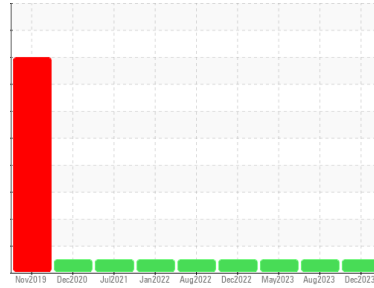


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
DT659

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (36 mls)

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 acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	PCA0111652	PCA0101877	PCA0095241	
Sample Date	Client Info	15 Dec 2023	28 Aug 2023	17 May 2023	
Machine Age	mls	Client Info	28393	28393	28393
Oil Age	mls	Client Info	28393	28393	28393
Oil Changed	Client Info	N/A	N/A	N/A	
Sample Status		NORMAL	NORMAL	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 >110	10	13	12
Chromium	ppm ASTM D5185m >4	<1	<1	<1
Nickel	ppm ASTM D5185m >2	0	<1	0
Titanium	ppm ASTM D5185m	0	0	0
Silver	ppm ASTM D5185m >2	0	0	0
Aluminum	ppm ASTM D5185m >25	5	5	5
Lead	ppm ASTM D5185m >45	0	0	0
Copper	ppm ASTM D5185m >85	0	<1	<1
Tin	ppm ASTM D5185m >4	<1	<1	<1
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 2	6	7	13
Barium	ppm ASTM D5185m 0	0	0	0
Molybdenum	ppm ASTM D5185m 50	70	70	72
Manganese	ppm ASTM D5185m 0	<1	<1	<1
Magnesium	ppm ASTM D5185m 950	861	1054	935
Calcium	ppm ASTM D5185m 1050	1066	1299	1167
Phosphorus	ppm ASTM D5185m 995	970	1227	1083
Zinc	ppm ASTM D5185m 1180	1188	1519	1339
Sulfur	ppm ASTM D5185m 2600	2666	4164	3862

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >30	5	5	4
Sodium	ppm ASTM D5185m	1	2	0
Potassium	ppm ASTM D5185m >20	4	11	5

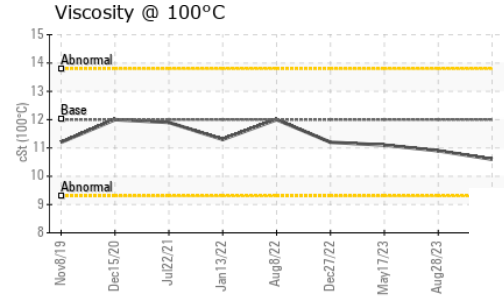
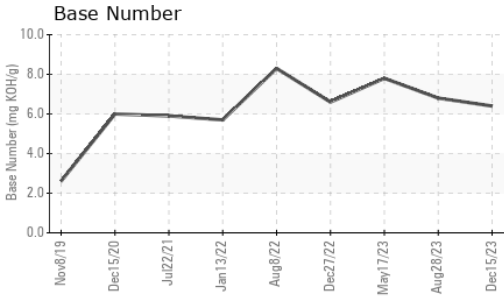
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.4	0.4	0.4
Nitration	Abs/cm *ASTM D7624 >20	9.2	9.9	8.4
Sulfation	Abs/.1mm *ASTM D7415 >30	20.4	21.0	20.1

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	16.6	16.9	15.4
Base Number (BN)	mg KOH/g ASTM D2896	6.4	6.8	7.8

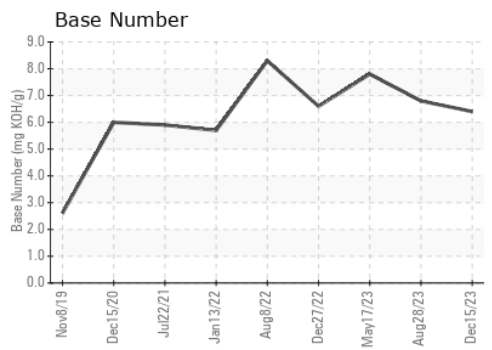
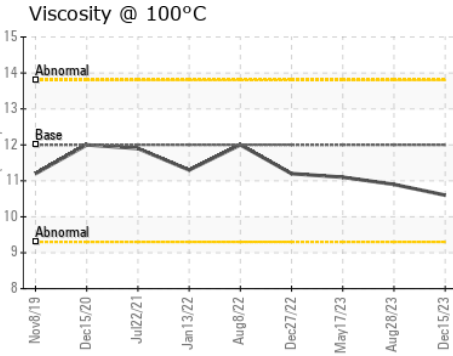
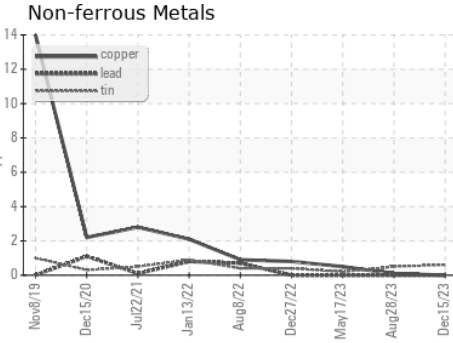
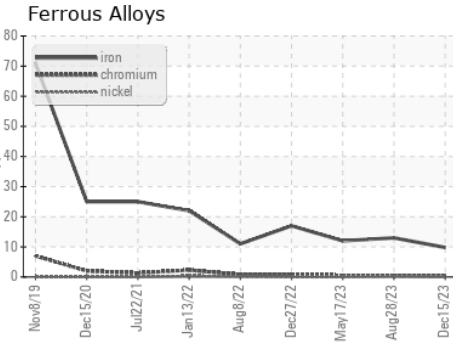
OIL ANALYSIS REPORT



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	10.6	10.9	11.1

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0111652 **Received** : 20 Dec 2023
Lab Number : **06040485** **Diagnosed** : 21 Dec 2023
Unique Number : 10795714 **Diagnostician** : Don Baldrige
Test Package : FLEET (Additional Tests: FT-IR(Diff))

NW WHITE & CO - BEAUFORT DIVISION
 1491 YENMASSEE HIGHWAY
 VARNVILLE, SC
 US 29944
 Contact: VINCENT BULLOCK
 bullockvince514@gmail.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)