



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**D4K CAT**  
 Component  
**Front Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (11 LTR)**



## DIAGNOSIS

### Recommendation

The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. No other corrective action is recommended at this time. ( Customer Sample Comment: Oil sampleed unknown.Was replaced with dshp 15 w40 )

### Wear

All component wear rates are normal.

### Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

### Fluid Condition

Additive levels indicate the addition of a different brand, or type of 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>GFL0087388</b>	---	---
Sample Date	Client Info		<b>19 Jul 2023</b>	---	---
Machine Age	hrs	Client Info	<b>6950</b>	---	---
Oil Age	hrs	Client Info	<b>600</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	<b>29</b>	---	---
Chromium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m) >2	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m) >25	<b>5</b>	---	---
Lead	ppm	ASTM D5185(m) >40	<b>3</b>	---	---
Copper	ppm	ASTM D5185(m) >330	<b>87</b>	---	---
Tin	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	---	---
Antimony	ppm	ASTM D5185(m)	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>22</b>	---	---
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m) 60	<b>16</b>	---	---
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m) 1010	<b>577</b>	---	---
Calcium	ppm	ASTM D5185(m) 1070	<b>1468</b>	---	---
Phosphorus	ppm	ASTM D5185(m) 1150	<b>981</b>	---	---
Zinc	ppm	ASTM D5185(m) 1270	<b>1093</b>	---	---
Sulfur	ppm	ASTM D5185(m) 2060	<b>3035</b>	---	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>7</b>	---	---
Sodium	ppm	ASTM D5185(m)	<b>43</b>	---	---
Potassium	ppm	ASTM D5185(m) >20	<b>9</b>	---	---
Fuel	%	ASTM D7593* >5	<b>1</b>	---	---
Glycol	%	ASTM D7922*	<b>0.0</b>	---	---

## INFRA-RED

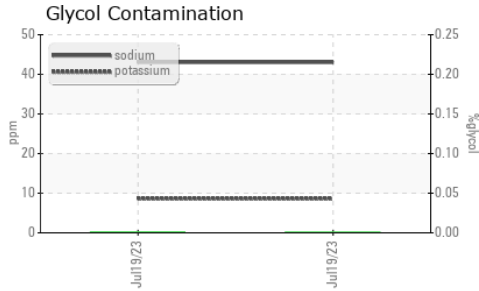
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0</b>	---	---
Nitration	Abs/cm	ASTM D7624* >20	<b>10.3</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>20.7</b>	---	---

## FLUID DEGRADATION

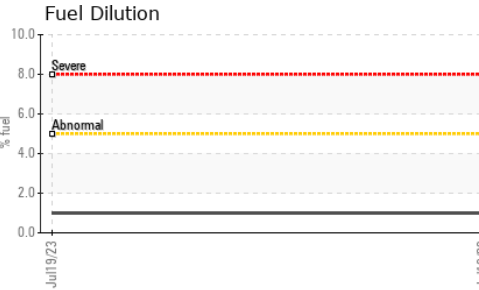
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>17.0</b>	---	---



# OIL ANALYSIS REPORT

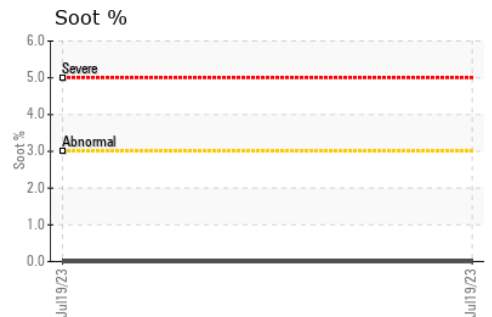
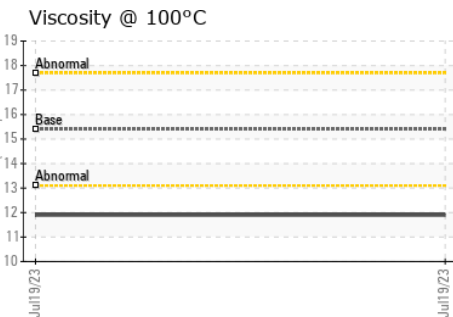
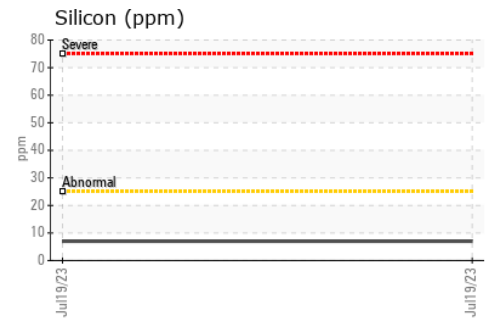
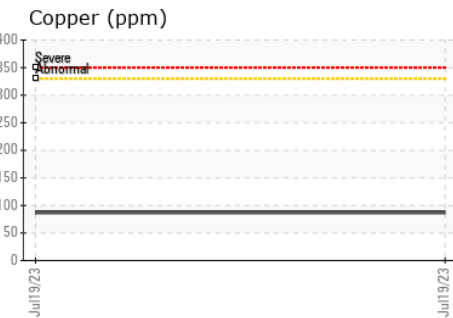
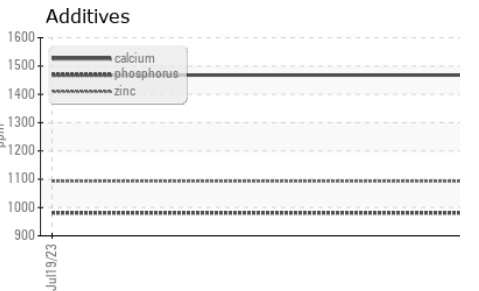
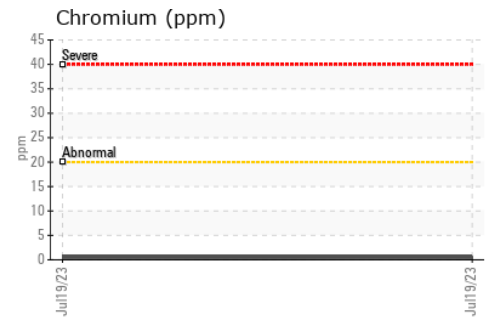
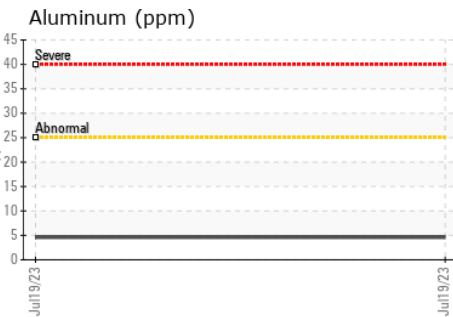
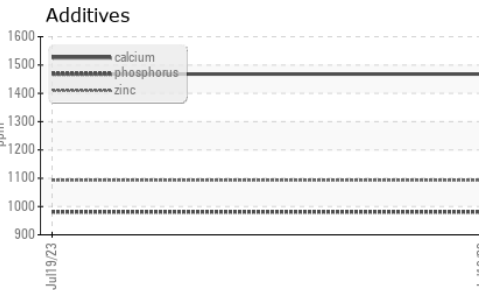
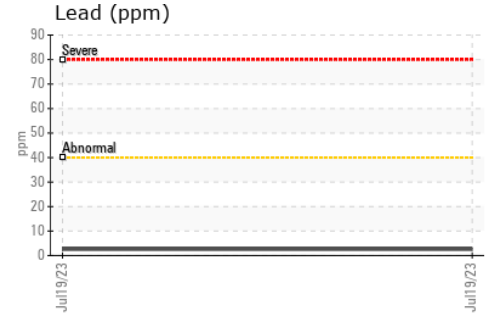
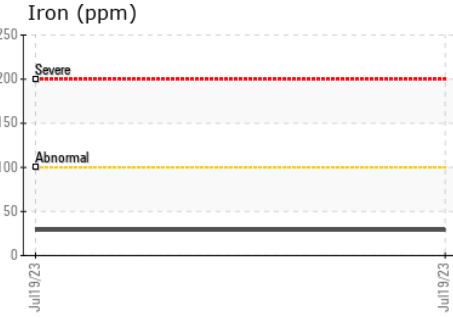


PARAMETER	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	---
Free Water	scalar	Visual*		NEG	---



PARAMETER	method	limit/base	current	history1	history2
FLUID PROPERTIES					
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	11.9	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 720 - Lafleche - Landfill  
**Sample No.** : GFL0087388 **Received** : 26 Jul 2023  
**Lab Number** : 02572179 **Diagnosed** : 27 Jul 2023  
**Unique Number** : 5617230 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, Glycol, PercentFuel )

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 Moose Creek, ON  
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 T: (613)538-4853  
 F:

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.