



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



Machine Id  
**NEW FLYER 302 (S/N 6511548133)**  
 Component  
**Transmission (Auto)**  
 Fluid  
**PETRO CANADA DuraDrive HD Synthetic 668 (30)**

**RECOMMENDATION**

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. ( Customer Sample Comment: 140k sample )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0060047</b>	PC0060042	PC0057338
Sample Date		Client Info		<b>07 Feb 2023</b>	15 Jul 2022	16 Mar 2022
Machine Age	kms	Client Info		<b>308932</b>	0	253848
Oil Age	kms	Client Info		<b>134861</b>	0	797777
Filter Age	kms	Client Info		<b>134861</b>	0	797777
Oil Changed		Client Info		<b>Not Changd</b>	N/A	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	ATTENTION	ATTENTION

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>230	<b>98</b>	92	83
Chromium	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>65	<b>33</b>	31	24
Lead	ppm	ASTM D5185(m)	>55	<b>7</b>	6	5
Copper	ppm	ASTM D5185(m)	>85	<b>19</b>	18	15
Tin	ppm	ASTM D5185(m)	>5	<b>2</b>	2	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>NONE</b>	NONE	NONE

**CONTAMINATION**

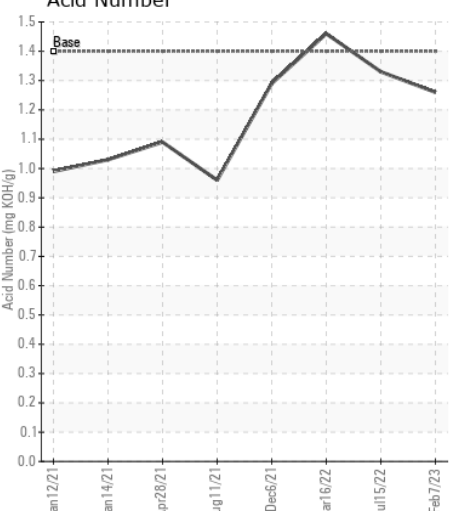
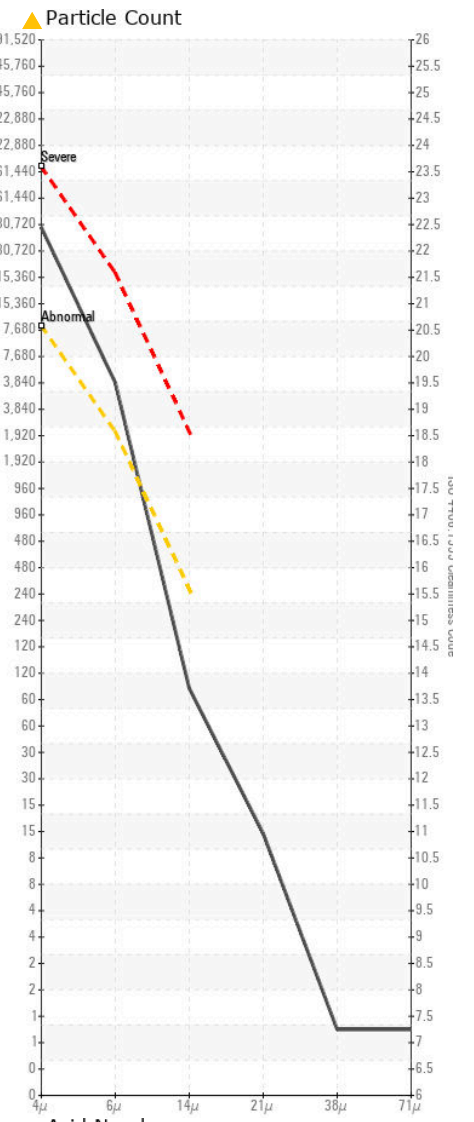
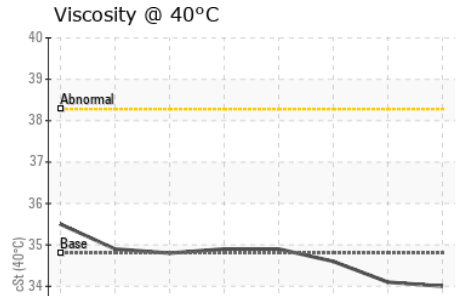
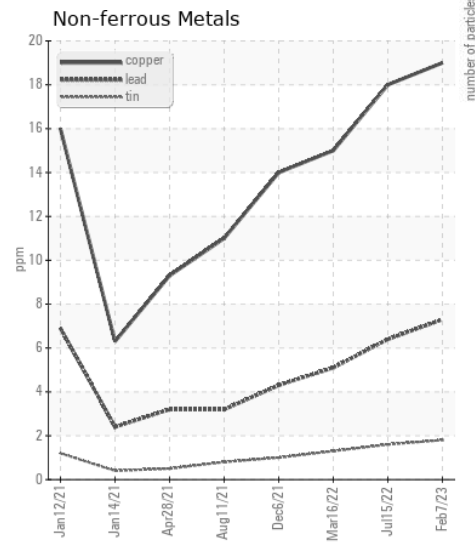
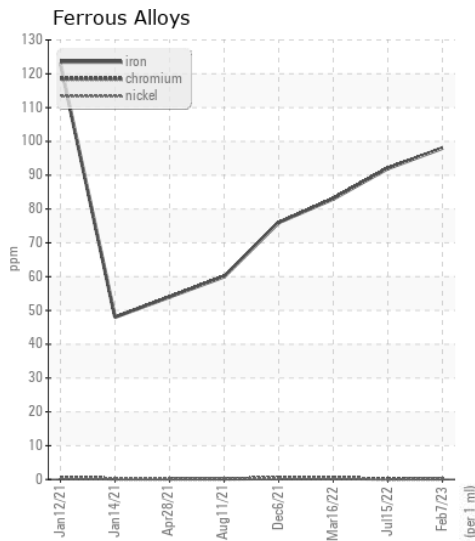
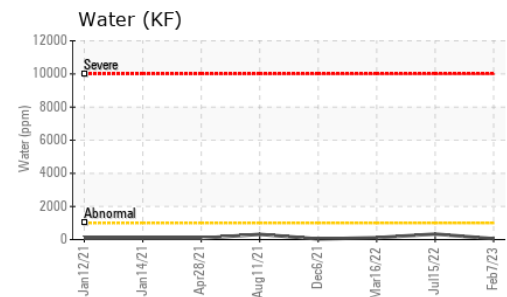
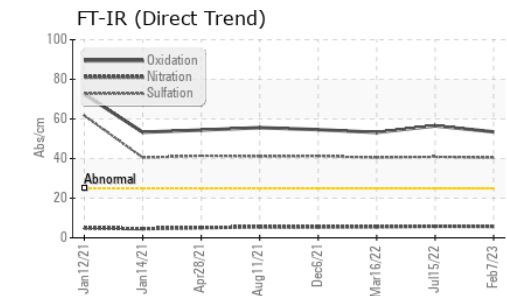
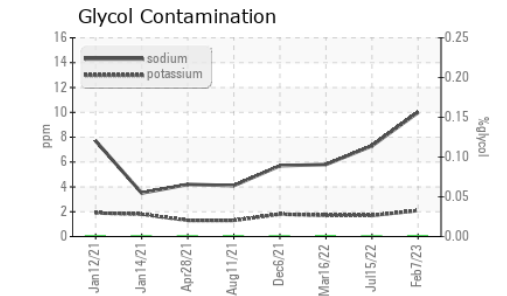
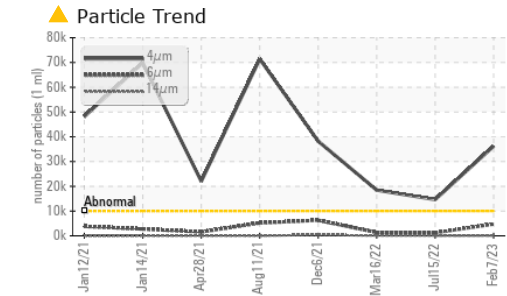
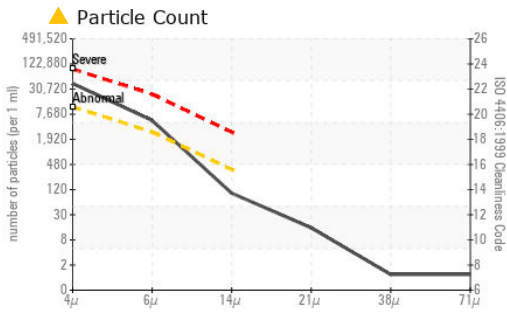
Particles >4µm and oil cleanliness are abnormally high. Particles >6µm are notably high. The water content is negligible.

Silicon	ppm	ASTM D5185(m)	>20	<b>11</b>	8	7
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	2	2
Water	%	ASTM D6304*	>0.1	<b>0.005</b>	0.033	0.011
ppm Water	ppm	ASTM D6304*	>1000	<b>51.0</b>	333.5	112.8
Glycol	%	ASTM D7922*		<b>0.0</b>	0.0	0.0
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*		<b>5.7</b>	5.8	5.5
Sulfation	Abs/.1mm	ASTM D7415*		<b>40.4</b>	40.9	40.5
Particles >4µm		ASTM D7647	>10000	<b>36211</b>	14631	18472
Particles >6µm		ASTM D7647	>2500	<b>4745</b>	1179	1375
Particles >14µm		ASTM D7647	>320	<b>87</b>	49	65
Particles >21µm		ASTM D7647	>80	<b>13</b>	11	14
Particles >38µm		ASTM D7647	>20	<b>1</b>	0	0
Particles >71µm		ASTM D7647	>4	<b>1</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>22/19/14</b>	21/17/13	21/18/13
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*	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The AN level is acceptable for this fluid. The fluid is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185(m)		<b>10</b>	7	6
Boron	ppm	ASTM D5185(m)	78	<b>67</b>	71	76
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>1</b>	1	<1
Magnesium	ppm	ASTM D5185(m)	0	<b>2</b>	1	<1
Calcium	ppm	ASTM D5185(m)	113	<b>103</b>	98	92
Phosphorus	ppm	ASTM D5185(m)	222	<b>248</b>	231	241
Zinc	ppm	ASTM D5185(m)		<b>6</b>	5	4
Sulfur	ppm	ASTM D5185(m)	1326	<b>1164</b>	1138	1069
Oxidation	Abs/.1mm	ASTM D7414*		<b>53.5</b>	56.5	53.2
Acid Number (AN)	mg KOH/g	ASTM D974*	1.4	<b>1.26</b>	1.33	1.46
Visc @ 40°C	cSt	ASTM D7279(m)	34.8	<b>34.0</b>	34.1	34.6
Visc @ 100°C	cSt	ASTM D7279(m)	7.0	<b>6.7</b>	6.7	6.6
Viscosity Index (VI)	Scale	ASTM D2270*	167	<b>158</b>	157	149



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0060047  
**Lab Number** : 02543196  
**Unique Number** : 5540201  
**Test Package** : MOB 2 ( Additional Tests: FT-IR, Glycol, KF, KV100, PrtCount, TAN Man, VI )

**WINNIPEG TRANSIT**  
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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.