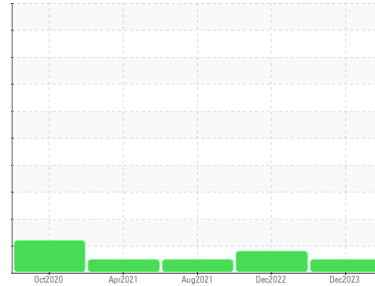


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
T299
 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		PCA0089136	PCA0080935	PCA0045175
Sample Date	Client Info		23 Dec 2023	16 Dec 2022	27 Aug 2021
Machine Age	mls	Client Info	266117	197437	0
Oil Age	mls	Client Info	60683	72497	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	ABNORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	69	▲ 114	38
Chromium	ppm	ASTM D5185m >20	<1	1	<1
Nickel	ppm	ASTM D5185m >4	<1	0	0
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m >3	0	0	<1
Aluminum	ppm	ASTM D5185m >20	4	3	4
Lead	ppm	ASTM D5185m >40	10	1	0
Copper	ppm	ASTM D5185m >330	9	6	4
Tin	ppm	ASTM D5185m >15	2	<1	<1
Antimony	ppm	ASTM D5185m	---	---	0
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	9	0	5
Barium	ppm	ASTM D5185m 0	0	2	0
Molybdenum	ppm	ASTM D5185m 50	66	70	56
Manganese	ppm	ASTM D5185m 0	1	<1	<1
Magnesium	ppm	ASTM D5185m 950	792	1037	937
Calcium	ppm	ASTM D5185m 1050	1908	1292	1168
Phosphorus	ppm	ASTM D5185m 995	1066	1125	966
Zinc	ppm	ASTM D5185m 1180	1604	1371	1207
Sulfur	ppm	ASTM D5185m 2600	3122	2358	2370

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	10	11	6
Sodium	ppm	ASTM D5185m	6	0	2
Potassium	ppm	ASTM D5185m >20	6	10	9

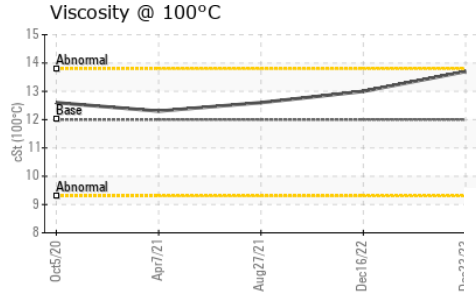
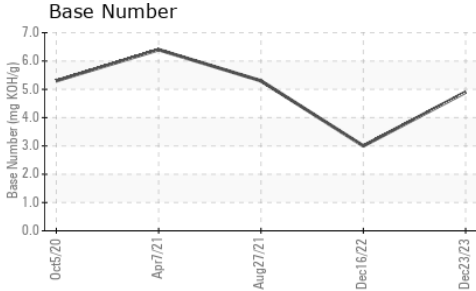
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1.2	2.2	1
Nitration	Abs/cm	*ASTM D7624 >20	13.8	17.4	11.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	29.3	33.1	24

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	28.8	35.1	20.5
Base Number (BN)	mg KOH/g	ASTM D2896	4.9	3.0	5.3

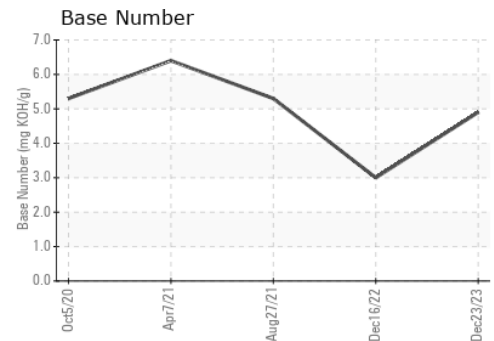
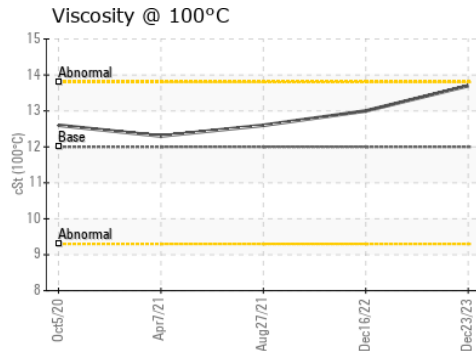
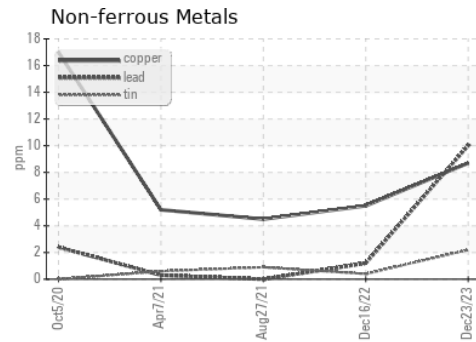
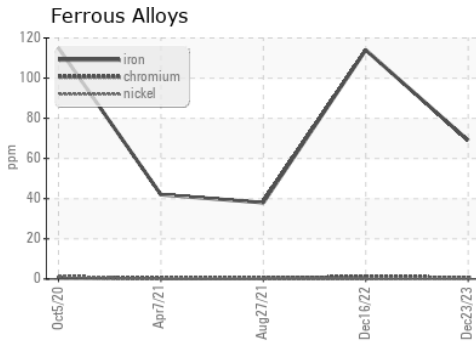
OIL ANALYSIS REPORT



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	13.7	13.0

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0089136
Lab Number : 06104215
Unique Number : 10902445
Test Package : FLEET

Received : 29 Feb 2024
Tested : 01 Mar 2024
Diagnosed : 02 Mar 2024 - Don Baldrige

NW WHITE & CO - GREER DIVISION
 1060 ROGERS BRIDGE RD
 DUNCAN, SC
 US 29334
 Contact: Matt Quinlan
 mquinlan@nwwhite.com
 T: (864)905-8506
 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)