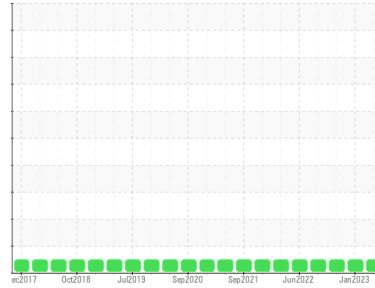


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
172080
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All 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	history 1	history 2
Sample Number	Client Info			PCA0097770	PCA0089983	PCA0079710
Sample Date	Client Info			06 May 2023	07 Jan 2023	16 Sep 2022
Machine Age	mls	Client Info		253000	0	227401
Oil Age	mls	Client Info		10000	0	0
Oil Changed	Client Info			N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history 1	history 2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>100	17	26	17
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>40	1	1	2
Copper	ppm	ASTM D5185m	>330	<1	1	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

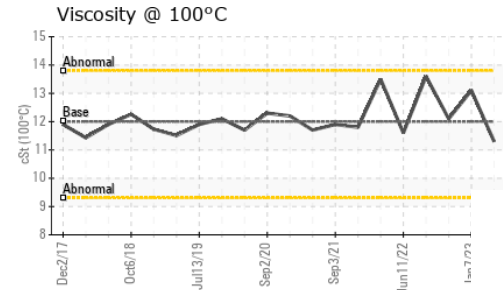
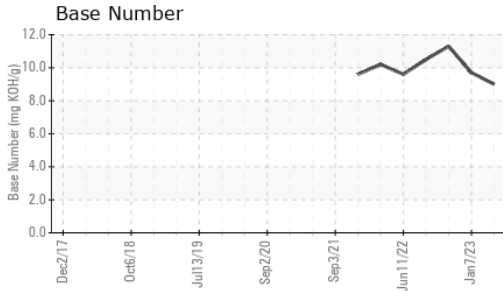
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	2	14	7	8
Barium	ppm	ASTM D5185m	0	2	0	0
Molybdenum	ppm	ASTM D5185m	50	69	66	66
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	818	882	980
Calcium	ppm	ASTM D5185m	1050	1135	1101	1157
Phosphorus	ppm	ASTM D5185m	995	996	958	1053
Zinc	ppm	ASTM D5185m	1180	1155	1125	1303
Sulfur	ppm	ASTM D5185m	2600	3045	3645	3907

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	3	5	4
Sodium	ppm	ASTM D5185m		0	10	0
Potassium	ppm	ASTM D5185m	>20	2	2	1

INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844	>3	0.7	0.6	1.4
Nitration	Abs/cm	*ASTM D7624	>20	8.5	8.2	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.8	19.1	22.4

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	15.0	17.5
Base Number (BN)	mg KOH/g	ASTM D2896		9.0	9.7	11.3

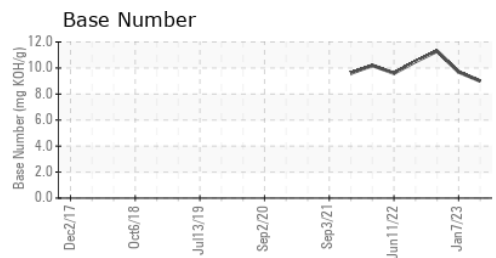
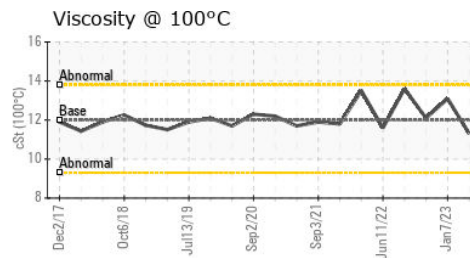
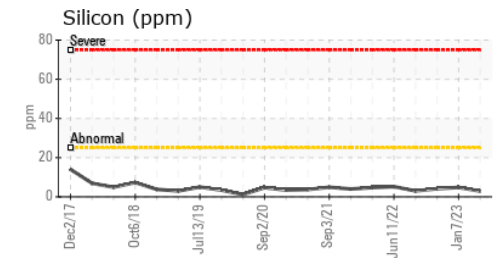
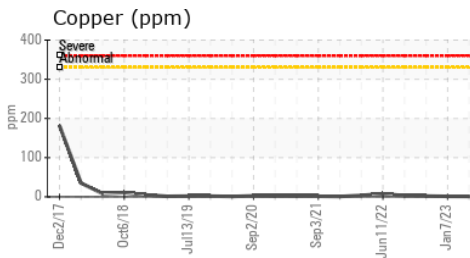
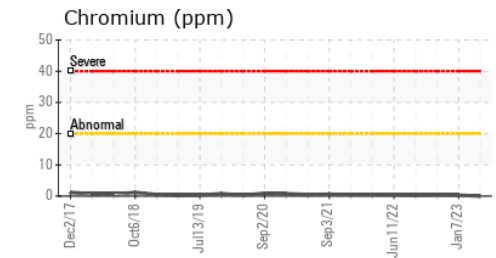
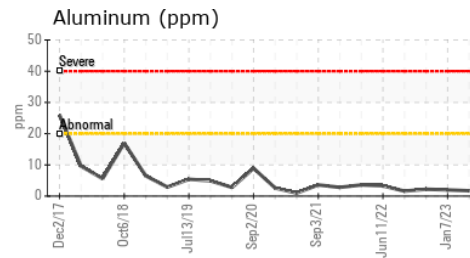
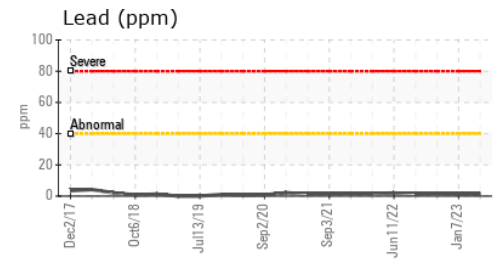
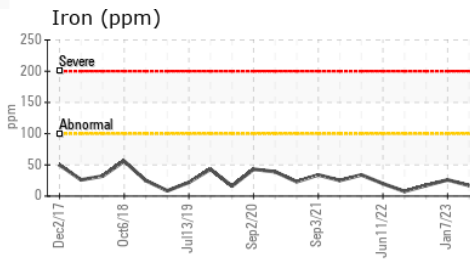
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
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	history 1	history 2	
Visc @ 100°C	cSt	ASTM D445	12.00	11.3	13.1	12.1

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0097770 **Received** : 03 Jul 2023
Lab Number : 05888701 **Diagnosed** : 05 Jul 2023
Unique Number : 10539184 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

63 REPAUPO STATION ROAD
 LOGAN TOWNSHIP, NJ
 US 08085

Contact: ED DAVIS
 edavis@millertransgroup.com
 T: (856)214-3521
 F: (856)214-3663

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)