



# OIL ANALYSIS REPORT

Sample Rating Trend

FUEL

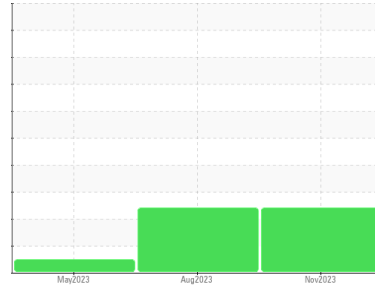


Area  
**{UNASSIGNED}**

Machine Id  
**420121**

Component  
**1 Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 10W30 (40 LTR)**



## DIAGNOSIS

### Recommendation

Nous vous recommandons de vérifier le système d'injection de carburant. Nous avons pris note que la vidange d'huile a été effectuée au moment de l'échantillonnage. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

### Wear

Les taux d'usure de tous les composants sont normaux.

### Contamination

Quantité élevée de carburant dans l'huile. Les tests confirment la présence de carburant dans l'huile.

### Fluid Condition

Il y a du carburant dans l'huile, ce qui réduit la viscosité. L'huile ne peut plus être utilisée en raison de la présence de contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0094162</b>	GFL0076608	GFL0076624
Sample Date	Client Info		<b>01 Nov 2023</b>	14 Aug 2023	25 May 2023
Machine Age	hrs	Client Info	<b>6581</b>	6009	5707
Oil Age	hrs	Client Info	<b>600</b>	600	600
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>SEVERE</b>	SEVERE	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >120	<b>9</b>	9	12
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m) >2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185(m) >20	<b>2</b>	1	2
Lead	ppm	ASTM D5185(m) >40	<b>6</b>	<1	<1
Copper	ppm	ASTM D5185(m) >330	<b>232</b>	4	4
Tin	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
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) 2	<b>2</b>	3	3
Barium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 50	<b>52</b>	54	58
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 950	<b>838</b>	919	941
Calcium	ppm	ASTM D5185(m) 1050	<b>943</b>	993	1155
Phosphorus	ppm	ASTM D5185(m) 995	<b>868</b>	995	1052
Zinc	ppm	ASTM D5185(m) 1180	<b>1034</b>	1128	1184
Sulfur	ppm	ASTM D5185(m) 2600	<b>2023</b>	2419	2443
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>4</b>	6	5
Sodium	ppm	ASTM D5185(m)	<b>3</b>	4	3
Potassium	ppm	ASTM D5185(m) >20	<b>1</b>	2	2
Fuel	%	ASTM D7593* >3.0	<b>10.2</b>	5.9	<1.0

## INFRA-RED

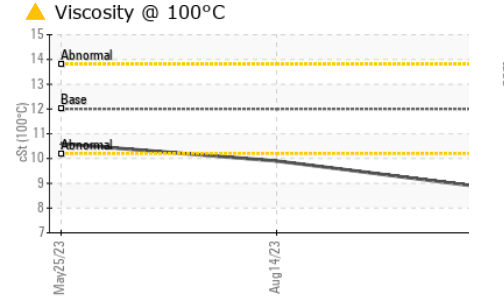
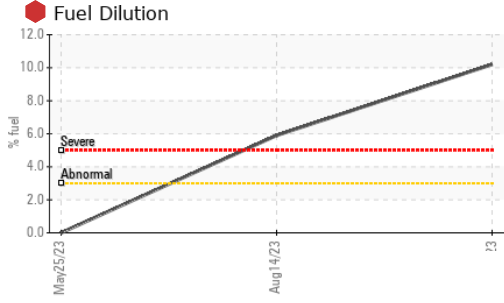
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	<b>0.1</b>	0	0.1
Nitration	Abs/cm	ASTM D7624* >20	<b>8.3</b>	6.5	8.8
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>19.2</b>	18.2	19.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>15.1</b>	12.7	16.0



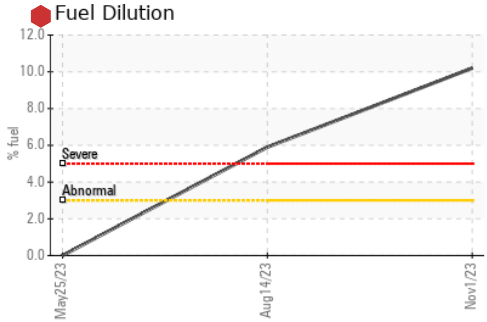
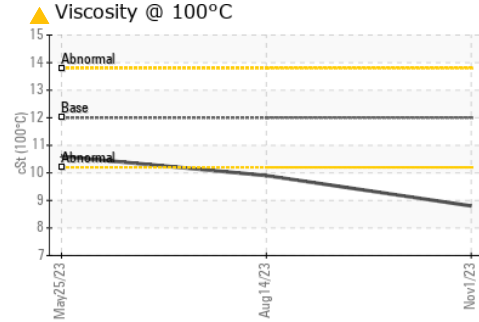
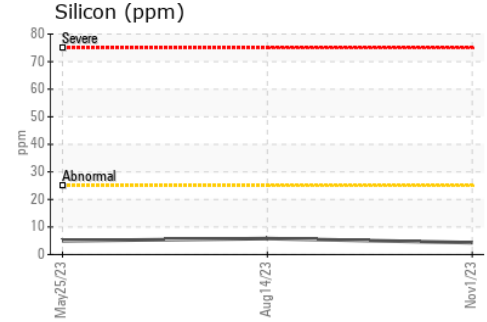
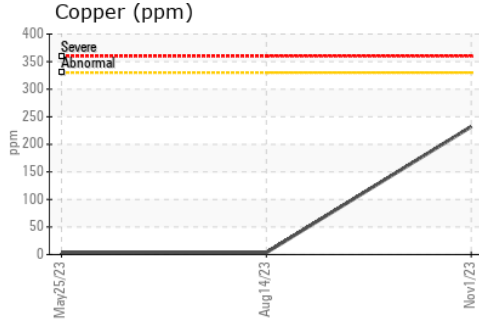
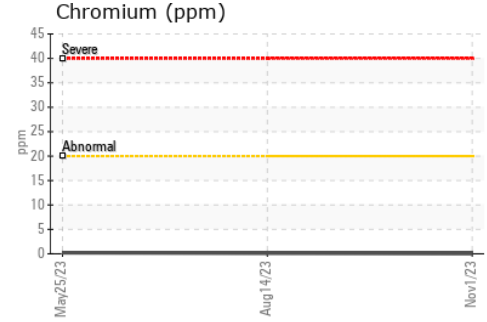
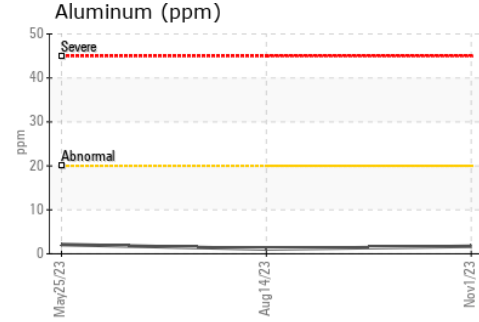
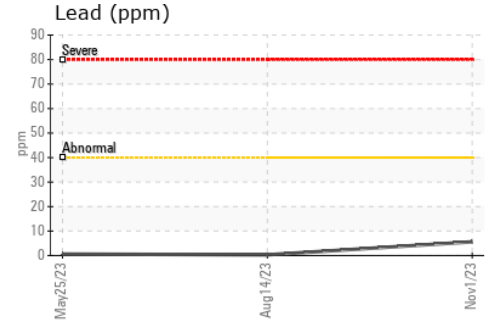
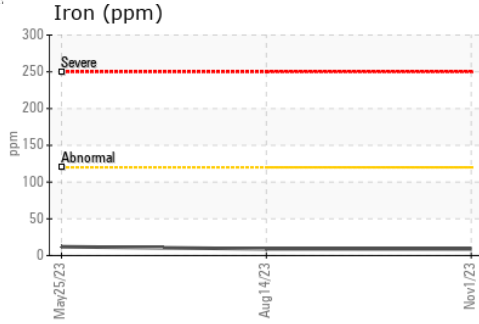
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	<b>▲ 8.8</b>	▲ 9.9	10.6

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 731STOK - Stoke Hauling  
**Sample No.** : GFL0094162 **Received** : 10 Nov 2023 286 Chemin Cote  
**Lab Number** : 02595571 **Diagnosed** : 13 Nov 2023 Stoke, QC  
**Unique Number** : 5672650 **Diagnostician** : Wes Davis CA J0B 3G0  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel ) Contact: Robert Sayers  
rsayers@matrec.ca

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.