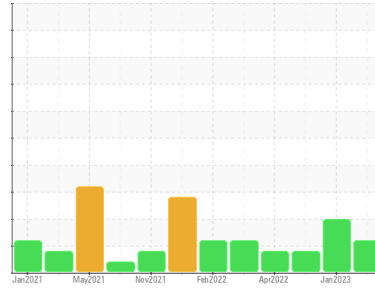


OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
NEW FLYER 435 (S/N 6511730513)
Component
Transmission (Auto)
Fluid
PETRO CANADA DuraDrive HD Synthetic 668 (30 LTR)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

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

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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC0069434	PC0064076	PC0060043
Sample Date	Client Info	08 Aug 2023	13 Jan 2023	14 Jul 2022
Machine Age	kms	Client Info	149225	108821
Oil Age	kms	Client Info	137324	96920
Oil Changed	Client Info	N/A	Not Changd	Not Changd
Sample Status		ABNORMAL	ABNORMAL	ATTENTION

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >230	184	143	126
Chromium	ppm	ASTM D5185(m) >2	<1	<1	<1
Nickel	ppm	ASTM D5185(m) >5	<1	<1	<1
Titanium	ppm	ASTM D5185(m) >2	0	0	0
Silver	ppm	ASTM D5185(m) >5	0	0	0
Aluminum	ppm	ASTM D5185(m) >65	44	31	26
Lead	ppm	ASTM D5185(m) >55	33	16	9
Copper	ppm	ASTM D5185(m) >85	35	30	28
Tin	ppm	ASTM D5185(m) >5	2	2	2
Antimony	ppm	ASTM D5185(m)	0	<1	0
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m) 78	54	59	61
Barium	ppm	ASTM D5185(m)	0	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<1	0	<1
Manganese	ppm	ASTM D5185(m)	2	2	2
Magnesium	ppm	ASTM D5185(m) 0	<1	<1	<1
Calcium	ppm	ASTM D5185(m) 113	101	102	99
Phosphorus	ppm	ASTM D5185(m) 222	246	244	221
Zinc	ppm	ASTM D5185(m)	9	7	7
Sulfur	ppm	ASTM D5185(m) 1326	1223	1090	1068
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

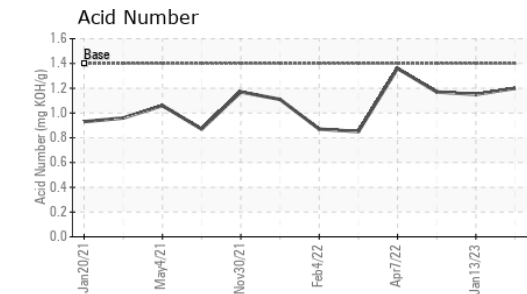
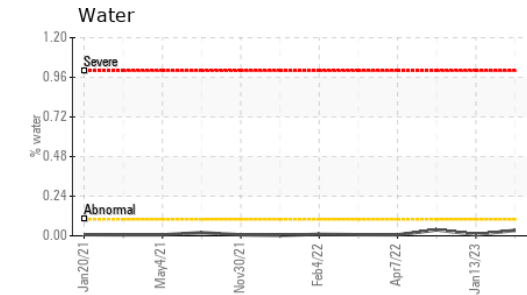
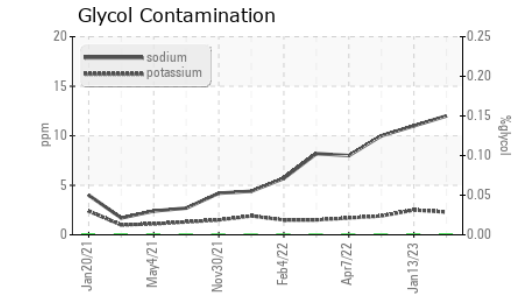
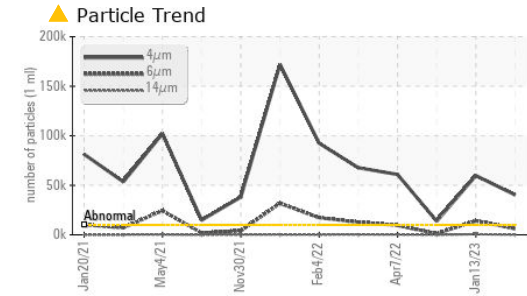
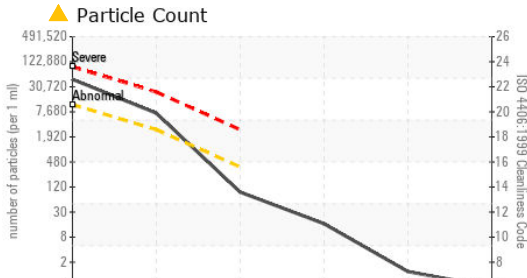
CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >20	12	10	9
Sodium	ppm	ASTM D5185(m)	12	11	10
Potassium	ppm	ASTM D5185(m) >20	2	2	2
Water	%	ASTM D6304* >0.1	0.033	0.008	0.036
ppm Water	ppm	ASTM D6304* >1000	339.8	80.7	366.8
Glycol	%	ASTM D7922*	0.0	0.0	0.0

INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	0	0	0
Nitration	Abs/cm	ASTM D7624*	5.9	5.7	5.8
Sulfation	Abs./1mm	ASTM D7415*	37.8	38.7	39.1

OIL ANALYSIS REPORT



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0069434 **Received** : 09 Aug 2023
Lab Number : **02574932** **Diagnosed** : 10 Aug 2023
Unique Number : 5619983 **Diagnostician** : 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.

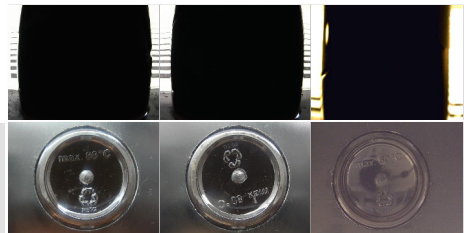
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 40246	▲ 59800	▲ 13734	
Particles >6µm	ASTM D7647	>2500	▲ 6210	▲ 14242	1210	
Particles >14µm	ASTM D7647	>320	80	▲ 624	51	
Particles >21µm	ASTM D7647	>80	14	▲ 137	12	
Particles >38µm	ASTM D7647	>20	1	7	1	
Particles >71µm	ASTM D7647	>4	0	1	1	
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 23/20/13	▲ 23/21/16	▲ 21/17/13	

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*		52.3	51.2	53.6
Acid Number (AN)	mg KOH/g	ASTM D974*	1.4	1.20	1.15	1.17

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	VLITE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	34.8	33.1	33.5	34.0
Visc @ 100°C	cSt	ASTM D7279(m)	7.0	6.5	6.6	6.7
Viscosity Index (VI)	Scale	ASTM D2270*	167	154	156	158

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						



WINNIPEG TRANSIT
 421 OSBORNE STREET
 WINNIPEG, MB
 CA R3L 2A2
 Contact: Jason Lavoie
 jlavoie@winnipeg.ca
 T: (204)986-4762
 F: