



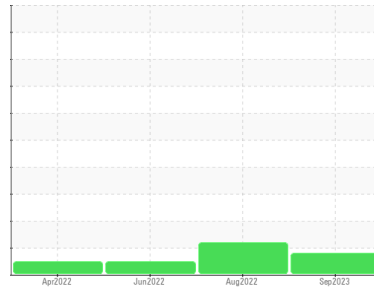
# OIL ANALYSIS REPORT

Sample Rating Trend

FUEL



Machine Id  
**0515**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**



## DIAGNOSIS

### Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

### Wear

All component wear rates are normal.

### Contamination

Light fuel dilution occurring. No other contaminants were detected 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>GFL0088947</b>	GFL0054526	GFL0049998
Sample Date	Client Info	<b>18 Sep 2023</b>	25 Aug 2022	11 Jun 2022
Machine Age	hrs	<b>25546</b>	23848	23282
Oil Age	hrs	<b>576</b>	566	220
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed
Sample Status		<b>MARGINAL</b>	ABNORMAL	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) >130	<b>26</b>	24	22
Chromium	ppm	ASTM D5185(m) >10	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >20	<b>3</b>	3	2
Lead	ppm	ASTM D5185(m) >20	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m) >125	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >4	<b>0</b>	<1	<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) 0	<b>8</b>	4	4
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>66</b>	61	63
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	<b>1061</b>	1020	1063
Calcium	ppm	ASTM D5185(m) 1070	<b>1165</b>	1144	1145
Phosphorus	ppm	ASTM D5185(m) 1150	<b>1129</b>	999	1073
Zinc	ppm	ASTM D5185(m) 1270	<b>1296</b>	1250	1299
Sulfur	ppm	ASTM D5185(m) 2060	<b>2464</b>	2486	2516
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >25	<b>4</b>	4	4
Sodium	ppm	ASTM D5185(m)	<b>2</b>	2	1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	1
Fuel	%	ASTM D7593* >3.0	<b>▲ 1.9</b>	▲ 4.5	<1.0

## INFRA-RED

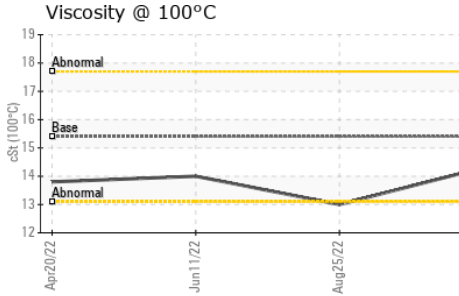
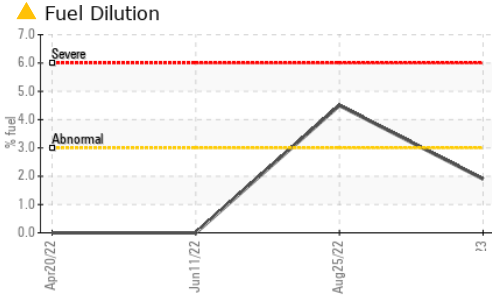
method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844* >6	<b>0.1</b>	0	0
Nitration	Abs/cm	ASTM D7624* >20	<b>9.7</b>	9.0	9.3
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>21.4</b>	20.2	22.9

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>19.4</b>	18.7	18.9



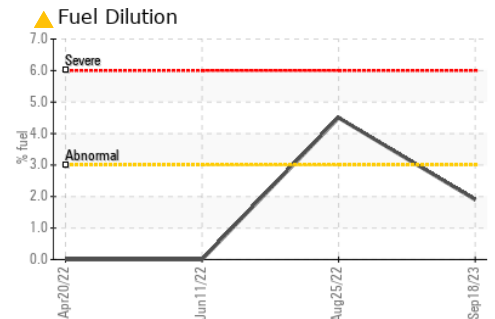
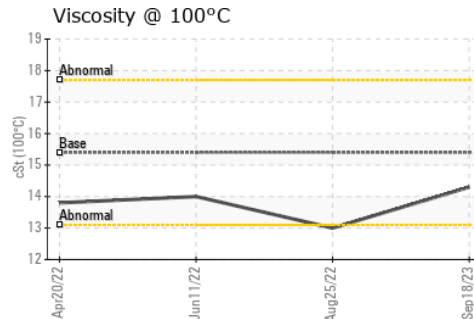
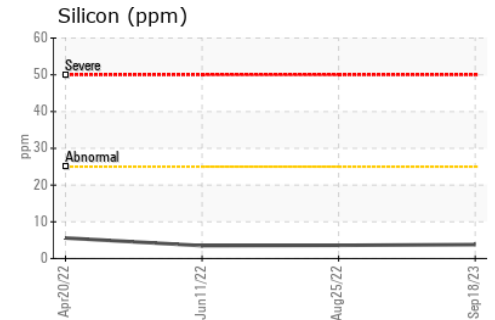
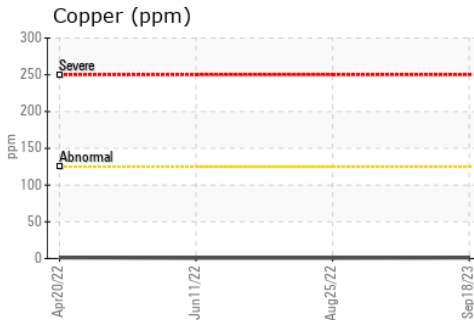
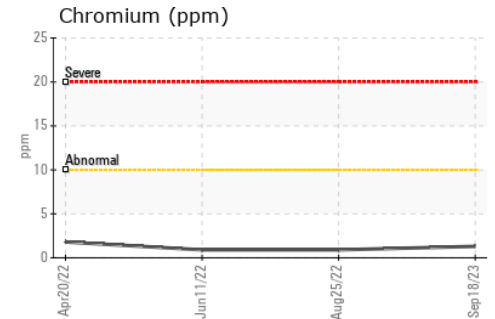
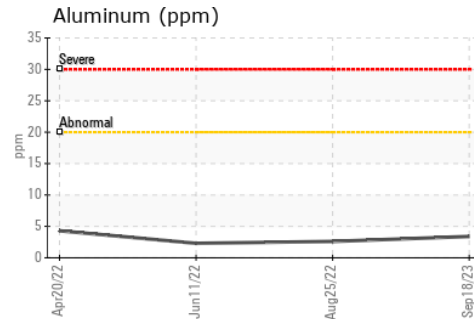
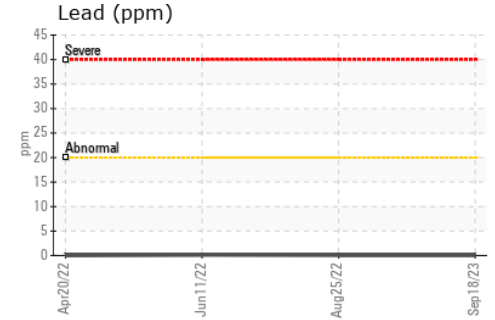
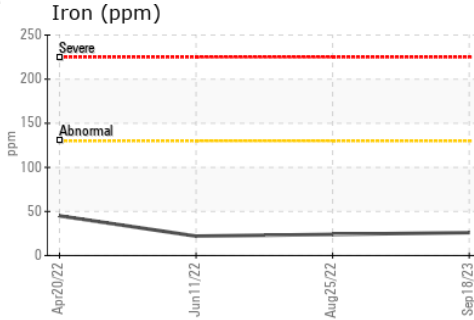
# OIL ANALYSIS REPORT



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)	15.4	14.3	▲ 13.0 14.0

## GRAPHS



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0088947 **Received** : 19 Sep 2023  
**Lab Number** : 02583540 **Diagnosed** : 20 Sep 2023  
**Unique Number** : 5644605 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel )

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.

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