



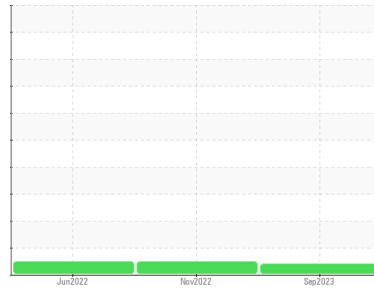
# OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY



Machine Id  
**801247**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**



## DIAGNOSIS

### Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition. Le fluide était spécifié comme PETRO CANADA DURON SHP 10W30, toutefois, une comparaison avec d'autres fluides indiquent que ce fluide est du SAE 40 Diesel Engine Oil. Veuillez confirmer la viscosité de l'huile et veuillez préciser la marque de votre prochain échantillon.

### Wear

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

### Contamination

Il n'y a aucun indice de contamination dans l'huile.

### Fluid Condition

La viscosité de l'échantillon se situe dans la portée de l'SAE 40; nous vous conseillons de vérifier. Ceci, en plus des niveaux d'additifs, indique que la marque ou le type d'huile ne correspond pas à ce qui a été signalé. L'état de l'huile est acceptable pour la durée de service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0089041</b>	GFL0070527	GFL0027065
Sample Date	Client Info		<b>20 Sep 2023</b>	21 Nov 2022	28 Jun 2022
Machine Age	hrs	Client Info	<b>8331</b>	7081	131825
Oil Age	hrs	Client Info	<b>600</b>	600	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>90	<b>37</b>	21	49
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	2
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>8</b>	5	18
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>330	<b>3</b>	2	6
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	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>55</b>	4	72
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>123</b>	60	120
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>706</b>	931	651
Calcium	ppm	ASTM D5185(m)	1050	<b>1557</b>	1183	1572
Phosphorus	ppm	ASTM D5185(m)	995	<b>720</b>	1068	653
Zinc	ppm	ASTM D5185(m)	1180	<b>911</b>	1199	797
Sulfur	ppm	ASTM D5185(m)	2600	<b>2095</b>	2569	2103
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>9</b>	4	10
Sodium	ppm	ASTM D5185(m)		<b>7</b>	1	5
Potassium	ppm	ASTM D5185(m)	>20	<b>7</b>	6	27
Glycol	%	ASTM D7922*		<b>0.0</b>	NEG	NEG

## INFRA-RED

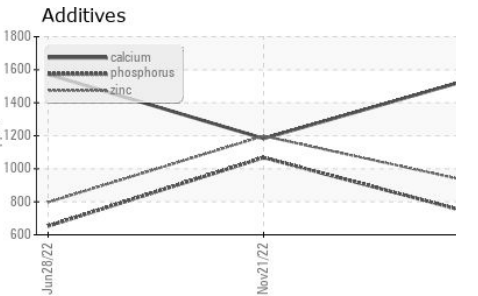
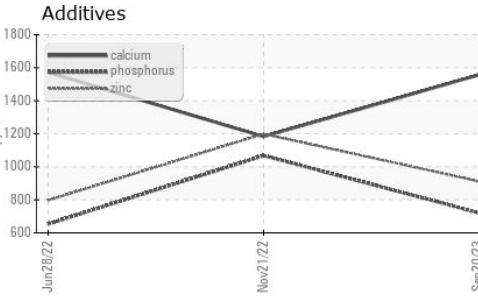
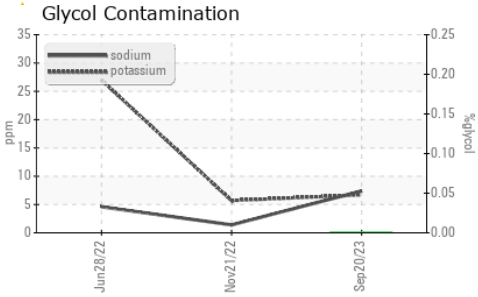
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	<b>1.1</b>	0.3	0.7
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.6</b>	8.9	12.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>26.8</b>	21.0	27.3

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>21.4</b>	15.6	24.4



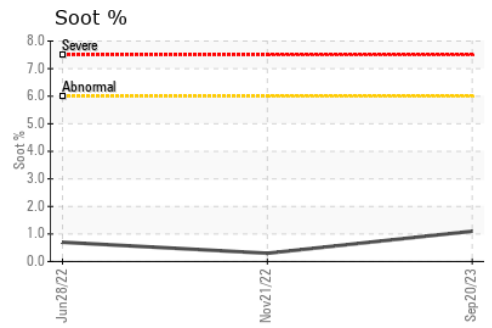
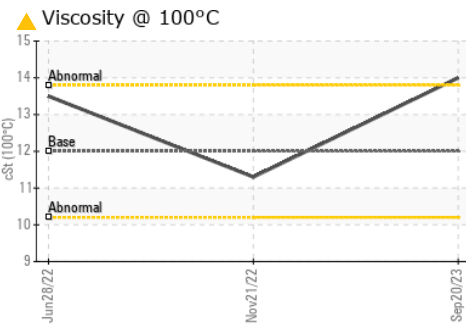
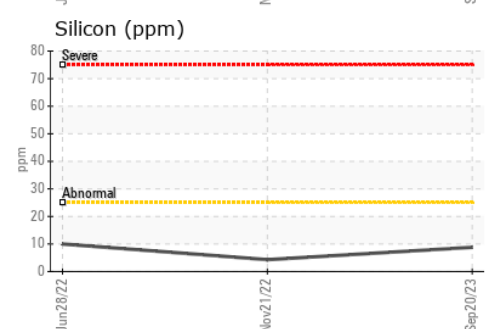
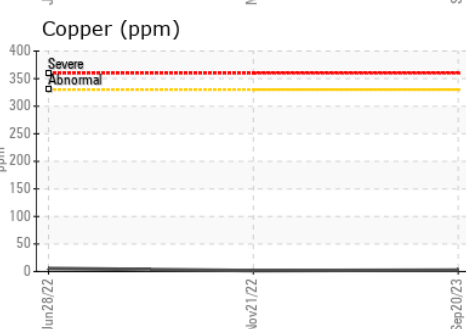
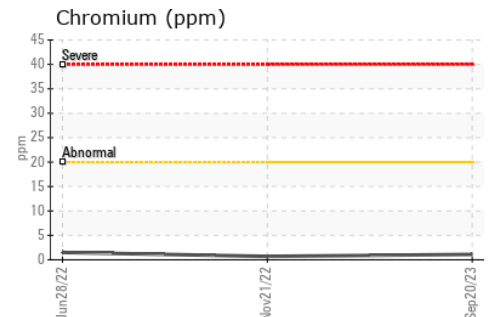
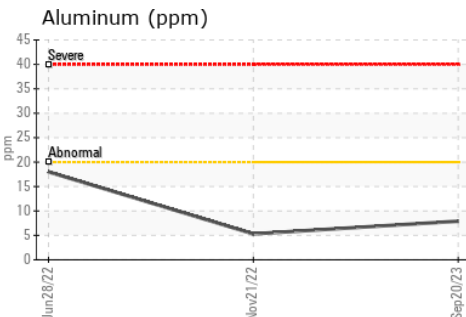
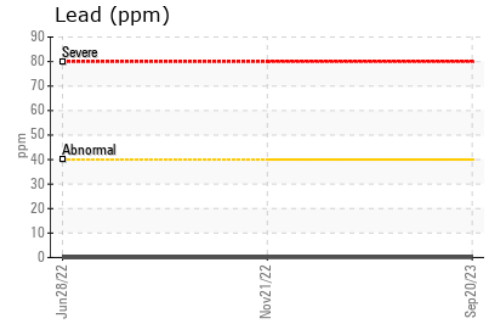
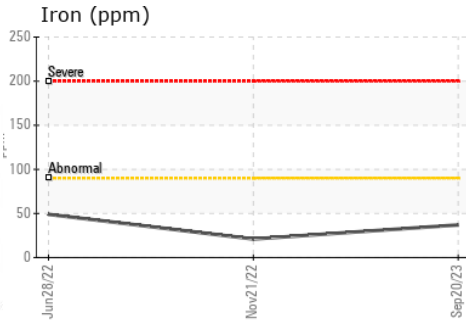
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
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 D7279(m)	▲ 14.0	11.3	13.5

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 731STOK - Stoke Hauling  
**Sample No.** : GFL0089041 **Received** : 13 Oct 2023 286 Chemin Cote  
**Lab Number** : 02588841 **Diagnosed** : 16 Oct 2023 Stoke, QC  
**Unique Number** : 5657907 **Diagnostician** : Kevin Marson CA J0B 3G0  
**Test Package** : MOB 1 ( Additional Tests: Glycol ) 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.