

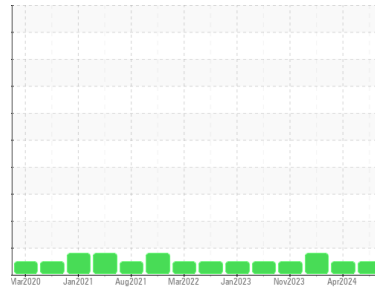


# OIL ANALYSIS REPORT



Machine Id  
**OR962**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (19 LTR)**

## Sample Rating Trend



**NORMAL**



## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

### Fluid Condition

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>GFL0124570</b>	GFL0113336	GFL0087373
Sample Date	Client Info		<b>09 Jul 2024</b>	17 Apr 2024	19 Jan 2024
Machine Age	hrs	Client Info	<b>14998</b>	14420	13733
Oil Age	hrs	Client Info	<b>578</b>	687	700
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	MARGINAL

## CONTAMINATION

	method	limit/base	current	history1	history2
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) >100	<b>14</b>	16	22
Chromium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
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>	0	0
Aluminum	ppm	ASTM D5185(m) >25	<b>10</b>	15	13
Lead	ppm	ASTM D5185(m) >40	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m) >330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >15	<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>5</b>	4	6
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>54</b>	56	53
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185(m) 1010	<b>798</b>	900	858
Calcium	ppm	ASTM D5185(m) 1070	<b>1073</b>	1140	1228
Phosphorus	ppm	ASTM D5185(m) 1150	<b>954</b>	977	1000
Zinc	ppm	ASTM D5185(m) 1270	<b>1151</b>	1167	1155
Sulfur	ppm	ASTM D5185(m) 2060	<b>2512</b>	2437	2653
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

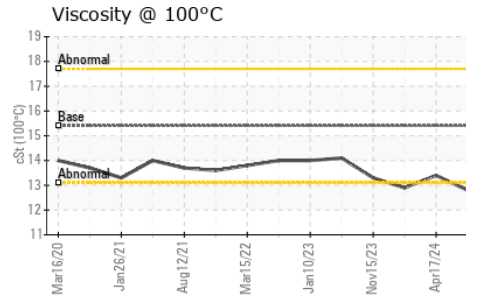
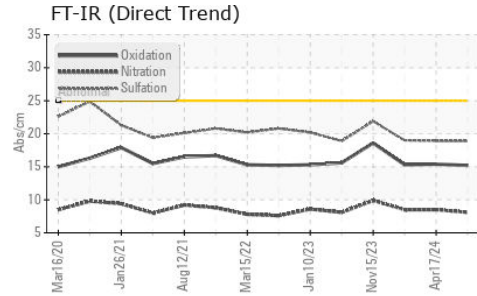
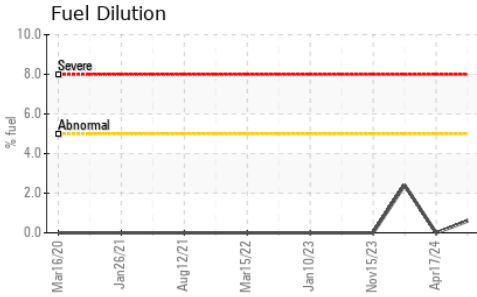
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>3</b>	3	4
Sodium	ppm	ASTM D5185(m)	<b>5</b>	17	2
Potassium	ppm	ASTM D5185(m) >20	<b>1</b>	3	2
Fuel	%	ASTM D7593* >5	<b>0.6</b>	<1.0	▲ 2.4

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0.3</b>	0.2	0.1
Nitration	Abs/cm	ASTM D7624* >20	<b>8.1</b>	8.5	8.5
Sulfation	Abs./1mm	ASTM D7415* >30	<b>18.9</b>	18.9	19.0



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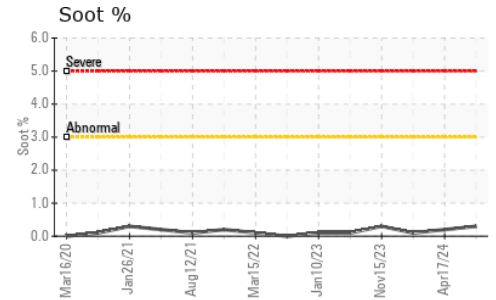
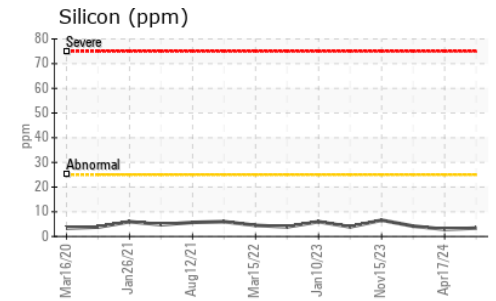
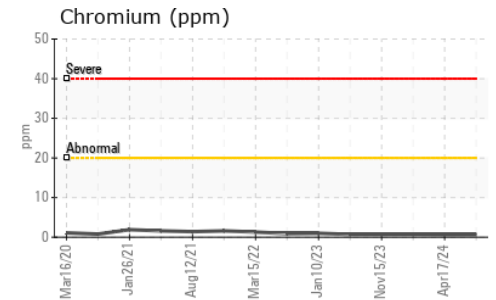
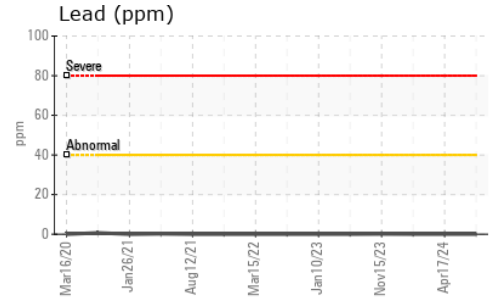
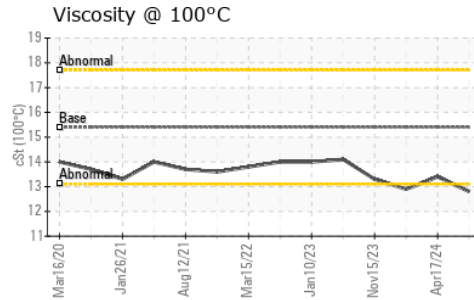
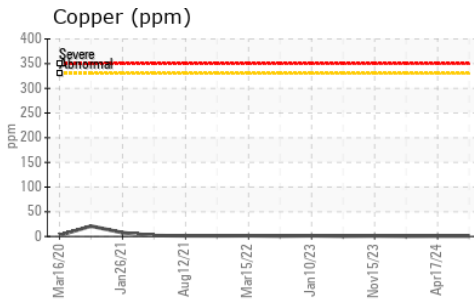
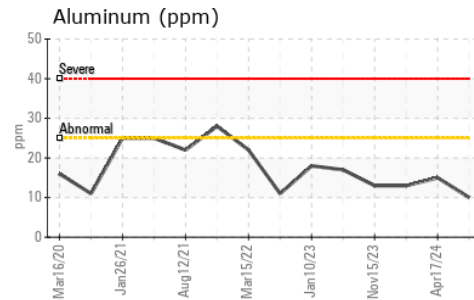
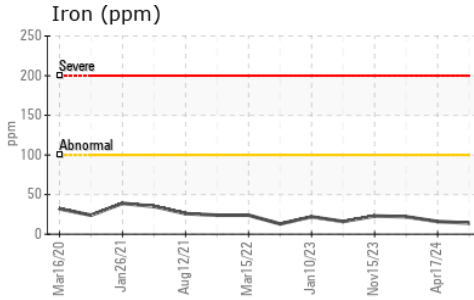


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>15.2</b>	15.4	15.3

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)	15.4	<b>12.8</b>	13.4	12.9

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0124570  
**Lab Number** : 02647312  
**Unique Number** : 5812864  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )

**GFL Environmental - 720 - Lafleche - Landfill**  
 17125 Lafleche Road,  
 Moose Creek, ON  
 CA K0C 1W0  
 Contact: Charles Bergeron  
 cbergeron@gflenv.com  
 T: (613)538-4853  
 F:

Received : 11 Jul 2024  
 Tested : 12 Jul 2024  
 Diagnosed : 12 Jul 2024 - Wes Davis  
 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.