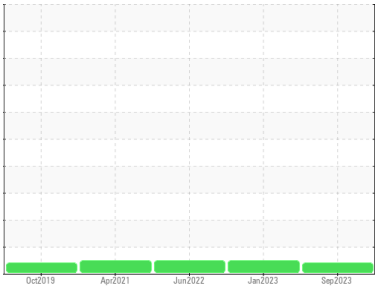
OIL DIAGNOSTICS

PROBLEM SUMMARY

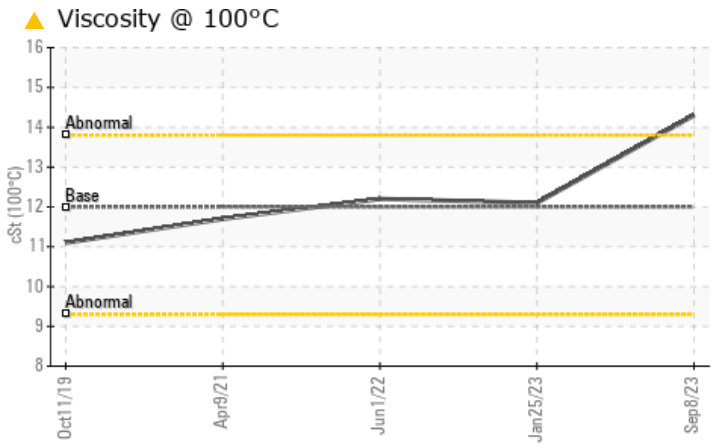
Sample Rating Trend



VISCOSITY

Machine Id
DT648
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (42 mls)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ATTENTION**	NORMAL	NORMAL
Visc @ 100°C	cSt	ASTM D445	12.00	▲ **14.3**	12.1	12.2

Customer Id: NWWPIE
Sample No.: PCA0103262
Lab Number: 05955123
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

25 Jan 2023 Diag: Wes Davis

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

01 Jun 2022 Diag: Wes Davis

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

09 Apr 2021 Diag: Wes Davis

NORMAL

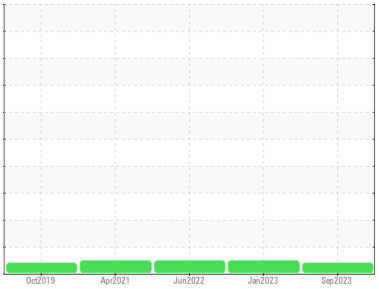
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

OIL DIAGNOSTICS

Sample Rating Trend



VISCOSITY

Machine Id
DT648
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (42 mls)

DIAGNOSIS

Recommendation
Oil and filter change at the time of sampling has been noted. 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 oil viscosity is higher than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PCA0103262**	PCA0091190	PCA0074848
Sample Date		Client Info		**08 Sep 2023**	25 Jan 2023	01 Jun 2022
Machine Age	mls	Client Info		**166713**	141520	115996
Oil Age	mls	Client Info		**15000**	0	24413
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ATTENTION**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>2.0	**<1.0**	<1.0	<1.0
Glycol		WC Method		**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	**14**	45	85
Chromium	ppm	ASTM D5185m	>20	**2**	2	2
Nickel	ppm	ASTM D5185m	>4	**<1**	<1	0
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**5**	4	5
Lead	ppm	ASTM D5185m	>40	**<1**	1	<1
Copper	ppm	ASTM D5185m	>330	**3**	5	8
Tin	ppm	ASTM D5185m	>15	**<1**	<1	<1
Antimony	ppm	ASTM D5185m		**---**	---	---
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	**23**	4	3
Barium	ppm	ASTM D5185m	0	**0**	3	2
Molybdenum	ppm	ASTM D5185m	50	**95**	70	62
Manganese	ppm	ASTM D5185m	0	**1**	<1	1
Magnesium	ppm	ASTM D5185m	950	**30**	1048	858
Calcium	ppm	ASTM D5185m	1050	**2291**	1301	1117
Phosphorus	ppm	ASTM D5185m	995	**1080**	1115	955
Zinc	ppm	ASTM D5185m	1180	**1294**	1473	1208
Sulfur	ppm	ASTM D5185m	2600	**4221**	3971	2707

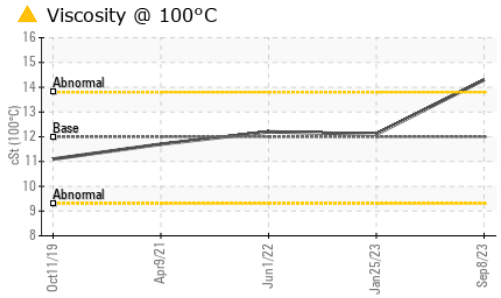
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**6**	12	7
Sodium	ppm	ASTM D5185m		**3**	3	<1
Potassium	ppm	ASTM D5185m	>20	**9**	10	14

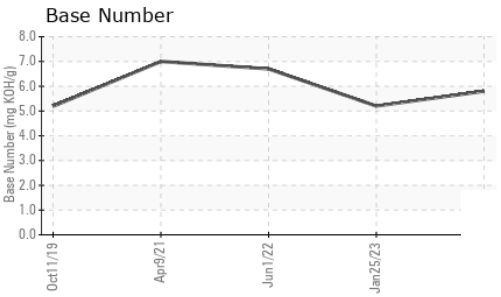
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.4**	1.4	2.7
Nitration	Abs/cm	*ASTM D7624	>20	**9.9**	10.6	11.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	**19.4**	21.9	24.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**14.7**	16.8	16.7
Base Number (BN)	mg KOH/g	ASTM D2896		**5.8**	5.2	6.7

OIL ANALYSIS REPORT

OIL DIAGNOSTICS

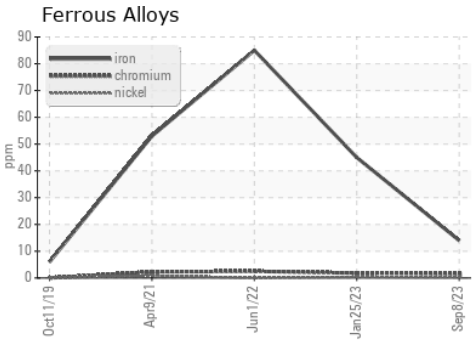


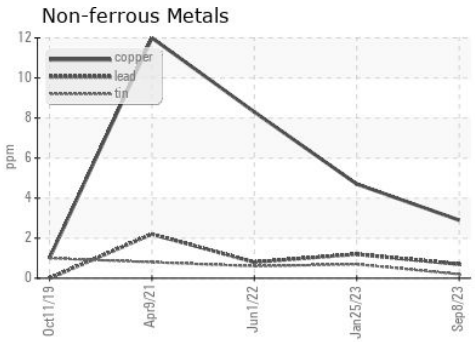


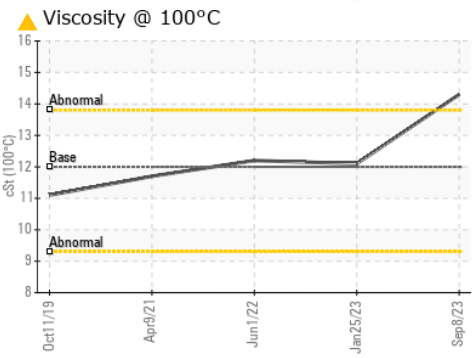
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

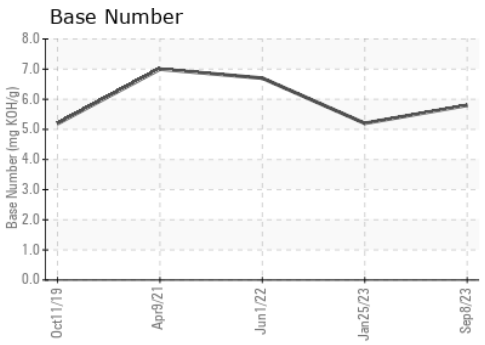
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	▲ **14.3**	12.1	12.2

GRAPHS









Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0103262
Lab Number : 05955123
Unique Number : 10656336
Test Package : FLEET

Received : 19 Sep 2023
Diagnosed : 21 Sep 2023
Diagnostician : Don Baldridge

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)

NW WHITE & CO - ANDERSON DIVISION
2605 RIVER RD
PIEDMONT, SC
US 29673
Contact: James Threatt
jthreatt@nwwhite.com
T: (864)918-4646
F: