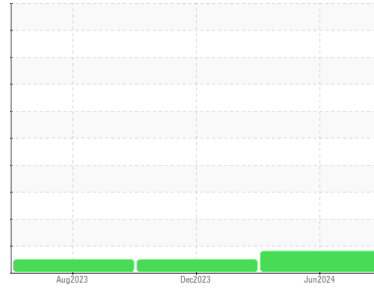


OIL ANALYSIS REPORT

Sample Rating Trend



Area
(AT645T) Supermarket - Tractor
 Machine Id
MACK 107A1827
 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. We recommend an early resample to monitor this condition.

Wear

Cylinder, crank, or cam shaft wear is indicated.

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 acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0124716	PCA0111512	PCA0100414
Sample Date	Client Info		21 Jun 2024	29 Dec 2023	09 Aug 2023
Machine Age	mls	Client Info	341432	320088	299020
Oil Age	mls	Client Info	21344	21068	14788
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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 >120	▲ 212	78	65
Chromium	ppm	ASTM D5185m >20	1	<1	<1
Nickel	ppm	ASTM D5185m >5	2	4	6
Titanium	ppm	ASTM D5185m >2	<1	0	<1
Silver	ppm	ASTM D5185m >2	<1	<1	0
Aluminum	ppm	ASTM D5185m >20	10	6	5
Lead	ppm	ASTM D5185m >40	2	2	3
Copper	ppm	ASTM D5185m >330	60	24	19
Tin	ppm	ASTM D5185m >15	1	1	1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	4	7	2
Barium	ppm	ASTM D5185m 0	6	0	0
Molybdenum	ppm	ASTM D5185m 50	65	61	61
Manganese	ppm	ASTM D5185m 0	6	2	2
Magnesium	ppm	ASTM D5185m 950	901	931	983
Calcium	ppm	ASTM D5185m 1050	1095	1151	1202
Phosphorus	ppm	ASTM D5185m 995	1049	1067	1061
Zinc	ppm	ASTM D5185m 1180	1204	1385	1382
Sulfur	ppm	ASTM D5185m 2600	2602	2930	3657

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	17	7	6
Sodium	ppm	ASTM D5185m	2	6	7
Potassium	ppm	ASTM D5185m >20	2	2	2

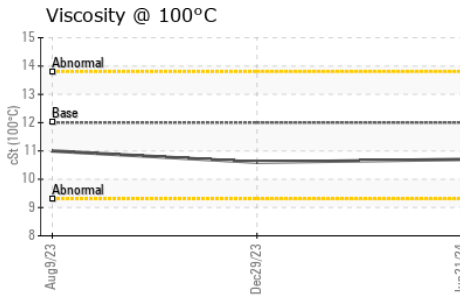
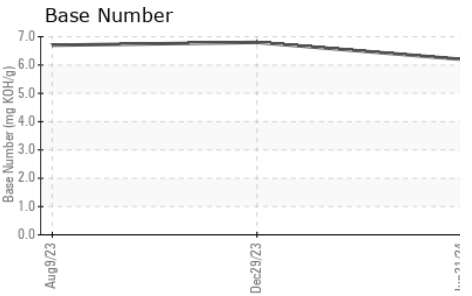
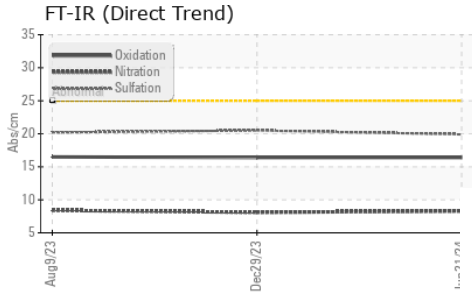
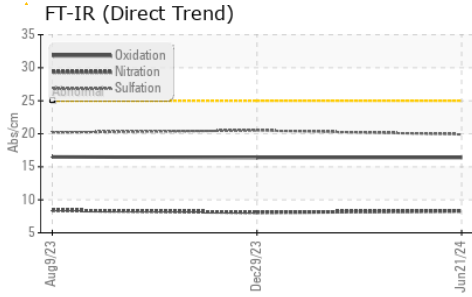
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	0.3	0.5	0.4
Nitration	Abs/cm	*ASTM D7624 >20	8.3	8.1	8.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	19.9	20.5	20.2

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.4	16.4	16.5
Base Number (BN)	mg KOH/g	ASTM D2896	6.2	6.8	6.7

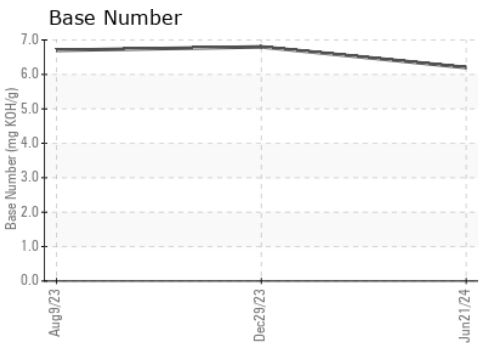
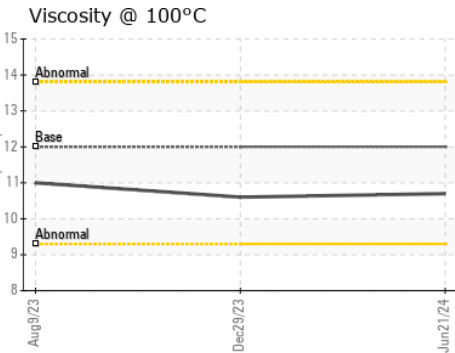
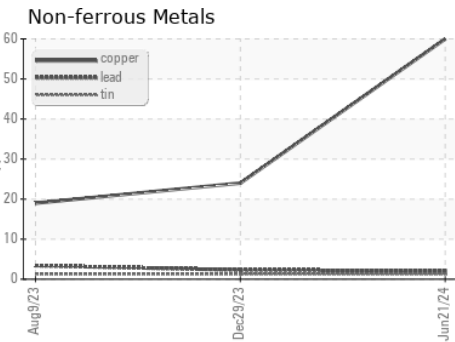
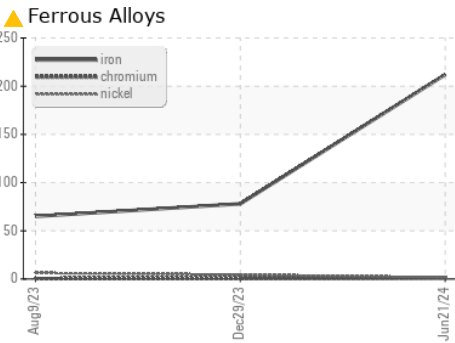
OIL ANALYSIS REPORT



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	10.7	10.6	11.0

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0124716
Lab Number : 06219198
Unique Number : 11097395
Test Package : FLEET

Received : 24 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 26 Jun 2024 - Jonathan Hester

Transervice - Shop 1072 - Supermarket-Elizabeth
 505 Division Street
 Elizabeth, NJ
 US 07207
 Contact: Normand Brizak
 nbrizak@transervice.com

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)