

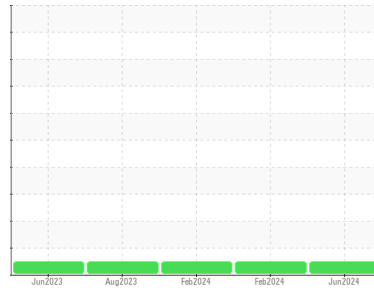


# OIL ANALYSIS REPORT



Area  
**CAPLAN**  
 Machine Id  
**#813101**  
 Component  
**Front Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (30 LTR)**

### Sample Rating Trend



**NORMAL**



## DIAGNOSIS

### Recommendation

Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition.

### Wear

Les taux de métaux sont typiques pour la période de rodage d'un nouveau composant.

### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Il n'y a aucun indice de contamination dans l'huile.

### Fluid Condition

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>GFL0113449</b>	GFL0091115	GFL0091109
Sample Date	Client Info		<b>25 Jun 2024</b>	09 Feb 2024	09 Feb 2024
Machine Age	hrs	Client Info	<b>2153</b>	1605	1605
Oil Age	hrs	Client Info	<b>548</b>	704	79
Oil Changed	Client Info		<b>Changed</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	NORMAL	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 D5185(m) >90	<b>29</b>	21	5
Chromium	ppm	ASTM D5185(m) >20	<b>1</b>	<1	0
Nickel	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m) >20	<b>8</b>	4	2
Lead	ppm	ASTM D5185(m) >40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m) >330	<b>7</b>	8	2
Tin	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	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) 2	<b>10</b>	14	17
Barium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	3	0
Molybdenum	ppm	ASTM D5185(m) 50	<b>63</b>	57	61
Manganese	ppm	ASTM D5185(m) 0	<b>2</b>	6	<1
Magnesium	ppm	ASTM D5185(m) 950	<b>894</b>	903	866
Calcium	ppm	ASTM D5185(m) 1050	<b>1177</b>	1082	1145
Phosphorus	ppm	ASTM D5185(m) 995	<b>974</b>	946	1008
Zinc	ppm	ASTM D5185(m) 1180	<b>1191</b>	1093	1153
Sulfur	ppm	ASTM D5185(m) 2600	<b>2485</b>	2613	2844
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

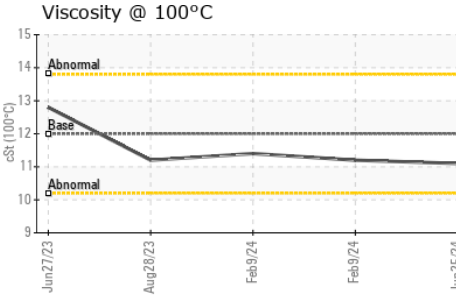
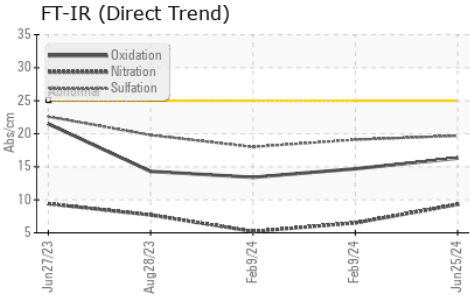
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>4</b>	14	4
Sodium	ppm	ASTM D5185(m)	<b>2</b>	3	2
Potassium	ppm	ASTM D5185(m) >20	<b>10</b>	2	1

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >6	<b>0.3</b>	0.1	0
Nitration	Abs/cm	ASTM D7624* >20	<b>9.3</b>	6.5	5.2
Sulfation	Abs./1mm	ASTM D7415* >30	<b>19.7</b>	19.1	18.0



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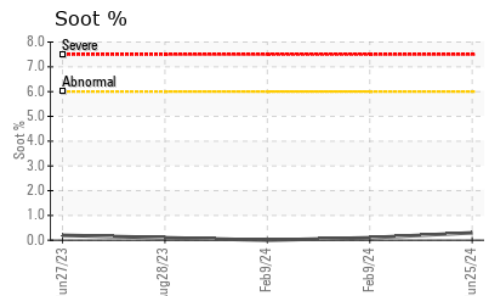
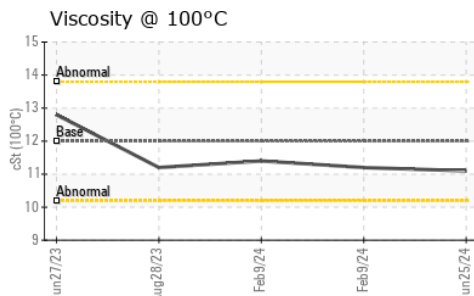
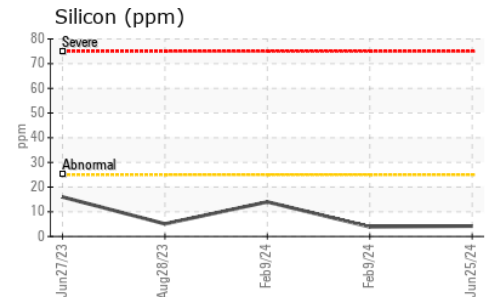
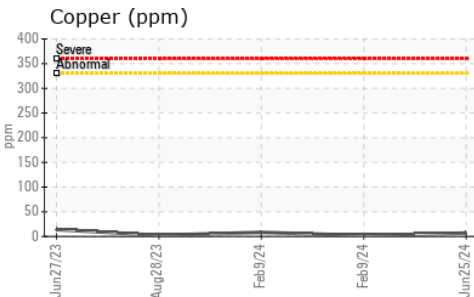
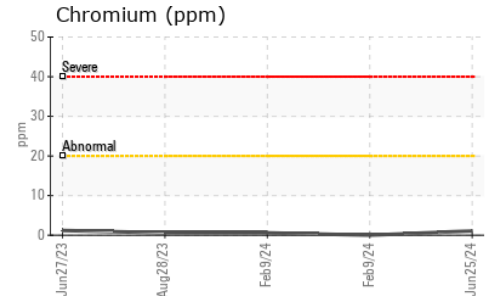
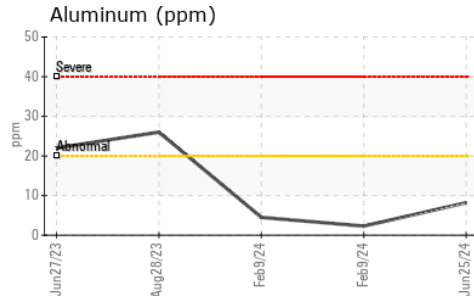
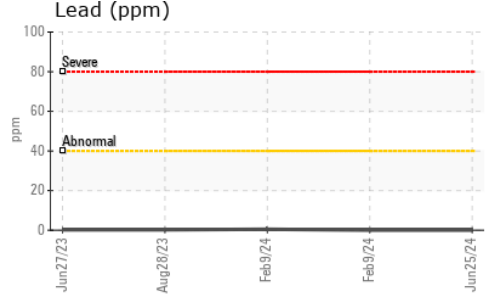
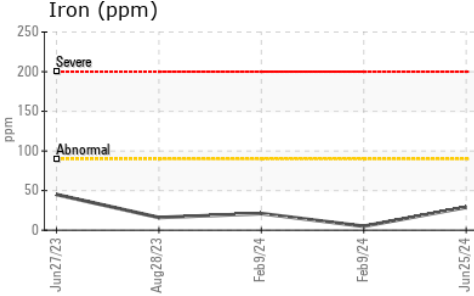


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>16.3</b>	14.7	13.4

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.1</b>	11.2	11.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0113449      **Received** : 28 Jun 2024  
**Lab Number** : 02644511      **Tested** : 28 Jun 2024  
**Unique Number** : 5802050      **Diagnosed** : 28 Jun 2024 - Wes Davis  
**Test Package** : MOB 1

**Matrec - 791 - Rimouski**  
 350 Avenue de L'Industrie  
 Rimouski, QC  
 CA G5M 1W4  
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 info@forestsstar.com  
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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.