



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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0069429</b>	PC0060045	PC0060044
Sample Date		Client Info		<b>08 Aug 2023</b>	05 Mar 2023	05 Mar 2023
Machine Age	kms	Client Info		<b>0</b>	0	0
Oil Age	kms	Client Info		<b>0</b>	0	0
Filter Age	kms	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	SEVERE	ATTENTION

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>230	<b>118</b>	77	94
Chromium	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>65	<b>38</b>	26	31
Lead	ppm	ASTM D5185(m)	>55	<b>14</b>	5	6
Copper	ppm	ASTM D5185(m)	>85	<b>21</b>	15	19
Tin	ppm	ASTM D5185(m)	>5	<b>2</b>	1	1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

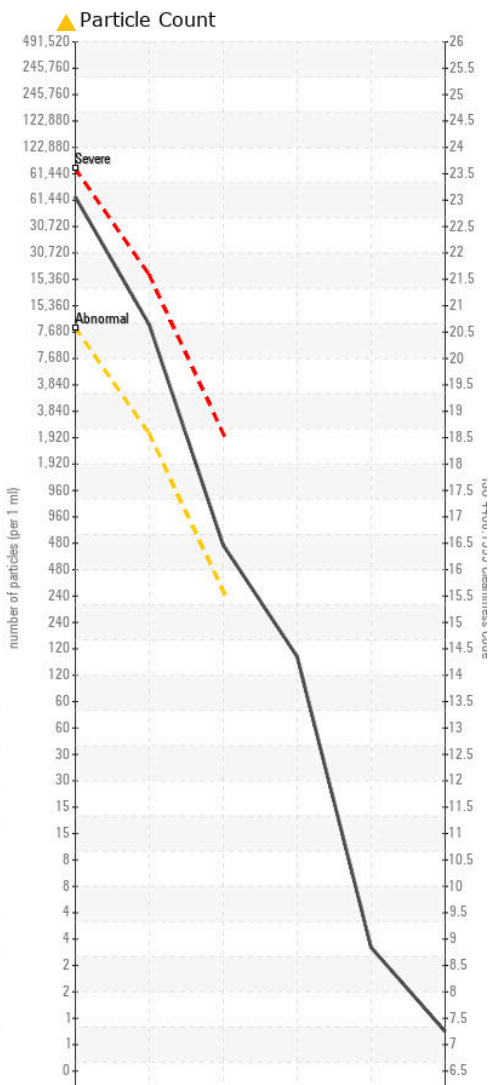
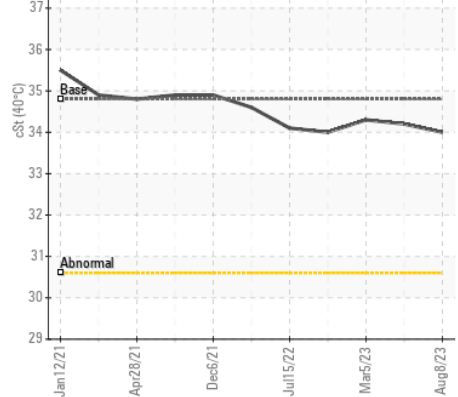
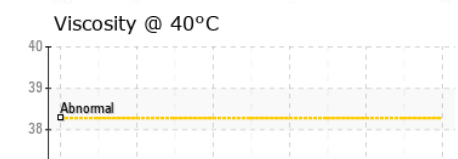
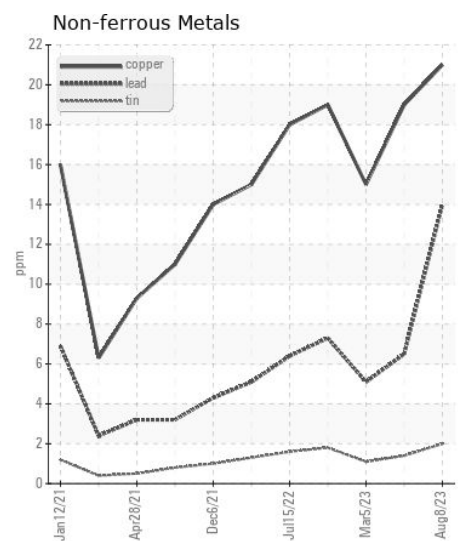
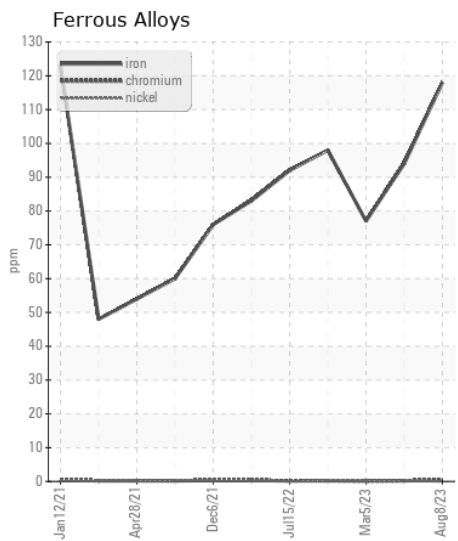
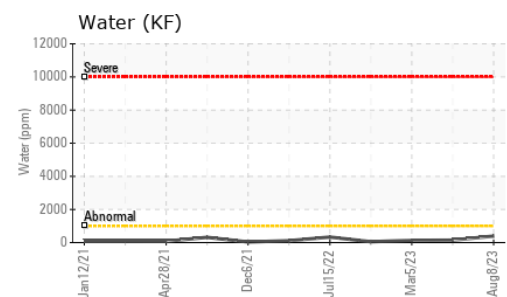
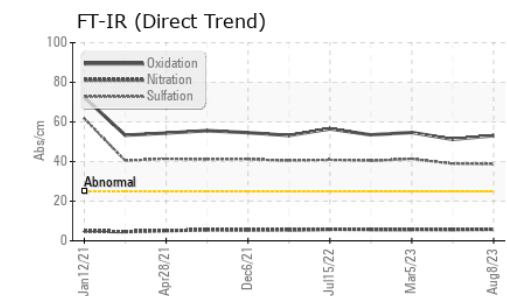
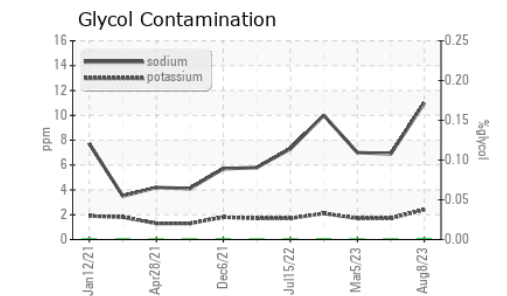
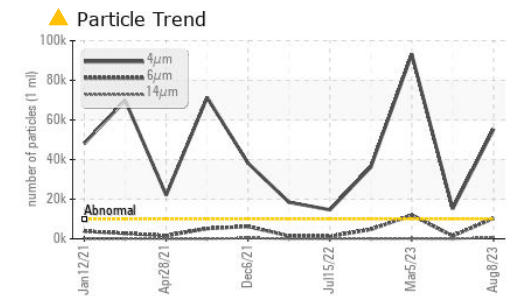
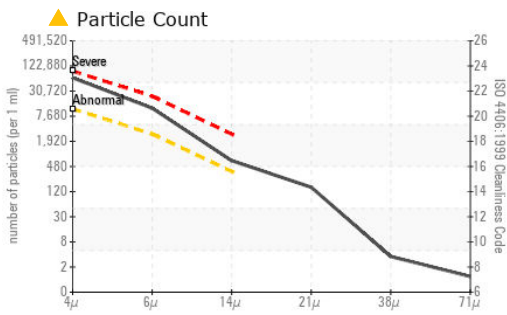
There is a moderate amount of silt (particulates < 14 microns in size) present in the fluid. The water content is negligible.

Silicon	ppm	ASTM D5185(m)	>20	<b>12</b>	8	8
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	2	2
Water	%	ASTM D6304*	>0.1	<b>0.039</b>	0.014	0.013
ppm Water	ppm	ASTM D6304*	>1000	<b>393.5</b>	146.4	135.7
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>5.8</b>	5.6	5.7
Sulfation	Abs/.1mm	ASTM D7415*		<b>38.7</b>	38.9	41.4
Particles >4µm		ASTM D7647	>10000	<b>▲ 55400</b>	▲ 93134	● 15158
Particles >6µm		ASTM D7647	>2500	<b>▲ 10409</b>	▲ 12006	1474
Particles >14µm		ASTM D7647	>320	<b>● 582</b>	123	43
Particles >21µm		ASTM D7647	>80	<b>● 135</b>	21	7
Particles >38µm		ASTM D7647	>20	<b>3</b>	0	1
Particles >71µm		ASTM D7647	>4	<b>1</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>▲ 23/21/16</b>	▲ 24/21/14	● 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>11</b>	7	7
Boron	ppm	ASTM D5185(m)	78	<b>65</b>	71	72
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>3</b>	1	1
Calcium	ppm	ASTM D5185(m)	113	<b>104</b>	104	98
Phosphorus	ppm	ASTM D5185(m)	222	<b>251</b>	248	255
Zinc	ppm	ASTM D5185(m)		<b>8</b>	5	5
Sulfur	ppm	ASTM D5185(m)	1326	<b>1263</b>	1183	1121
Oxidation	Abs/.1mm	ASTM D7414*		<b>53.1</b>	51.2	54.7
Acid Number (AN)	mg KOH/g	ASTM D974*	1.4	<b>1.18</b>	1.29	1.37
Visc @ 40°C	cSt	ASTM D7279(m)	34.8	<b>34.0</b>	34.2	34.3
Visc @ 100°C	cSt	ASTM D7279(m)	7.0	<b>6.6</b>	6.8	6.7
Viscosity Index (VI)	Scale	ASTM D2270*	167	<b>153</b>	161	156



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0069429 **Received** : 09 Aug 2023  
**Lab Number** : **02574936** **Tested** : 10 Aug 2023  
**Unique Number** : 5619987 **Diagnosed** : 10 Aug 2023 - Kevin Marson  
**Test Package** : MOB 2 ( Additional Tests: FT-IR, Glycol, KF, KV100, PrtCount, VI )

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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