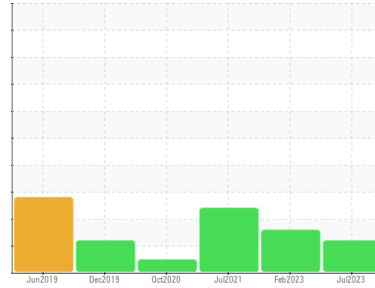


# OIL ANALYSIS REPORT

Sample Rating Trend



**GLYCOL**



Machine Id  
**DT656**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 10W30 (42 mls)**

## DIAGNOSIS

### Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

### 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	<b>PCA0089163</b>	PCA0089278	PCA0050569	
Sample Date	Client Info	<b>25 Jul 2023</b>	01 Feb 2023	20 Jul 2021	
Machine Age	mls	Client Info	<b>148805</b>	136173	0
Oil Age	mls	Client Info	<b>12632</b>	36516	0
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed	
Sample Status		<b>ABNORMAL</b>	ABNORMAL	SEVERE	

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	0.4	▲ 25.7
Water	WC Method >0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >110	<b>31</b>	▲ 121	30
Chromium	ppm ASTM D5185m >4	<b>2</b>	▲ 6	1
Nickel	ppm ASTM D5185m >2	<b>&lt;1</b>	2	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >25	<b>10</b>	13	5
Lead	ppm ASTM D5185m >45	<b>&lt;1</b>	13	<1
Copper	ppm ASTM D5185m >85	<b>6</b>	25	6
Tin	ppm ASTM D5185m >4	<b>&lt;1</b>	1	<1
Antimony	ppm ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 2	<b>3</b>	3	19
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 50	<b>64</b>	45	32
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	3	<1
Magnesium	ppm ASTM D5185m 950	<b>962</b>	885	606
Calcium	ppm ASTM D5185m 1050	<b>1099</b>	1321	999
Phosphorus	ppm ASTM D5185m 995	<b>1057</b>	967	622
Zinc	ppm ASTM D5185m 1180	<b>1281</b>	1215	790
Sulfur	ppm ASTM D5185m 2600	<b>3390</b>	2780	1961

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >30	<b>10</b>	16	4
Sodium	ppm ASTM D5185m	<b>8</b>	5	3
Potassium	ppm ASTM D5185m >20	▲ <b>54</b>	28	14
Glycol	% *ASTM D2982	<b>NEG</b>	NEG	NEG

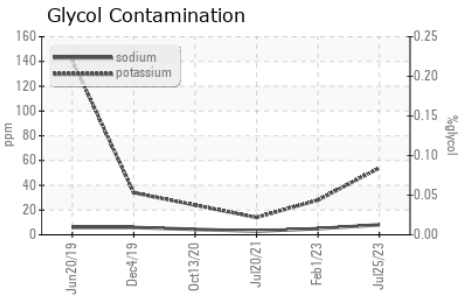
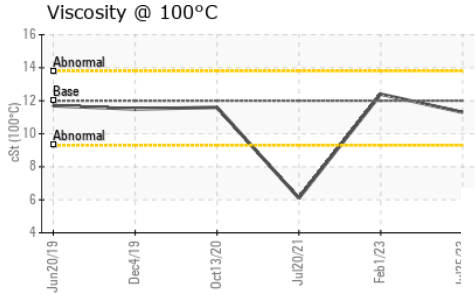
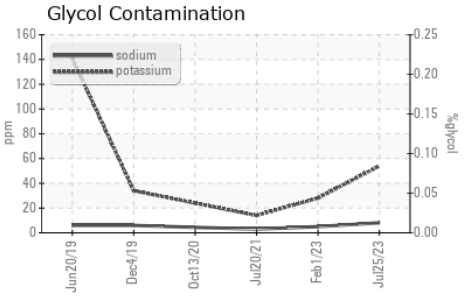
## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.7</b>	2.7	1.3
Nitration	Abs/cm *ASTM D7624 >20	<b>8.8</b>	16.3	10
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>19.3</b>	32.9	22

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.7</b>	27.2	14
Base Number (BN)	mg KOH/g ASTM D2896	<b>8.0</b>	4.3	6.1

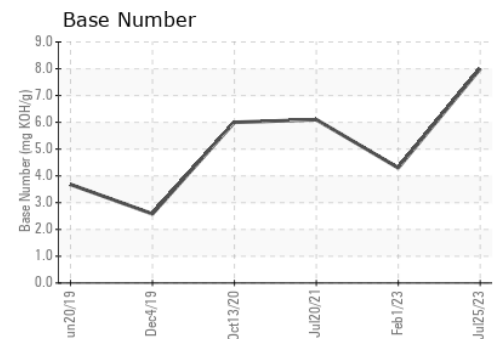
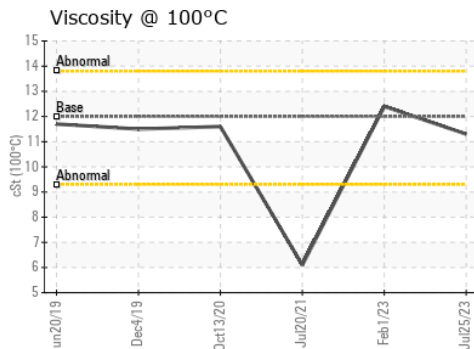
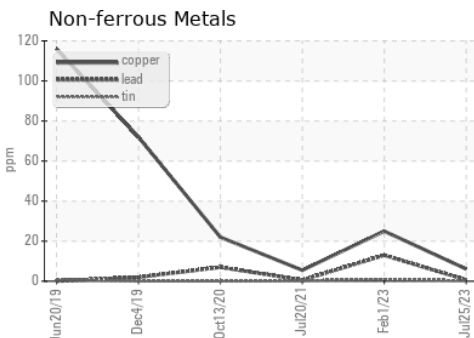
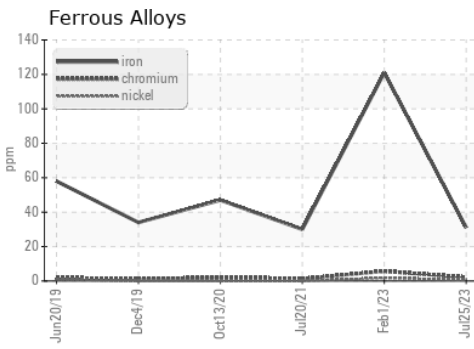
# OIL ANALYSIS REPORT



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	11.3	12.4 ▲ 6.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0089163 **Received** : 29 Feb 2024  
**Lab Number** : **06104807** **Tested** : 05 Mar 2024  
**Unique Number** : 10903037 **Diagnosed** : 05 Mar 2024 - Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: Glycol )

**NW WHITE & CO - GREER DIVISION**  
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 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)