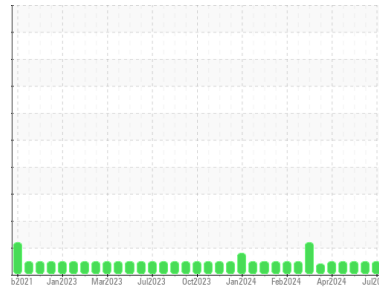




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**(61AC7A0)**  
Machine Id  
**2414**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**

## 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>GFL0121443</b>	GFL0115811	GFL0115805
Sample Date	Client Info		<b>02 Jul 2024</b>	25 Jun 2024	18 Jun 2024
Machine Age	hrs	Client Info	<b>21539</b>	21539	21515
Oil Age	hrs	Client Info	<b>0</b>	2059	2035
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>6.0	<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 D5185m >100	<b>6</b>	8	4
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185m >25	<b>3</b>	4	3
Lead	ppm	ASTM D5185m >40	<b>0</b>	<1	1
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	2	1
Tin	ppm	ASTM D5185m >15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>4</b>	5	5
Barium	ppm	ASTM D5185m 0	<b>0</b>	1	1
Molybdenum	ppm	ASTM D5185m 60	<b>61</b>	65	61
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>868</b>	914	845
Calcium	ppm	ASTM D5185m 1070	<b>1058</b>	1062	1037
Phosphorus	ppm	ASTM D5185m 1150	<b>1190</b>	1003	975
Zinc	ppm	ASTM D5185m 1270	<b>1238</b>	1203	1143
Sulfur	ppm	ASTM D5185m 2060	<b>3205</b>	3103	2959

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	5	4
Sodium	ppm	ASTM D5185m	<b>1</b>	1	0
Potassium	ppm	ASTM D5185m >20	<b>2</b>	4	2

## INFRA-RED

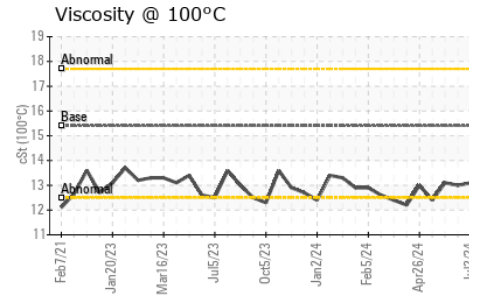
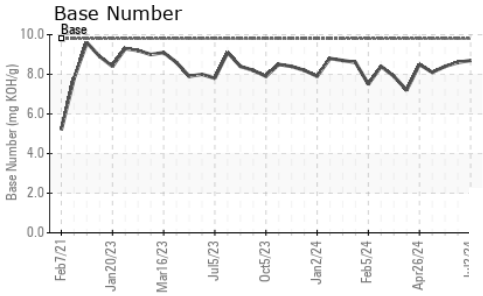
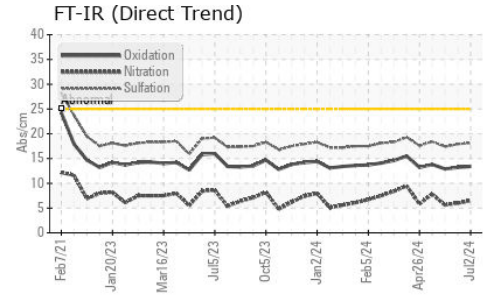
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.4</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.5</b>	6.0	5.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.1</b>	17.9	17.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.4</b>	13.2	12.9
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.7</b>	8.6	8.4



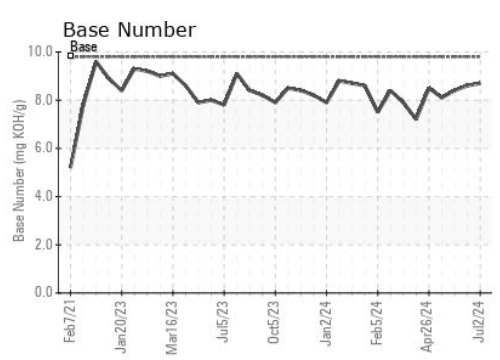
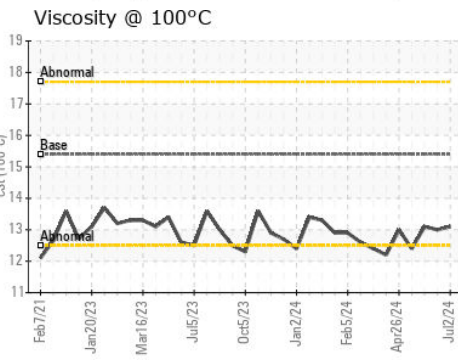
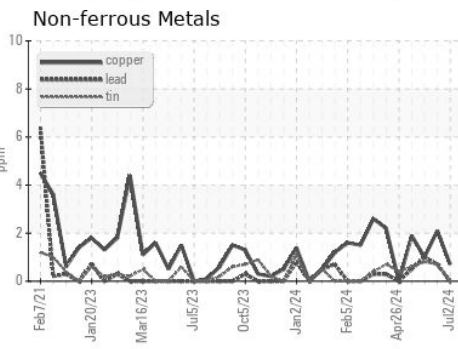
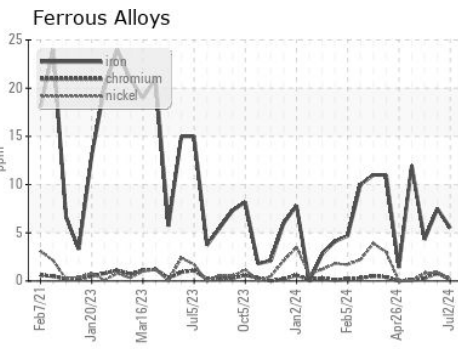
# OIL ANALYSIS REPORT



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	>0.2	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	13.0

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0121443  
**Lab Number** : 06229983  
**Unique Number** : 11113476  
**Test Package** : FLEET

**Received** : 08 Jul 2024  
**Tested** : 09 Jul 2024  
**Diagnosed** : 09 Jul 2024 - Wes Davis

GFL Environmental - 868 - Childersburg Fines Hauling (Alpine)  
 13737 Plant Rd  
 Childersburg, AL  
 US 35044  
 Contact: JONATHAN WILLIAMS  
 jonathan.williams@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)