



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

Machine Id  
**3720106**  
 Component  
**Diesel Engine**  
 Fluid  
**SHELL ROTELLA T4 10W30 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0084004</b>	PC0083999	PC0074755
Sample Date		Client Info		<b>05 Jun 2024</b>	10 May 2024	18 Sep 2023
Machine Age	mls	Client Info		<b>393393</b>	386474	332458
Oil Age	mls	Client Info		<b>7000</b>	54000	57000
Filter Age	mls	Client Info		<b>7000</b>	54000	57000
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>200	<b>16</b>	82	51
Chromium	ppm	ASTM D5185(m)	>6	<b>1</b>	▲ 6	3
Nickel	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>50	<b>5</b>	27	22
Lead	ppm	ASTM D5185(m)	>10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>50	<b>4</b>	11	11
Tin	ppm	ASTM D5185(m)	>6	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>VLITE</b>	NONE	NONE

**CONTAMINATION**

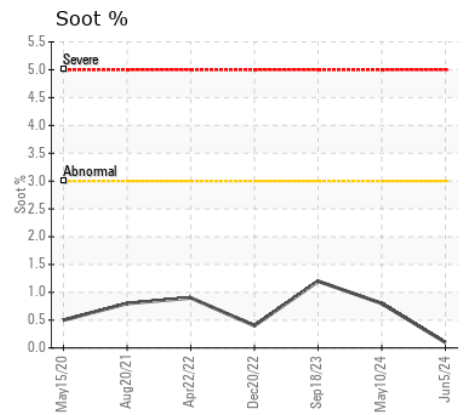
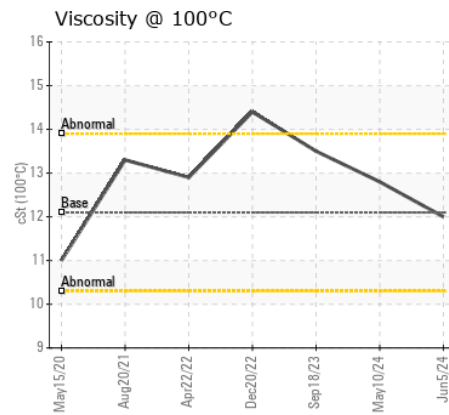
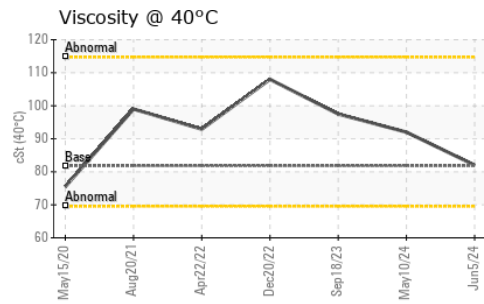
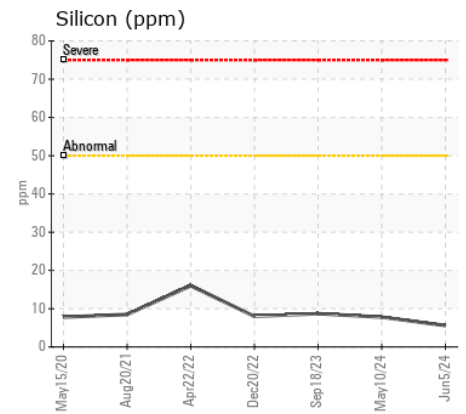
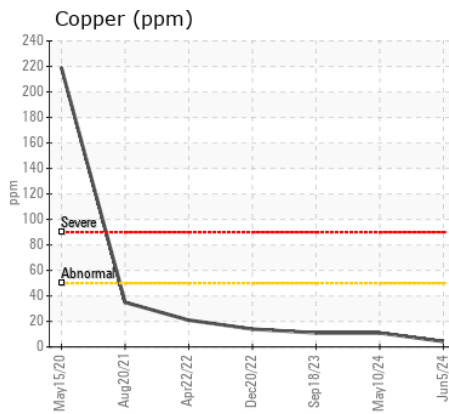
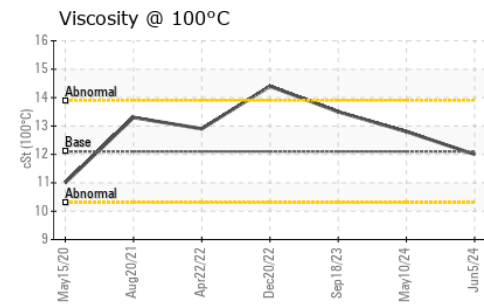
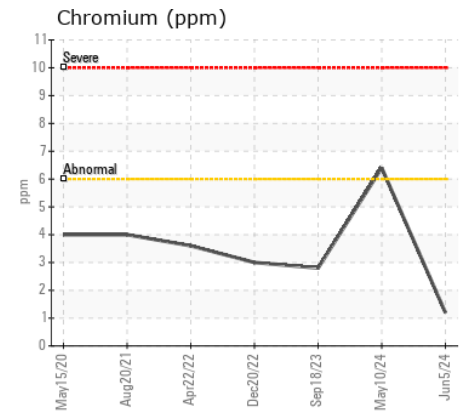
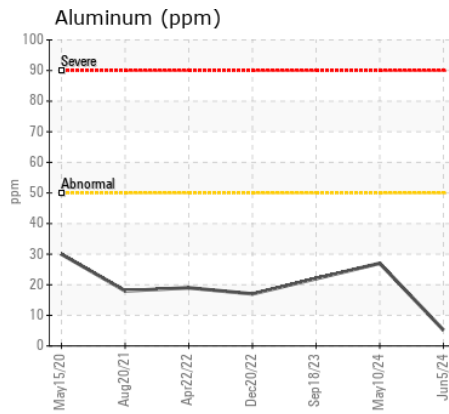
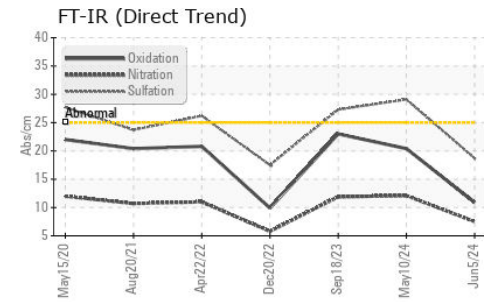
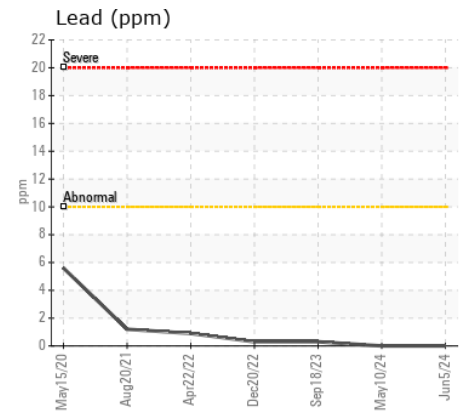
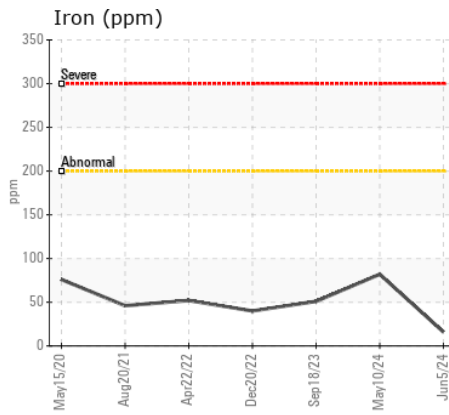
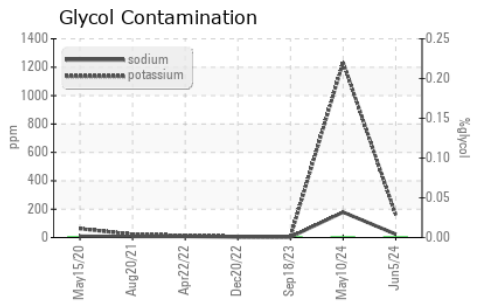
Test for glycol is negative. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>50	<b>6</b>	8	9
Potassium	ppm	ASTM D5185(m)	>20	<b>160</b>	▲ 1234	6
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	%	ASTM D7922*		<b>0.0</b>	0.0	0.0
Soot %	%	ASTM D7844*	>3	<b>0.1</b>	0.8	1.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.5</b>	12.1	11.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.7</b>	29.1	27.3
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>24</b>	● 179	4
Boron	ppm	ASTM D5185(m)		<b>10</b>	9	12
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>16</b>	105	60
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	2	<1
Magnesium	ppm	ASTM D5185(m)		<b>41</b>	166	571
Calcium	ppm	ASTM D5185(m)		<b>2186</b>	2194	1709
Phosphorus	ppm	ASTM D5185(m)		<b>826</b>	831	1014
Zinc	ppm	ASTM D5185(m)		<b>994</b>	1056	1256
Sulfur	ppm	ASTM D5185(m)		<b>2848</b>	2751	2380
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>10.9</b>	20.4	23.0
Visc @ 40°C	cSt	ASTM D7279(m)	81.8	<b>82.0</b>	92.0	97.5
Visc @ 100°C	cSt	ASTM D7279(m)	12.1	<b>12.0</b>	12.8	13.5
Viscosity Index (VI)	Scale	ASTM D2270*	141	<b>140</b>	136	138



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0084004 **Received** : 20 Jun 2024  
**Lab Number** : **02643081** **Tested** : 20 Jun 2024  
**Unique Number** : 5800620 **Diagnosed** : 20 Jun 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Glycol, KV40, VI, Visual )

**TRANSPORT BESNER INC**  
 1950, 3e RUE  
 LEVIS, QC  
 CA G6W 5M6  
 Contact: DEMERS GUY  
 gdemers@besner.com  
 T: (418)831-5444  
 F: (418)831-2639

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.