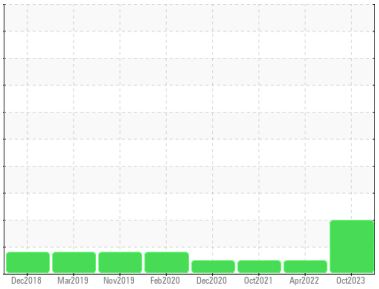
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

Area
Off-Road
Machine Id
E684
Component
Hydraulic System
Fluid
PETRO CANADA DURATRAN (--- GAL)

Sample Rating Trend



ISO

DIAGNOSIS

Recommendation
We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a high amount of particulates present in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PCA0090803**	PCA0072027	PCA0059330
Sample Date		Client Info		**11 Oct 2023**	19 Apr 2022	19 Oct 2021
Machine Age	hrs	Client Info		**11104**	9227	8162
Oil Age	hrs	Client Info		**7717**	7717	445
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**18**	27	24
Chromium	ppm	ASTM D5185m	>10	**4**	5	4
Nickel	ppm	ASTM D5185m	>10	**0**	0	0
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m		**0**	0	<1
Aluminum	ppm	ASTM D5185m	>10	**<1**	1	1
Lead	ppm	ASTM D5185m	>10	**<1**	1	0
Copper	ppm	ASTM D5185m	>75	**3**	4	4
Tin	ppm	ASTM D5185m	>10	**0**	0	<1
Antimony	ppm	ASTM D5185m		**---**	---	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	110	**15**	19	12
Barium	ppm	ASTM D5185m	0.0	**1**	0	0
Molybdenum	ppm	ASTM D5185m	0.0	**2**	1	<1
Manganese	ppm	ASTM D5185m	1	**0**	<1	<1
Magnesium	ppm	ASTM D5185m	13	**37**	12	5
Calcium	ppm	ASTM D5185m	3610	**1558**	654	333
Phosphorus	ppm	ASTM D5185m	1192	**761**	744	600
Zinc	ppm	ASTM D5185m	1455	**794**	540	330
Sulfur	ppm	ASTM D5185m	2641	**2097**	1216	932

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**4**	5	3
Sodium	ppm	ASTM D5185m		**3**	0	2
Potassium	ppm	ASTM D5185m	>20	**0**	2	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **15818**	713	610
Particles >6µm		ASTM D7647	>1300	▲ **3610**	104	170
Particles >14µm		ASTM D7647	>160	▲ **373**	10	20
Particles >21µm		ASTM D7647	>40	▲ **122**	2	3
Particles >38µm		ASTM D7647	>10	**8**	0	0
Particles >71µm		ASTM D7647	>3	**1**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **21/19/16**	17/14/10	16/15/11

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.6	**1.22**	0.50	0.465

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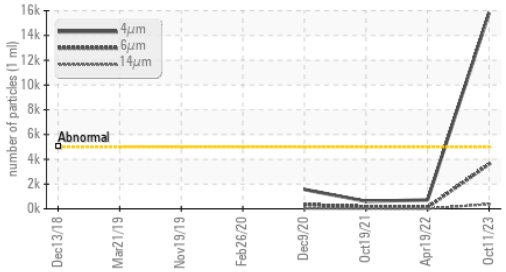
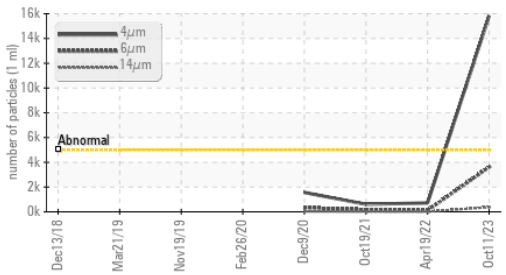
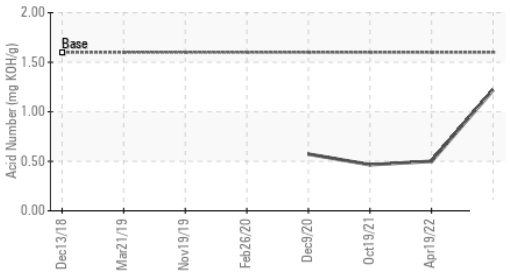
Particle Trend



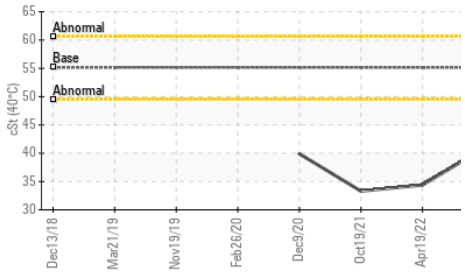
Particle Trend



Acid Number



Viscosity @ 40°C



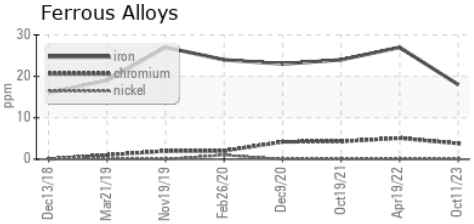
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**LIGHT**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**LIGHT**	VLITE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	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 D445	55.14	**40.9**	34.4	33.3

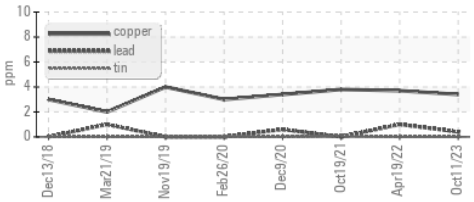
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

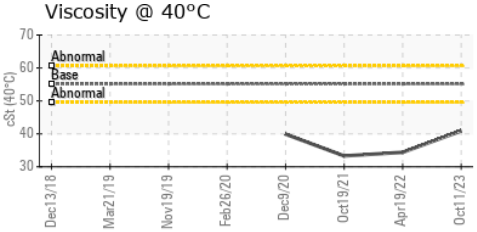
Ferrous Alloys



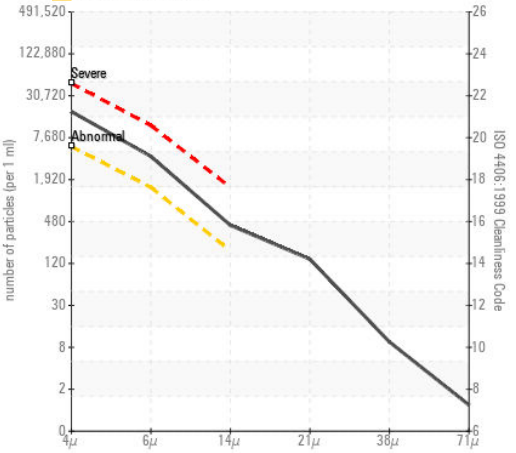
Non-ferrous Metals



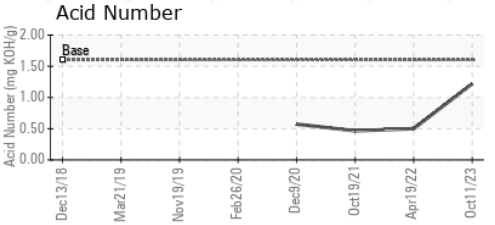
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0090803
Lab Number : 05978218
Unique Number : 10695513
Test Package : MOB 2

Received : 13 Oct 2023
Diagnosed : 16 Oct 2023
Diagnostician : Don Baldridge

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

WIN Waste Innovations - Shop # - Taunton
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TAUNTON, MA
US 02780
Contact: Dave Wilson
dwilson@win-waste.com
T:
F:

Report Id: WINTAU [WUSCAR] 05978218 (Generated: 10/17/2023 07:16:52) Rev: 1

Submitted By: MATT MANOLI