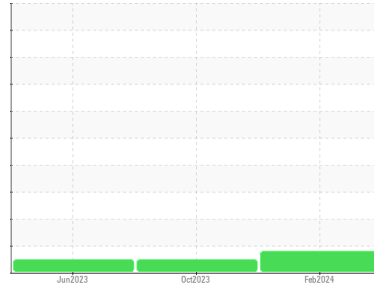


OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

Area
(36138Z) Walgreens - Tractor
 Machine Id
[Walgreens - Tractor] 136A62555
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (11 GAL)



DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Valve wear is indicated. All other component wear rates are normal.

Contamination

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		PCA0103643	PCA0103712	PCA0093597
Sample Date	Client Info		01 Feb 2024	24 Oct 2023	14 Jun 2023
Machine Age	mls	Client Info	187970	160307	144668
Oil Age	mls	Client Info	27663	15638	27023
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>2.0	<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 >100	11	10	22
Chromium	ppm	ASTM D5185m >20	<1	<1	1
Nickel	ppm	ASTM D5185m >4	▲ 7	<1	<1
Titanium	ppm	ASTM D5185m	2	11	2
Silver	ppm	ASTM D5185m >3	<1	0	0
Aluminum	ppm	ASTM D5185m >20	4	4	5
Lead	ppm	ASTM D5185m >40	2	1	7
Copper	ppm	ASTM D5185m >330	17	<1	<1
Tin	ppm	ASTM D5185m >15	1	<1	2
Vanadium	ppm	ASTM D5185m	<1	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	12	12	7
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 50	48	44	51
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 950	789	781	796
Calcium	ppm	ASTM D5185m 1050	1169	1078	1045
Phosphorus	ppm	ASTM D5185m 995	964	966	932
Zinc	ppm	ASTM D5185m 1180	1236	1179	1191
Sulfur	ppm	ASTM D5185m 2600	3044	2959	3254

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	5	4	4
Sodium	ppm	ASTM D5185m	3	<1	1
Potassium	ppm	ASTM D5185m >20	8	6	4

INFRA-RED

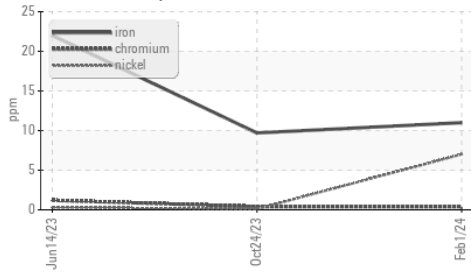
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.2	0.3	0.4
Nitration	Abs/cm	*ASTM D7624 >20	8.1	7.9	9.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.0	18.6	21.2

FLUID DEGRADATION

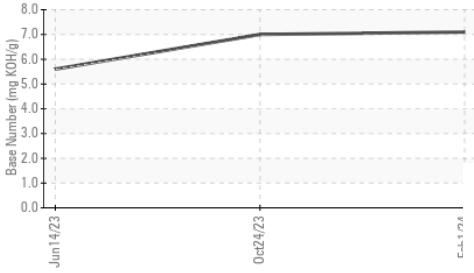
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.7	14.4	17.3
Base Number (BN)	mg KOH/g	ASTM D2896	7.1	7.0	5.6

OIL ANALYSIS REPORT

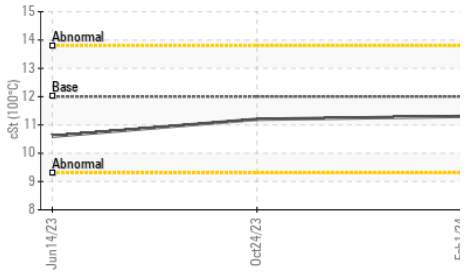
▲ Ferrous Alloys



Base Number



Viscosity @ 100°C

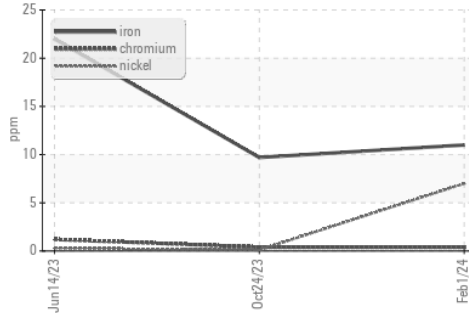


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

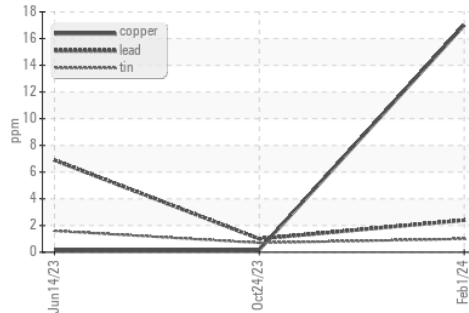
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.3	11.2

GRAPHS

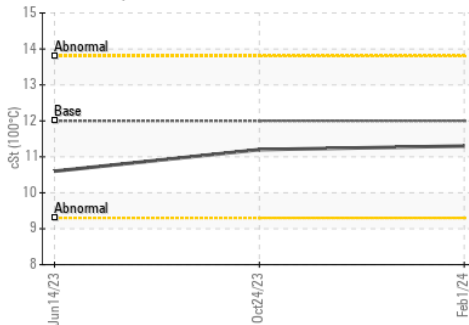
▲ Ferrous Alloys



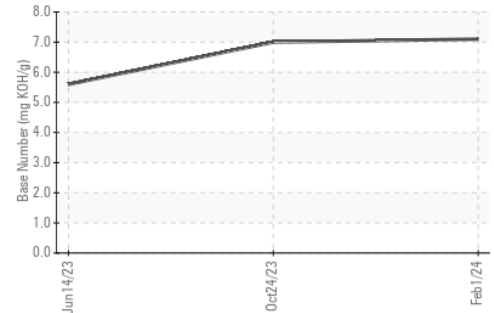
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0103643
Lab Number : 06080522
Unique Number : 10862613
Test Package : FLEET

Received : 05 Feb 2024
Tested : 06 Feb 2024
Diagnosed : 07 Feb 2024 - Don Baldrige

Transervice - Shop 1365 - Berkeley-Nazareth
 6813 Chrisphalt Drive
 Bath Borough, PA
 US 18014
 Contact: Stephen Mackes
 smackes@transervice.com
 T: (610)837-8103
 F: (610)837-8105

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)