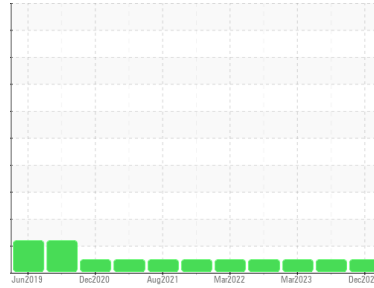


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**DT639**

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 suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PCA0111657</b>	PCA0101853	PCA0087475
Sample Date	Client Info			<b>06 Dec 2023</b>	25 Jul 2023	14 Mar 2023
Machine Age	mls	Client Info		<b>248163</b>	248163	248163
Oil Age	mls	Client Info		<b>71725</b>	71725	71725
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2		<b>NEG</b>	NEG	NEG
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>110	<b>12</b>	13	13
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	3	4
Lead	ppm	ASTM D5185m	>45	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>85	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

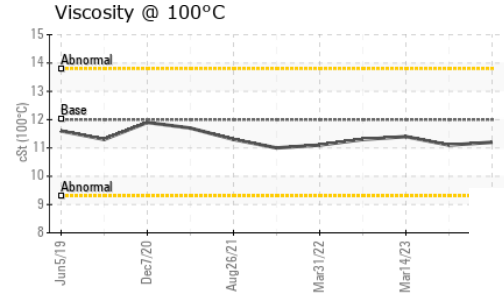
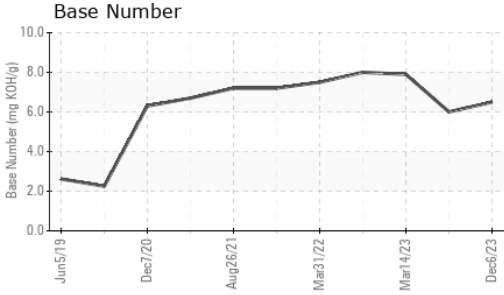
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	<b>8</b>	2	46
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>66</b>	64	63
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	950	<b>877</b>	884	473
Calcium	ppm	ASTM D5185m	1050	<b>1084</b>	1232	1708
Phosphorus	ppm	ASTM D5185m	995	<b>995</b>	987	1067
Zinc	ppm	ASTM D5185m	1180	<b>1232</b>	1243	1271
Sulfur	ppm	ASTM D5185m	2600	<b>2681</b>	3227	2995

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	<b>6</b>	4	6
Sodium	ppm	ASTM D5185m		<b>2</b>	3	4
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	4	3

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.7</b>	0.7	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.2</b>	10.7	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.0</b>	22.3	20.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.3</b>	18.2	16.5
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.5</b>	6.0	7.9

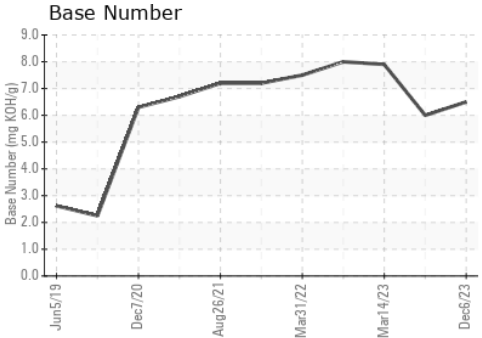
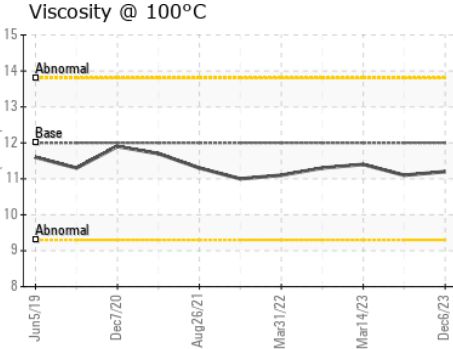
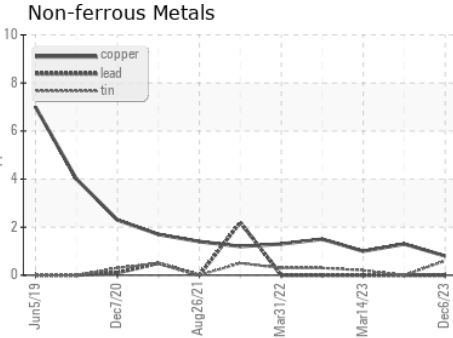
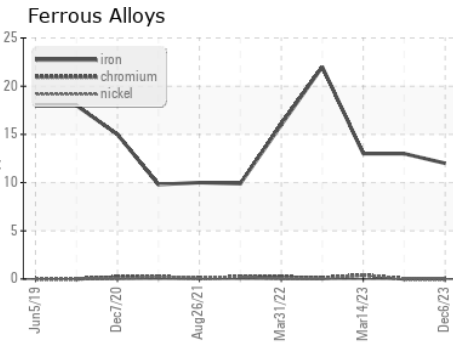
# OIL ANALYSIS REPORT



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	11.2	11.1	11.4

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0111657 **Received** : 20 Dec 2023  
**Lab Number** : 06040484 **Diagnosed** : 21 Dec 2023  
**Unique Number** : 10795713 **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

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)