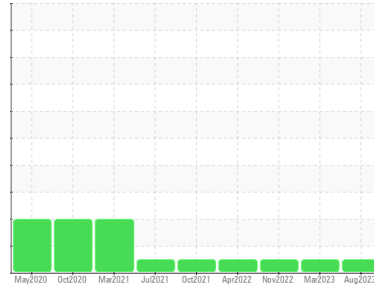


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL


Machine Id

T283

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 10W30 (36 hrs)
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	history1	history2
Sample Number	Client Info		PCA0102177	PCA0092560	PCA0081227
Sample Date	Client Info		24 Aug 2023	29 Mar 2023	03 Nov 2022
Machine Age	mls	Client Info	224307	199761	175077
Oil Age	mls	Client Info	224307	175077	0
Oil Changed	Client Info		Changed	Changed	Changed
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	>100	19	22	39
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	6	7	15
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	2	2	2
Tin	ppm	ASTM D5185m	>15	<1	0	<1
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	4	3	3
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	69	67	61
Manganese	ppm	ASTM D5185m	0	<1	1	<1
Magnesium	ppm	ASTM D5185m	950	939	959	926
Calcium	ppm	ASTM D5185m	1050	1240	1134	1120
Phosphorus	ppm	ASTM D5185m	995	1042	1009	973
Zinc	ppm	ASTM D5185m	1180	1280	1240	1241
Sulfur	ppm	ASTM D5185m	2600	3348	2946	3125

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	8	8	10
Sodium	ppm	ASTM D5185m		2	2	<1
Potassium	ppm	ASTM D5185m	>20	10	10	31

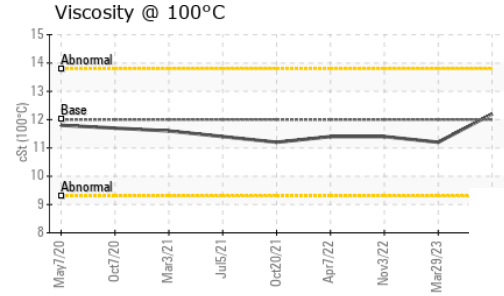
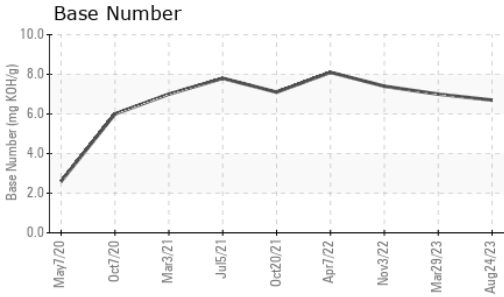
INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.5	0.6	0.7
Nitration	Abs/cm	*ASTM D7624	>20	8.4	9.0	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.3	21.0	23.2

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	16.3	19
Base Number (BN)	mg KOH/g	ASTM D2896		6.7	7.0	7.4

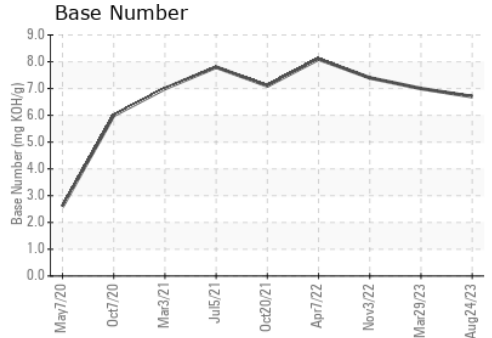
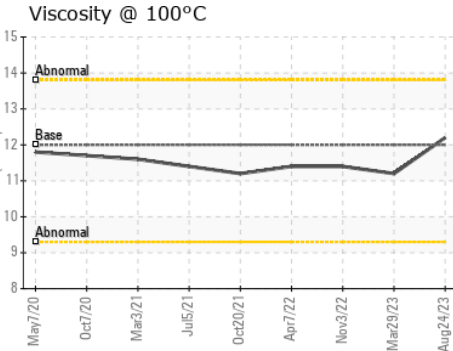
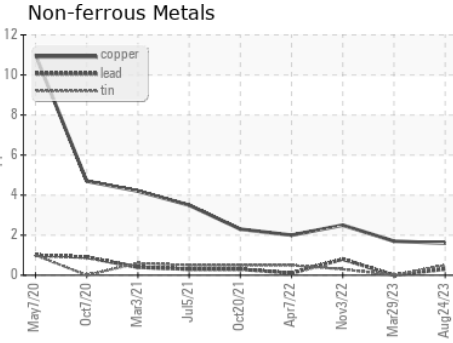
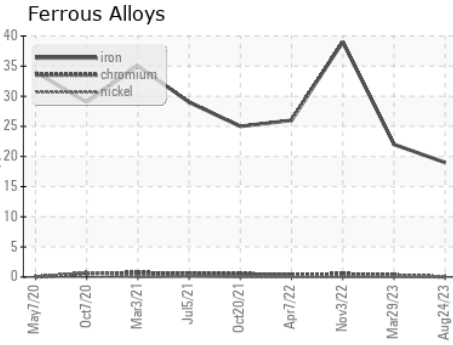
OIL ANALYSIS REPORT



PARAMETER	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

PARAMETER	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	12.2	11.2

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0102177
Lab Number : 05935896
Unique Number : 10621167
Test Package : FLEET

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

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)