

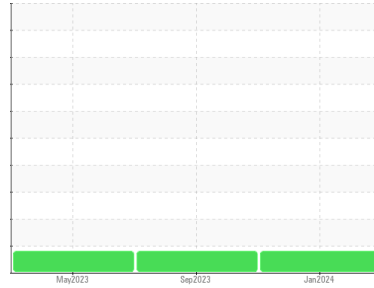
OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area
(55225Z) Walgreens - Tractor
Machine Id
[Walgreens - Tractor] 136A63357
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (11 GAL)



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other component wear rates are normal.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0105870	PCA0105904	PCA0091485
Sample Date	Client Info		24 Jan 2024	06 Sep 2023	02 May 2023
Machine Age	mls	Client Info	80455	56394	31582
Oil Age	mls	Client Info	25000	31582	31582
Oil Changed	Client Info		Oil Added	N/A	Oil Added
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >80	22	56	41
Chromium	ppm	ASTM D5185m >5	2	4	2
Nickel	ppm	ASTM D5185m >2	2	1	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	<1	<1	0
Aluminum	ppm	ASTM D5185m >30	24	63	52
Lead	ppm	ASTM D5185m >30	<1	<1	2
Copper	ppm	ASTM D5185m >150	▲ 159	▲ 249	▲ 298
Tin	ppm	ASTM D5185m >5	2	4	2
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	3	30	42
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 50	57	43	45
Manganese	ppm	ASTM D5185m 0	2	4	3
Magnesium	ppm	ASTM D5185m 950	857	561	591
Calcium	ppm	ASTM D5185m 1050	1083	1726	1715
Phosphorus	ppm	ASTM D5185m 995	958	758	801
Zinc	ppm	ASTM D5185m 1180	1194	925	998
Sulfur	ppm	ASTM D5185m 2600	2712	2365	2570

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	4	7	6
Sodium	ppm	ASTM D5185m	3	6	5
Potassium	ppm	ASTM D5185m >20	56	153	132

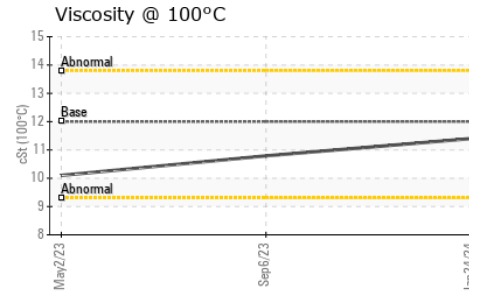
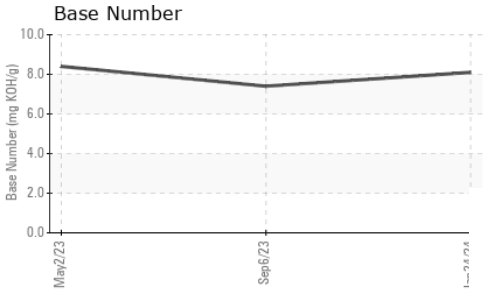
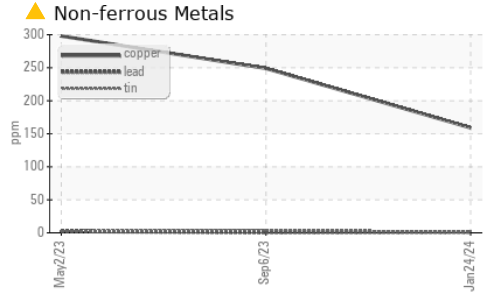
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.5	0.8	0.4
Nitration	Abs/cm	*ASTM D7624 >20	8.0	10.5	9.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.0	23.0	23.2

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.6	24.4	23.0
Base Number (BN)	mg KOH/g	ASTM D2896	8.1	7.4	8.4

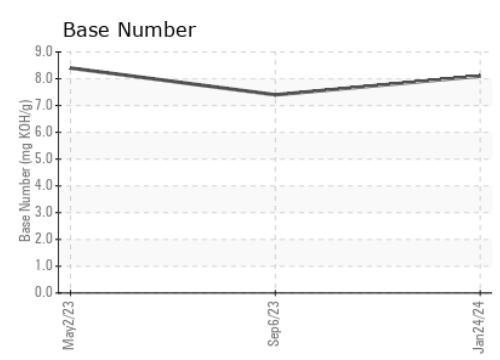
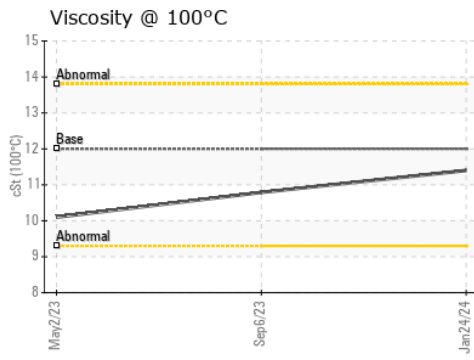
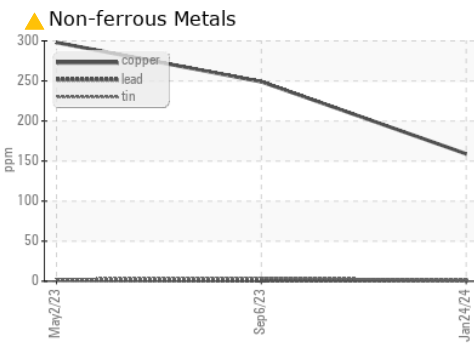
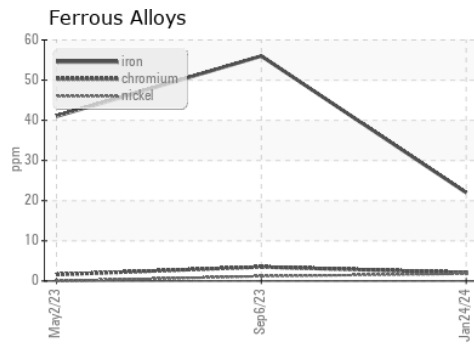
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.4	10.79

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0105870 **Received** : 06 Feb 2024
Lab Number : 06081929 **Tested** : 07 Feb 2024
Unique Number : 10869374 **Diagnosed** : 08 Feb 2024 - Sean Felton
Test Package : FLEET

Transervice - Shop 1361 - Berkeley-Windsor
 4400 State Road 19
 Windsor, WI
 US 53598
 Contact: Mike Hurda
 mhurda@transervice.com
 T: (608)846-2726
 F: (608)846-0389

Certificate L2367
 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)