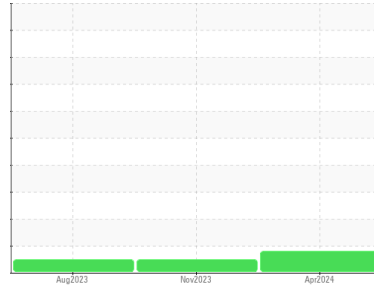


OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
(51464Z) Walgreens - Tractor
 Machine Id
[Walgreens - Tractor] 136A63334
 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

Exhaust valve wear is indicated.

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 acceptable for the time in service.

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0121317	PCA0106515	PCA0094943
Sample Date	Client Info		15 Apr 2024	14 Nov 2023	01 Aug 2023
Machine Age	mls	Client Info	224914	164180	117995
Oil Age	mls	Client Info	60000	50000	64000
Oil Changed	Client Info		Changed	Changed	N/A
Sample Status			ABNORMAL	NORMAL	NORMAL

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	33	25	33
Chromium	ppm	ASTM D5185m >5	▲ 6	4	3
Nickel	ppm	ASTM D5185m >2	0	<1	<1
Titanium	ppm	ASTM D5185m	<1	0	<1
Silver	ppm	ASTM D5185m >3	0	<1	0
Aluminum	ppm	ASTM D5185m >30	29	20	24
Lead	ppm	ASTM D5185m >30	0	<1	1
Copper	ppm	ASTM D5185m >150	29	46	95
Tin	ppm	ASTM D5185m >5	<1	2	2
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

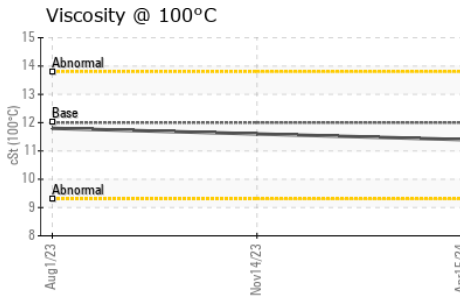
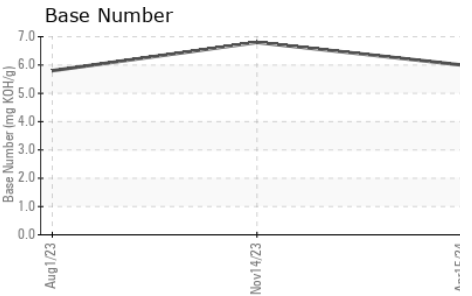
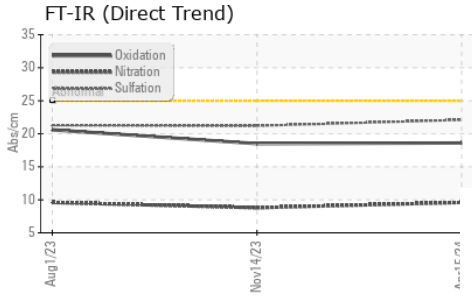
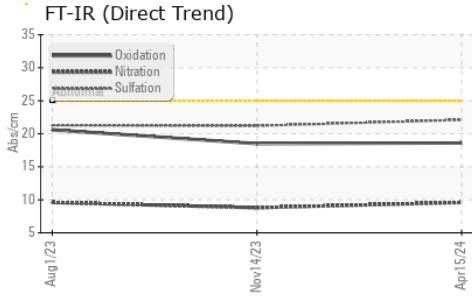
ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	0	3	5
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 50	58	58	56
Manganese	ppm	ASTM D5185m 0	<1	1	2
Magnesium	ppm	ASTM D5185m 950	896	950	953
Calcium	ppm	ASTM D5185m 1050	1075	1106	1392
Phosphorus	ppm	ASTM D5185m 995	795	966	935
Zinc	ppm	ASTM D5185m 1180	1067	1240	1243
Sulfur	ppm	ASTM D5185m 2600	2483	2306	2530

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	12	10	5
Sodium	ppm	ASTM D5185m	3	2	3
Potassium	ppm	ASTM D5185m >20	60	42	52

INFRA-RED	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.7	0.6	0.6
Nitration	Abs/cm	*ASTM D7624 >20	9.6	8.8	9.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.1	21.2	21.3

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.6	18.5	20.6
Base Number (BN)	mg KOH/g	ASTM D2896	6.0	6.8	5.8

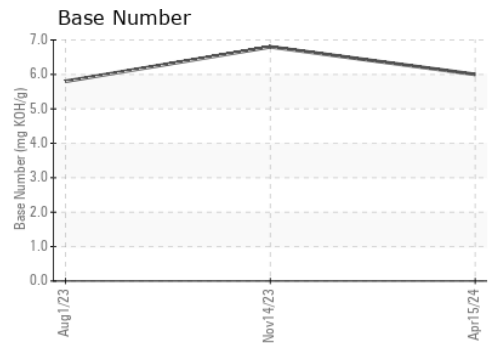
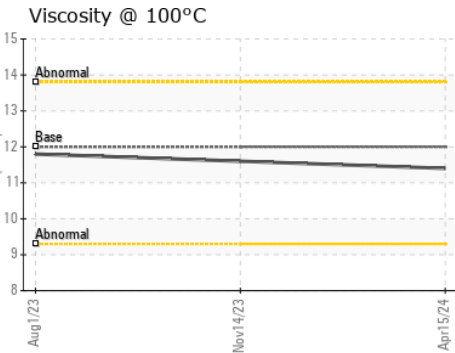
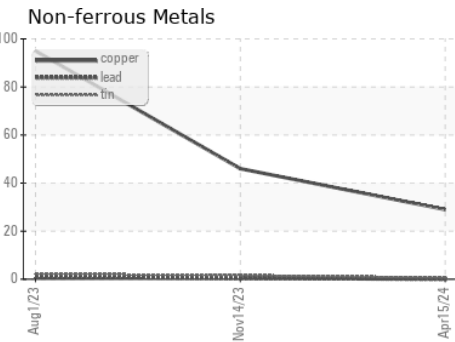
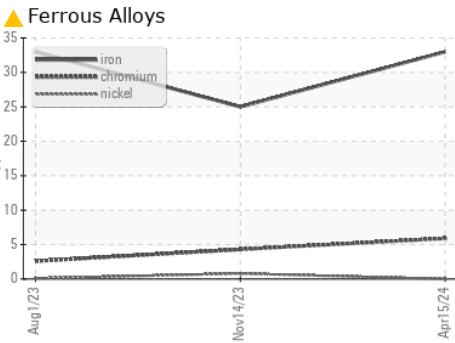
OIL ANALYSIS REPORT



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	11.6	11.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0121317
Lab Number : 06155582
Unique Number : 10991005
Test Package : FLEET

Transervice - Shop 1369 - Berkeley-Waxahachie
 710 Ovilla Road
 Waxahachie, TX
 US 75167

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)

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 F: (972)923-9919