levels are typical for a new component breaking in.

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

**CONTAMINATION**

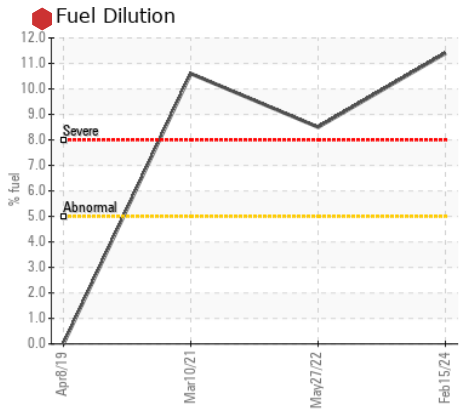
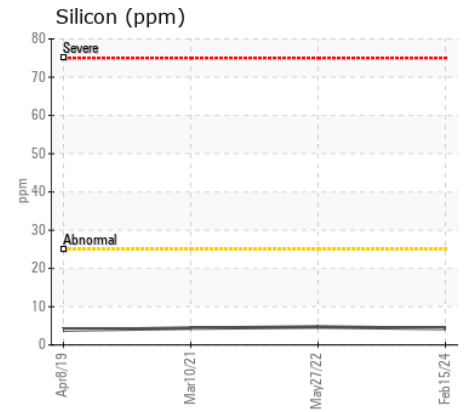
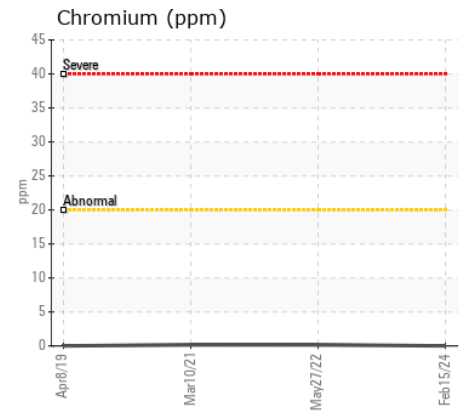
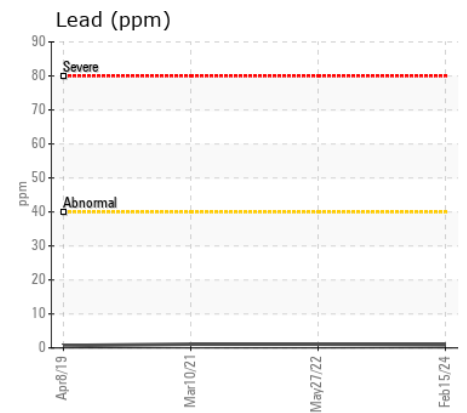
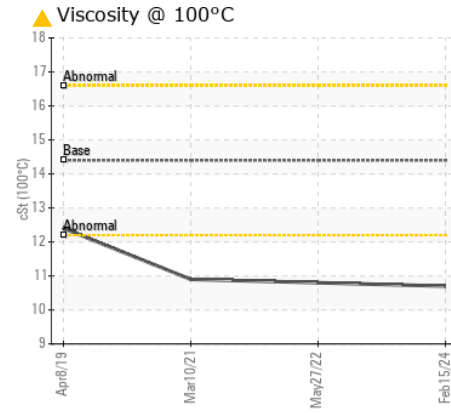
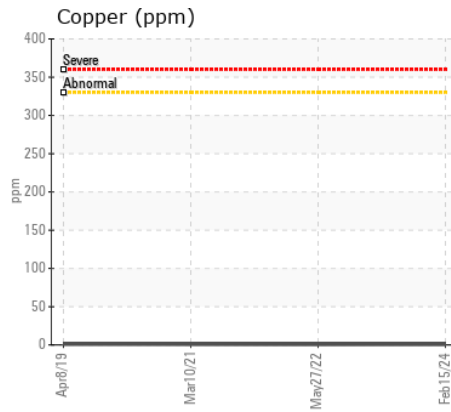
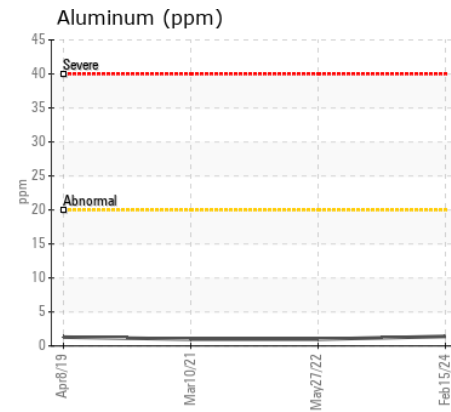
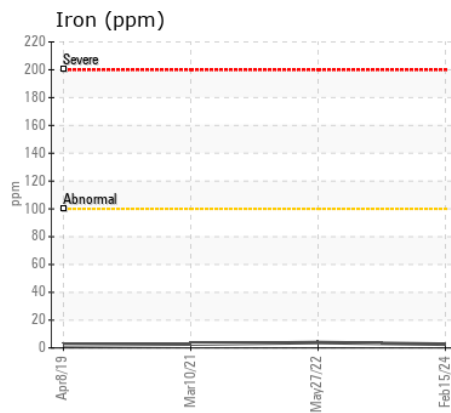
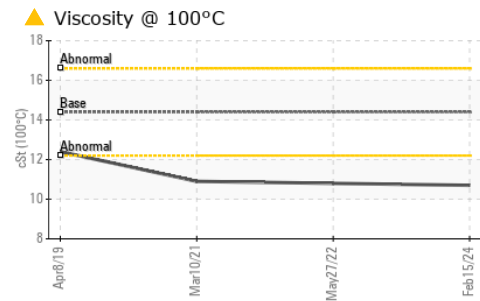
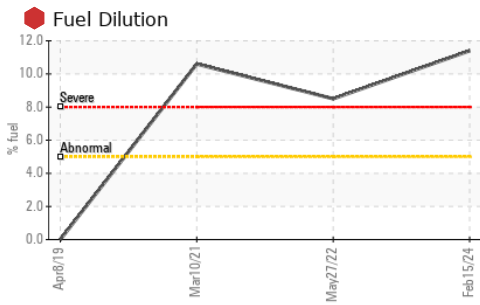
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	5	4
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	1
Fuel	%	ASTM D7593*	>5	<b>11.4</b>	8.5	10.6
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.1</b>	5.8	5.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>16.2</b>	17.9	18.1
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

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

Sodium	ppm	ASTM D5185(m)	>158	<b>1</b>	1	1
Boron	ppm	ASTM D5185(m)	250	<b>3</b>	4	10
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>17</b>	10	50
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	<b>283</b>	172	841
Calcium	ppm	ASTM D5185(m)	3000	<b>1635</b>	1906	992
Phosphorus	ppm	ASTM D5185(m)	1150	<b>813</b>	898	925
Zinc	ppm	ASTM D5185(m)	1350	<b>905</b>	989	1129
Sulfur	ppm	ASTM D5185(m)	4250	<b>2655</b>	2853	2663
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>10.5</b>	9.8	13.1
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>10.7</b>	10.8	10.9



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WA0020909 **Received** : 21 Feb 2024  
**Lab Number** : 02616900 **Tested** : 22 Feb 2024  
**Unique Number** : 5734010 **Diagnosed** : 22 Feb 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel )

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.

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