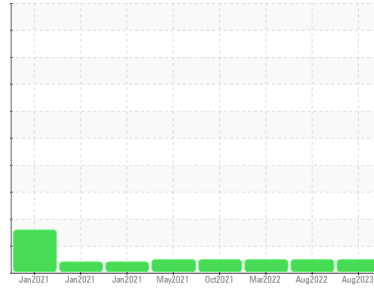


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
DT701

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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	history1	history2
Sample Number	Client Info		PCA0102249	PCA0079621	PCA0067601
Sample Date	Client Info		23 Aug 2023	22 Aug 2022	16 Mar 2022
Machine Age	mls Client Info		200392	150779	0
Oil Age	mls Client Info		200392	99979	0
Oil Changed	Client Info		Changed	Changed	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m	>110	18	24	18
Chromium	ppm ASTM D5185m	>4	<1	1	<1
Nickel	ppm ASTM D5185m	>2	0	0	0
Titanium	ppm ASTM D5185m		<1	<1	0
Silver	ppm ASTM D5185m	>2	0	<1	<1
Aluminum	ppm ASTM D5185m	>25	4	8	4
Lead	ppm ASTM D5185m	>45	0	<1	0
Copper	ppm ASTM D5185m	>85	1	2	2
Tin	ppm ASTM D5185m	>4	<1	<1	<1
Antimony	ppm ASTM D5185m		---	---	---
Vanadium	ppm ASTM D5185m		<1	<1	0
Cadmium	ppm ASTM D5185m		0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	2	2	5	6
Barium	ppm ASTM D5185m	0	0	0	0
Molybdenum	ppm ASTM D5185m	50	73	68	64
Manganese	ppm ASTM D5185m	0	<1	<1	<1
Magnesium	ppm ASTM D5185m	950	1002	989	1044
Calcium	ppm ASTM D5185m	1050	1307	1161	1236
Phosphorus	ppm ASTM D5185m	995	1106	1094	1148
Zinc	ppm ASTM D5185m	1180	1323	1367	1322
Sulfur	ppm ASTM D5185m	2600	3390	2970	2711

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>30	5	5	4
Sodium	ppm ASTM D5185m		3	2	2
Potassium	ppm ASTM D5185m	>20	5	14	5

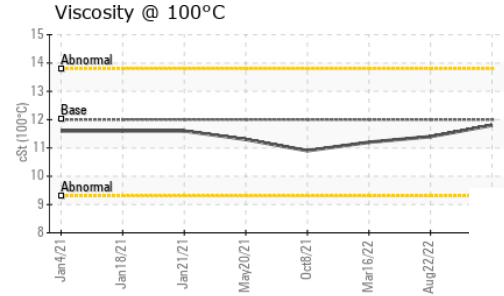
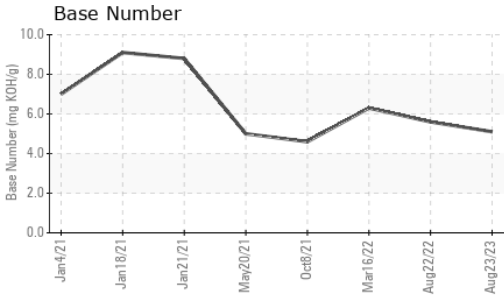
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	>3	0.5	0.6	0.5
Nitration	Abs/cm *ASTM D7624	>20	10.3	12.7	11.3
Sulfation	Abs/.1mm *ASTM D7415	>30	23.1	27.2	24.7

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	19.7	23.8	21.9
Base Number (BN)	mg KOH/g ASTM D2896		5.1	5.6	6.3

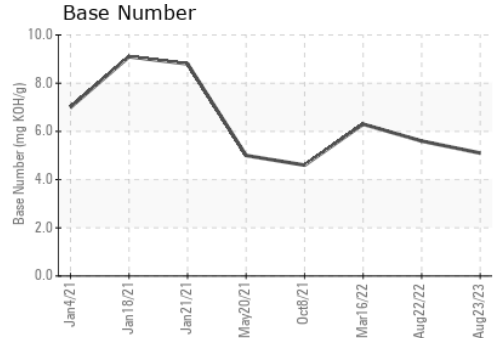
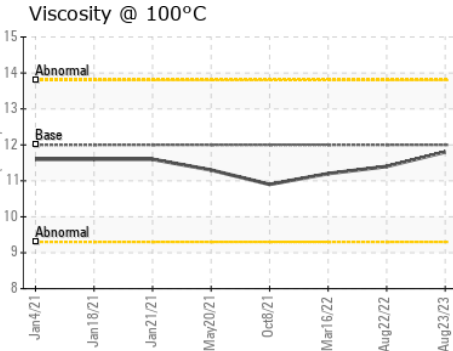
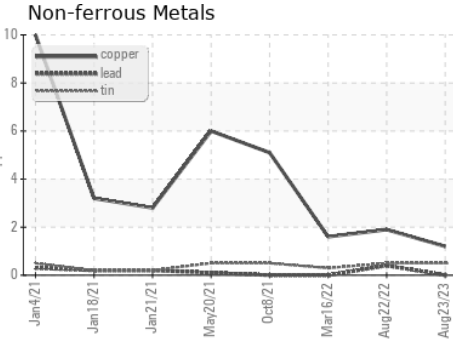
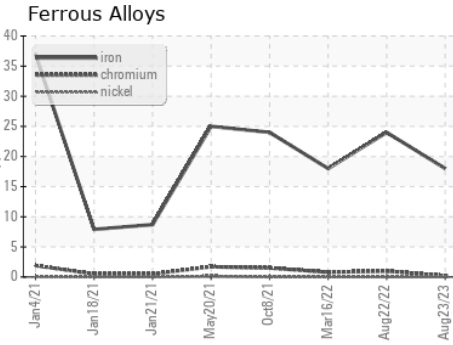
OIL ANALYSIS REPORT



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	11.8	11.4	11.2

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0102249 **Received** : 28 Aug 2023
Lab Number : **05935897** **Diagnosed** : 28 Aug 2023
Unique Number : 10621168 **Diagnostician** : Wes Davis
Test Package : FLEET

NW WHITE & CO - COLUMBIA DIVISION
 100 INDEPENDENCE BLVD
 COLUMBIA, SC
 US 29210
 Contact: GEORGE EDWARDS
 gedwards@nwwhite.com

Certificate L2367
 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)