



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
DT819
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (36 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0113191	PCA0103292	PCA0096967
Sample Date		Client Info		24 Apr 2024	10 Oct 2023	09 May 2023
Machine Age	mls	Client Info		104267	76449	50474
Oil Age	mls	Client Info		27818	25975	26187
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	19	25	28
Chromium	ppm	ASTM D5185m	>20	<1	1	1
Nickel	ppm	ASTM D5185m	>5	2	10	3
Titanium	ppm	ASTM D5185m	>2	0	0	<1
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>20	4	4	5
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	8	34	53
Tin	ppm	ASTM D5185m	>15	1	2	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

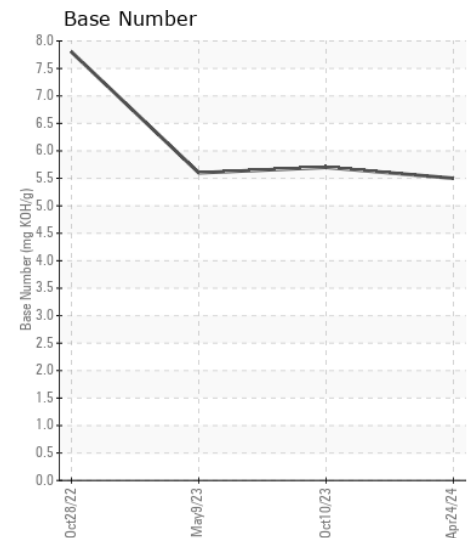
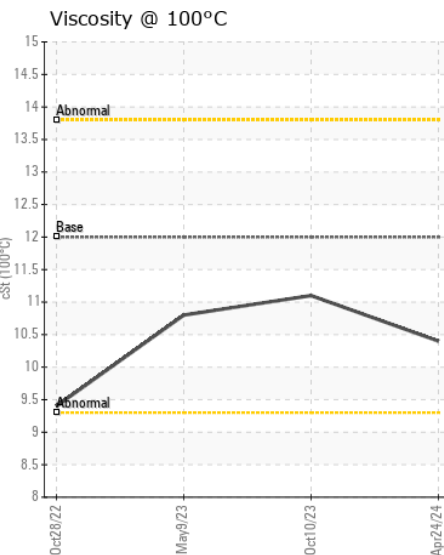
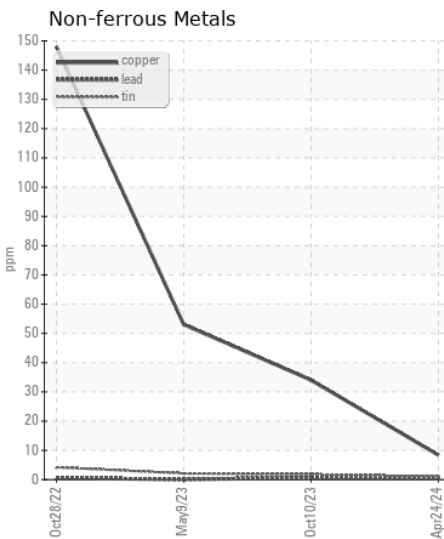
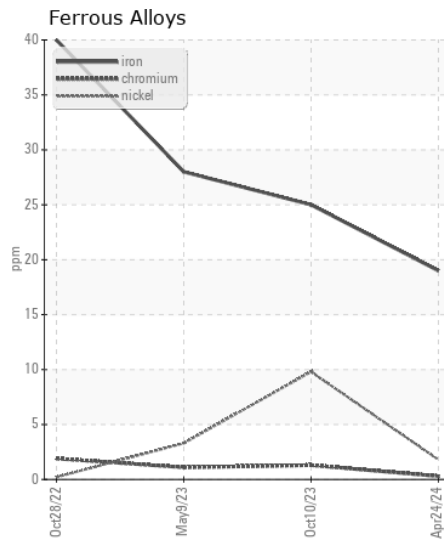
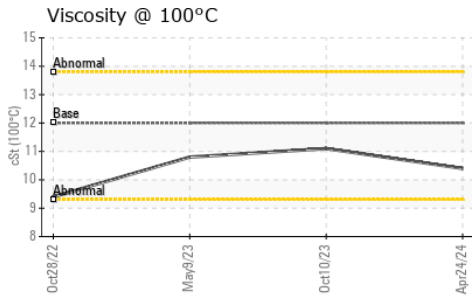
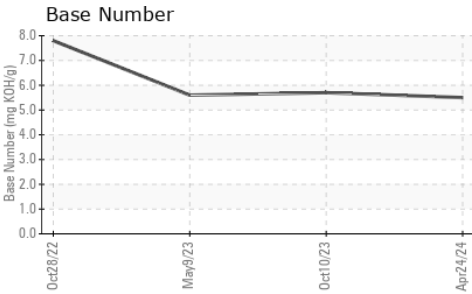
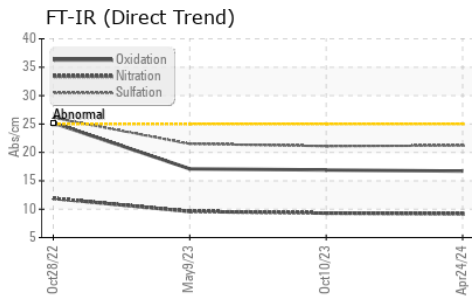
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	11	11
Potassium	ppm	ASTM D5185m	>20	5	28	21
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
Soot %	%	*ASTM D7844	>4	0.6	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	9.2	9.3	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.2	21.1	21.5
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		5	2	5
Boron	ppm	ASTM D5185m	2	4	4	4
Barium	ppm	ASTM D5185m	0	0	2	0
Molybdenum	ppm	ASTM D5185m	50	64	64	72
Manganese	ppm	ASTM D5185m	0	<1	1	1
Magnesium	ppm	ASTM D5185m	950	895	861	920
Calcium	ppm	ASTM D5185m	1050	1080	1083	1199
Phosphorus	ppm	ASTM D5185m	995	943	863	844
Zinc	ppm	ASTM D5185m	1180	1175	1174	1178
Sulfur	ppm	ASTM D5185m	2600	2901	2531	2455
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7	16.9	17.1
Base Number (BN)	mg KOH/g	ASTM D2896		5.5	5.7	5.6
Visc @ 100°C	cSt	ASTM D445	12.00	10.4	11.1	10.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0113191
Lab Number : 06175302
Unique Number : 11021355
Test Package : FLEET

Received : 10 May 2024
Tested : 13 May 2024
Diagnosed : 13 May 2024 - Wes Davis

NW WHITE & CO - ANDERSON DIVISION
 2605 RIVER RD
 PIEDMONT, SC
 US 29673

Contact: James Threatt
 jthreatt@nwwhite.com

T: (864)918-4646

F:

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)