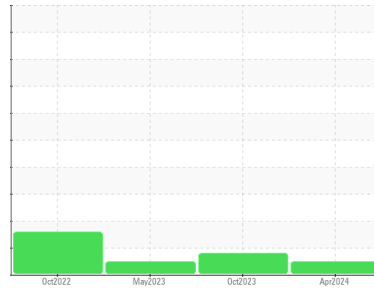


# OIL ANALYSIS REPORT



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

### Sample Rating Trend



**NORMAL**



## 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>PCA0113191</b>	PCA0103292	PCA0096967
Sample Date	Client Info			<b>24 Apr 2024</b>	10 Oct 2023	09 May 2023
Machine Age	mls	Client Info		<b>104267</b>	76449	50474
Oil Age	mls	Client Info		<b>27818</b>	25975	26187
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>3.0		<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	>120	<b>19</b>	25	28
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	1
Nickel	ppm	ASTM D5185m	>5	<b>2</b>	10	3
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	4	5
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>8</b>	34	53
Tin	ppm	ASTM D5185m	>15	<b>1</b>	2	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

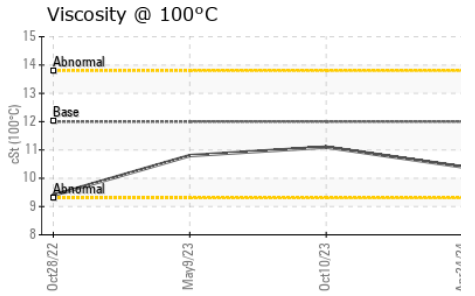
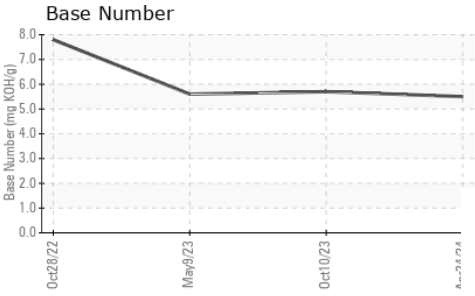
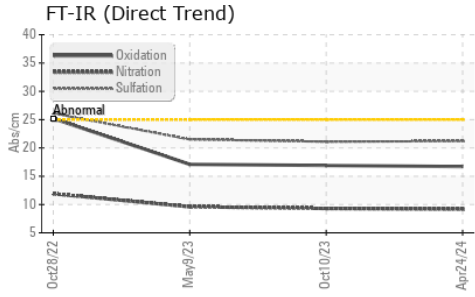
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	<b>4</b>	4	4
Barium	ppm	ASTM D5185m	0	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m	50	<b>64</b>	64	72
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	1	1
Magnesium	ppm	ASTM D5185m	950	<b>895</b>	861	920
Calcium	ppm	ASTM D5185m	1050	<b>1080</b>	1083	1199
Phosphorus	ppm	ASTM D5185m	995	<b>943</b>	863	844
Zinc	ppm	ASTM D5185m	1180	<b>1175</b>	1174	1178
Sulfur	ppm	ASTM D5185m	2600	<b>2901</b>	2531	2455

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	11	11
Sodium	ppm	ASTM D5185m		<b>5</b>	2	5
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	28	21

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>4	<b>0.6</b>	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.2</b>	9.3	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.2</b>	21.1	21.5

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.7</b>	16.9	17.1
Base Number (BN)	mg KOH/g	ASTM D2896		<b>5.5</b>	5.7	5.6

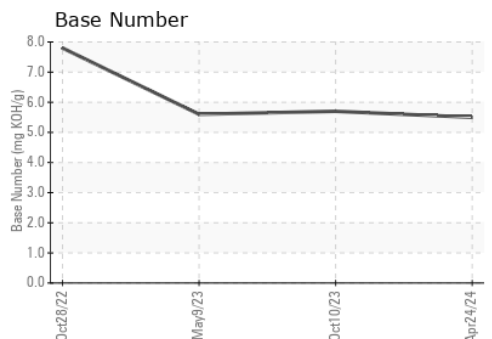
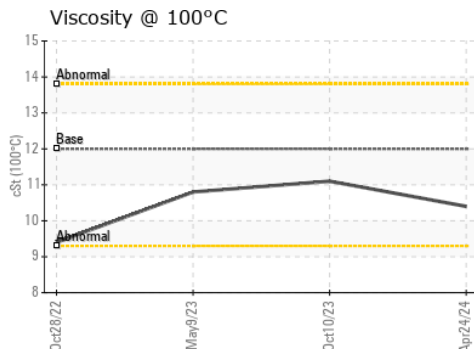
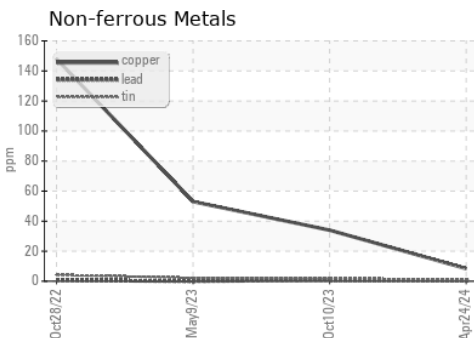
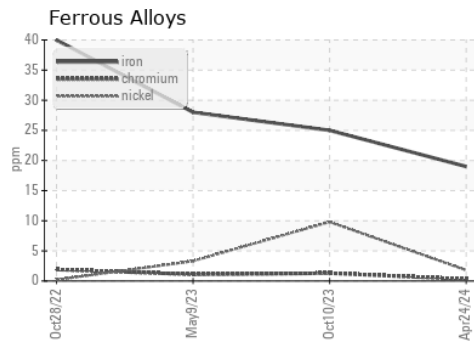
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	10.4	11.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0113191      **Received** : 10 May 2024  
**Lab Number** : 06175302      **Tested** : 13 May 2024  
**Unique Number** : 11021355      **Diagnosed** : 13 May 2024 - Wes Davis  
**Test Package** : FLEET

**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)