



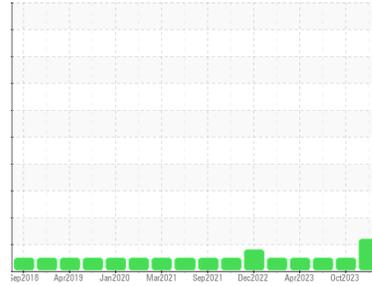
# OIL ANALYSIS REPORT

Sample Rating Trend

GLYCOL



Area  
**[1190069]**  
 Machine Id  
**801036**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (19 LTR)**



## DIAGNOSIS

### Recommendation

Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

### Fluid Condition

The condition of the oil is acceptable for the time in service (see recommendation).

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0875111</b>	GFL0094202	GFL0091040
Sample Date	Client Info		<b>05 Dec 2023</b>	10 Oct 2023	03 Aug 2023
Machine Age	hrs	Client Info	<b>10854</b>	120211	120211
Oil Age	hrs	Client Info	<b>352</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	N/A	Changed
Sample Status			<b>ATTENTION</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

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>80	<b>29</b>	30	35
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>30	<b>4</b>	4	6
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185(m)	>150	<b>1</b>	1	2
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0	<b>46</b>	6	8
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>66</b>	59	61
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>789</b>	910	957
Calcium	ppm	ASTM D5185(m)	1070	<b>1117</b>	1023	1065
Phosphorus	ppm	ASTM D5185(m)	1150	<b>940</b>	962	1047
Zinc	ppm	ASTM D5185(m)	1270	<b>1166</b>	1134	1226
Sulfur	ppm	ASTM D5185(m)	2060	<b>2511</b>	2384	2410
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

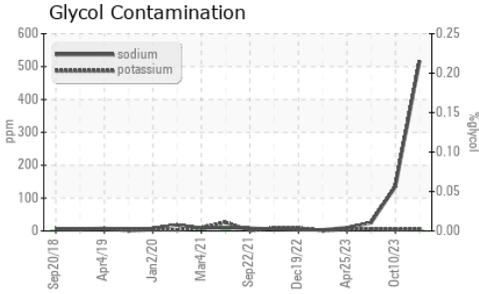
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	<b>6</b>	6	9
Sodium	ppm	ASTM D5185(m)		<b>517</b>	135	25
Potassium	ppm	ASTM D5185(m)	>20	<b>6</b>	4	6
Glycol	%	ASTM D7922*		<b>0.0</b>	0.0	0.0

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.7</b>	0.8	1
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.5</b>	10.4	11.0
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>21.9</b>	21.1	23.4



# OIL ANALYSIS REPORT



## FLUID DEGRADATION

method	limit/base	current	history1	history2
Abs./1mm	ASTM D7414*	>25	17.2	18.2

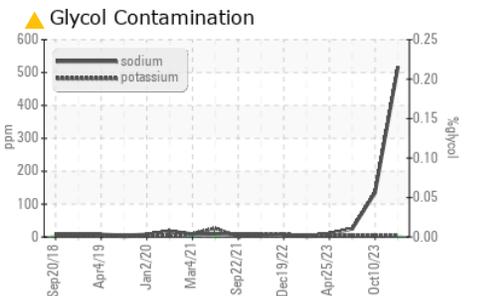
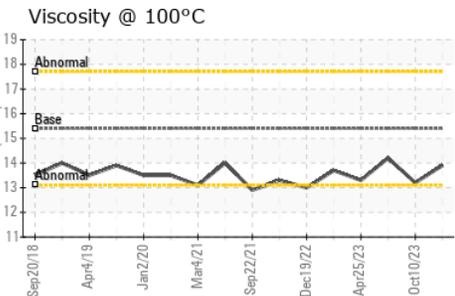
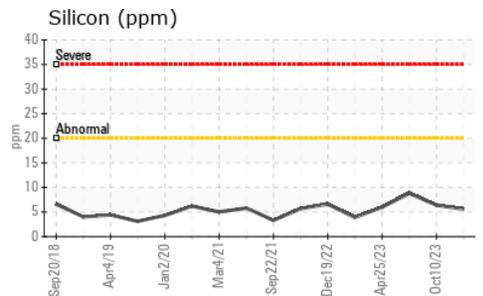
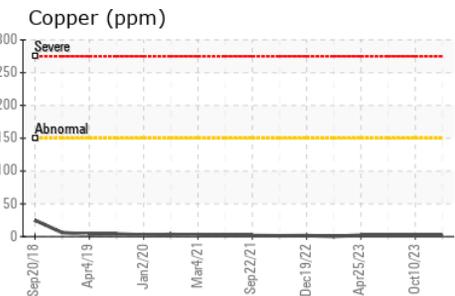
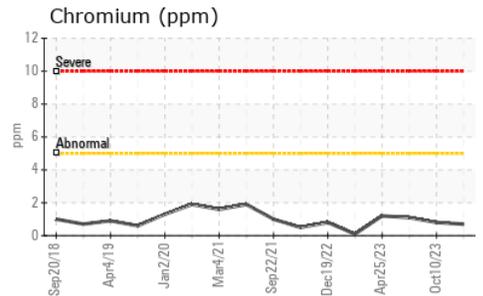
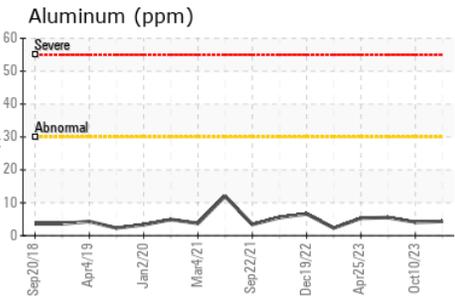
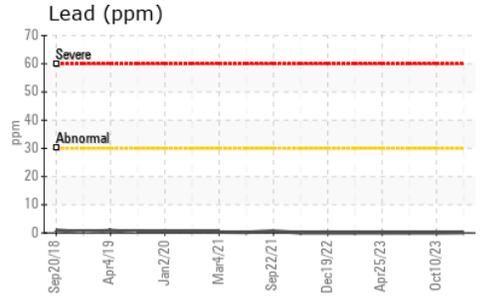
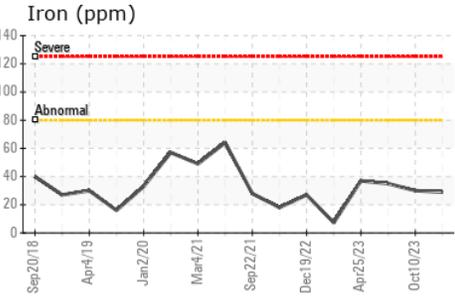
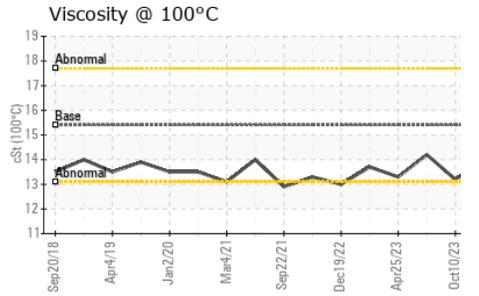
## VISUAL

method	limit/base	current	history1	history2
scalar	Visual*	>0.2	NEG	NEG
scalar	Visual*	NEG	NEG	NEG

## FLUID PROPERTIES

method	limit/base	current	history1	history2
cSt	ASTM D7279(m)	15.4	13.9	14.2

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0875111  
**Lab Number** : 02601782  
**Unique Number** : 5694867  
**Test Package** : MOB 1 ( Additional Tests: Glycol )

**GFL Environmental - 217 - Aurora**  
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 AURORA, ON  
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 Contact: Mike Havens  
 MHavens@gflenv.com  
 T:  
 F: (905)713-2445

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.