



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
INTERNATIONAL 539
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0905898	WC0792732	WC0792651
Sample Date		Client Info		23 May 2024	28 Dec 2023	15 Aug 2023
Machine Age	mls	Client Info		124110	119183	115672
Oil Age	mls	Client Info		5000	5000	0
Filter Age	mls	Client Info		5000	5000	0
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	31	37	54
Chromium	ppm	ASTM D5185m	>20	1	<1	2
Nickel	ppm	ASTM D5185m	>4	<1	<1	2
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	9	7	12
Lead	ppm	ASTM D5185m	>40	2	<1	4
Copper	ppm	ASTM D5185m	>330	3	3	5
Tin	ppm	ASTM D5185m	>15	1	0	2
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

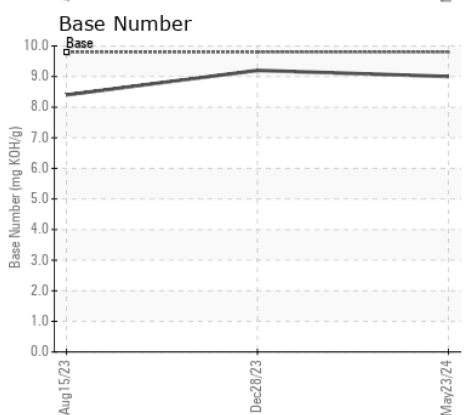
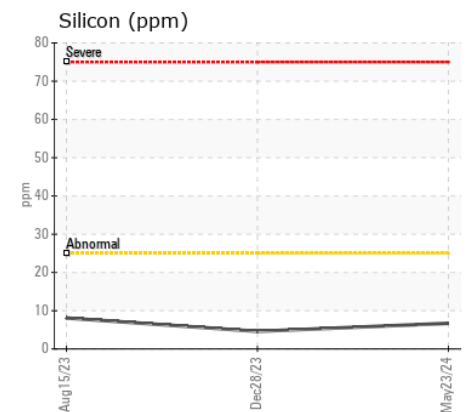
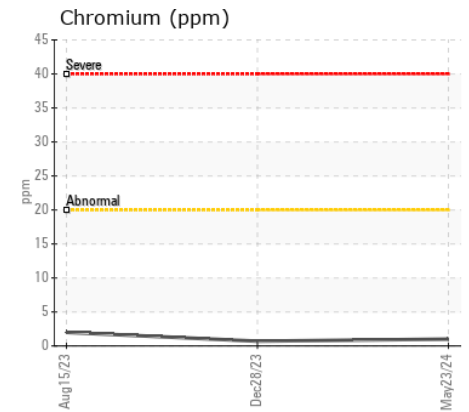
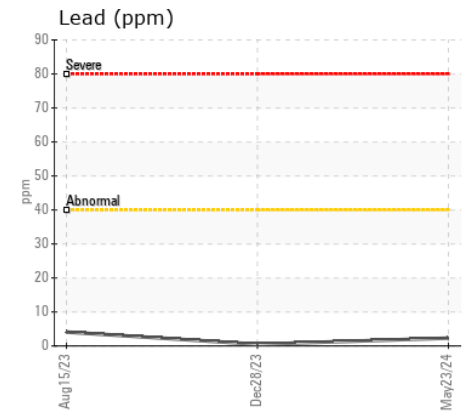
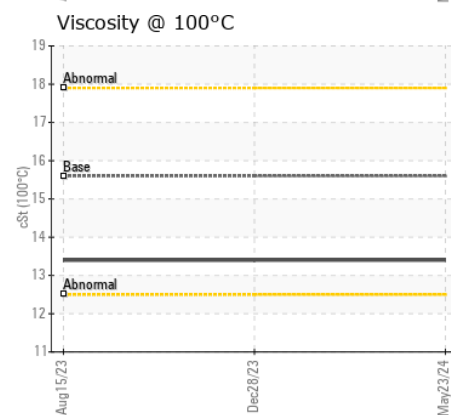
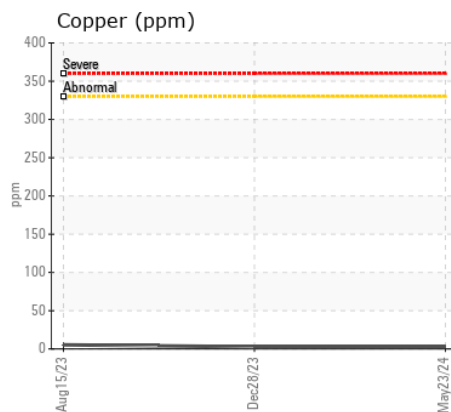
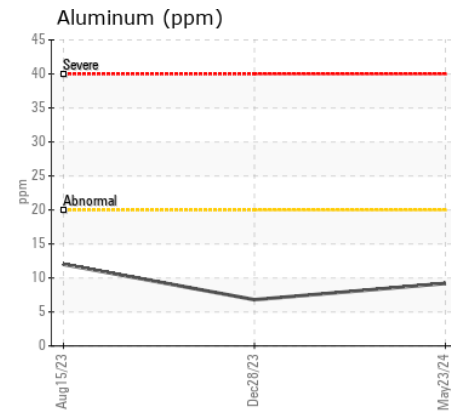
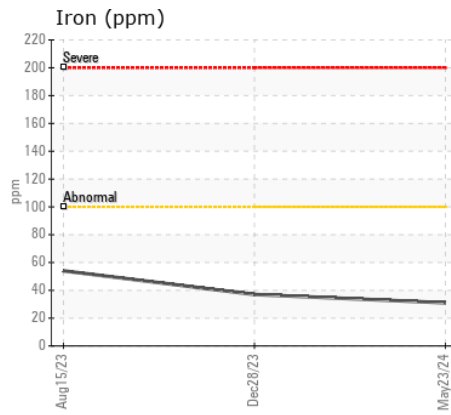
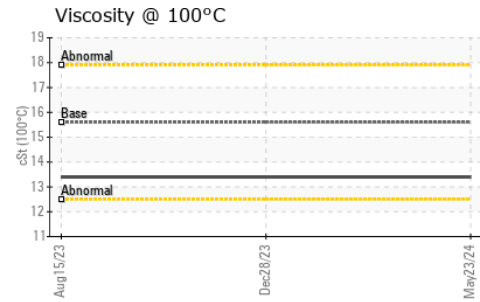
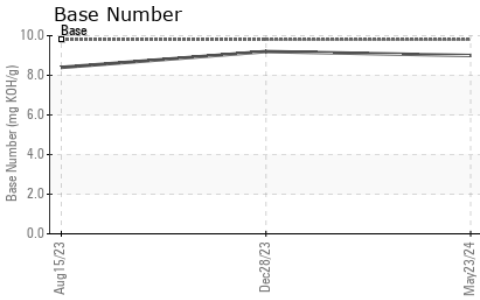
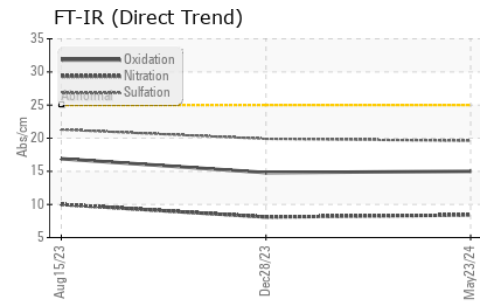
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	5	8
Potassium	ppm	ASTM D5185m	>20	35	1	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.9	0.9	1.4
Nitration	Abs/cm	*ASTM D7624	>20	8.4	8.1	10.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.6	19.9	21.3
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	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	>0.2	NEG	NEG	NEG

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.

Sodium	ppm	ASTM D5185m		3	<1	<1
Boron	ppm	ASTM D5185m		7	8	7
Barium	ppm	ASTM D5185m		0	0	1
Molybdenum	ppm	ASTM D5185m		59	63	63
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		905	909	772
Calcium	ppm	ASTM D5185m		1036	1084	1129
Phosphorus	ppm	ASTM D5185m		1023	977	950
Zinc	ppm	ASTM D5185m		1209	1198	1108
Sulfur	ppm	ASTM D5185m		3376	3178	2816
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.0	14.8	16.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.0	9.2	8.4
Visc @ 100°C	cSt	ASTM D445	15.6	13.4	13.4	13.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0905898
Lab Number : 06196480
Unique Number : 11058603
Test Package : MOB 1 (Additional Tests: TBN)

Received : 31 May 2024
Tested : 03 Jun 2024
Diagnosed : 03 Jun 2024 - Wes Davis

WAYNE CO SCHOOL BUS GARAGE
 1603 SALEM CHURCH RD
 GOLDSBORO, NC
 US 27530
 Contact: BRANDON BRIGGS
 brandonbriggs@wcps.org

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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