

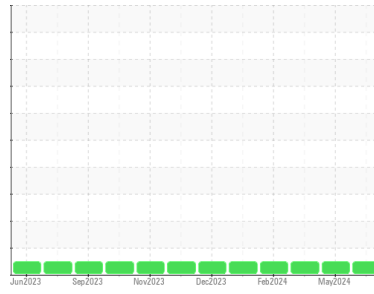


# OIL ANALYSIS REPORT



Area  
**(GED668) {UNASSIGNED}**  
 Machine Id  
**933041**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (8 GAL)**

### Sample Rating Trend



**NORMAL**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0122120</b>	GFL0118100	GFL0115713
Sample Date	Client Info		<b>19 Jun 2024</b>	08 May 2024	22 Mar 2024
Machine Age	hrs	Client Info	<b>3059</b>	2731	2305
Oil Age	hrs	Client Info	<b>167</b>	426	598
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>8</b>	15	21
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	1	2
Nickel	ppm	ASTM D5185m >2	<b>0</b>	1	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>2</b>	2	7
Lead	ppm	ASTM D5185m >30	<b>1</b>	2	1
Copper	ppm	ASTM D5185m >35	<b>&lt;1</b>	2	8
Tin	ppm	ASTM D5185m >4	<b>0</b>	2	1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>5</b>	<1	4
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>66</b>	65	73
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>976</b>	875	973
Calcium	ppm	ASTM D5185m 1070	<b>1224</b>	1069	1231
Phosphorus	ppm	ASTM D5185m 1150	<b>1105</b>	926	1009
Zinc	ppm	ASTM D5185m 1270	<b>1382</b>	1180	1282
Sulfur	ppm	ASTM D5185m 2060	<b>3760</b>	2950	2981

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>3</b>	6	6
Sodium	ppm	ASTM D5185m	<b>4</b>	3	6
Potassium	ppm	ASTM D5185m >20	<b>3</b>	5	16

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.6</b>	9.2	9.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>17.4</b>	19.1	20.0

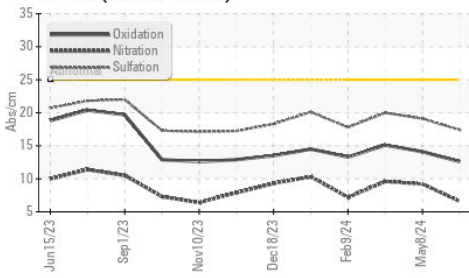
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>12.6</b>	14.1	15.1
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.2</b>	5.3	4.5

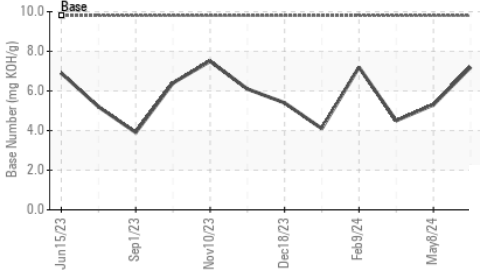


# OIL ANALYSIS REPORT

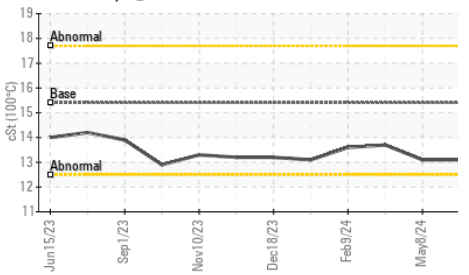
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

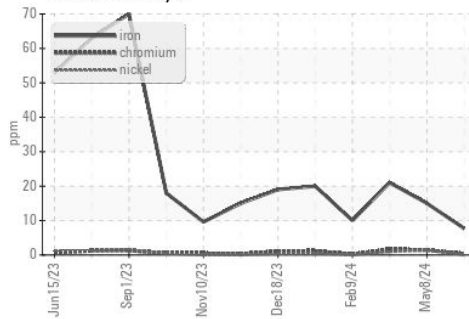


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

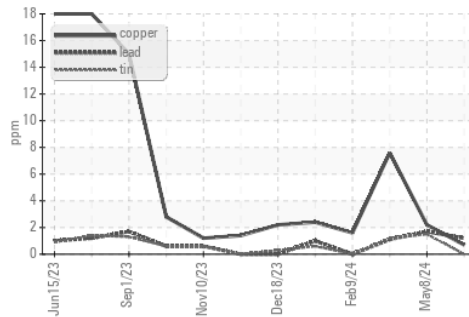
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.1	13.7

## GRAPHS

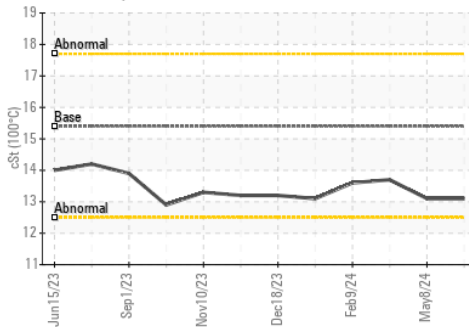
Ferrous Alloys



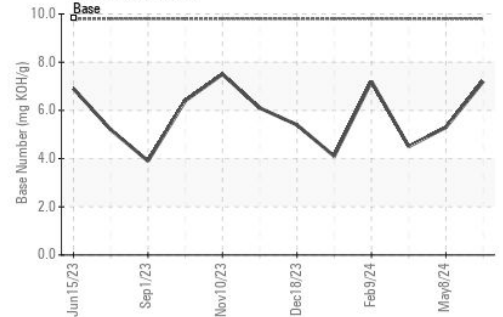
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0122120  
 Lab Number : 06215605  
 Unique Number : 11088469  
 Test Package : FLEET

Received : 20 Jun 2024  
 Tested : 21 Jun 2024  
 Diagnosed : 21 Jun 2024 - Wes Davis

GFL Environmental - 010 - Stockbridge  
 1280 Rum Creek Parkway  
 Stockbridge, GA  
 US 30281  
 Contact: JOSHUA TINKER  
 joshuatinker@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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F: