



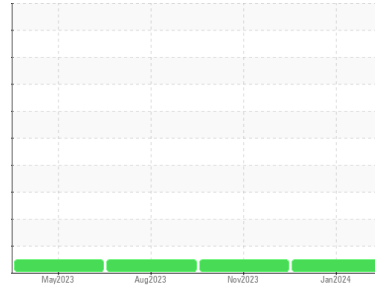
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**(61800Z) S0916A-Suamico**  
 Machine Id  
**920110**  
 Component  
**Front Center Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (42 QTS)**



## 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>GFL0095939</b>	GFL0095978	GFL0074835
Sample Date	Client Info		<b>18 Jan 2024</b>	08 Nov 2023	07 Aug 2023
Machine Age	hrs	Client Info	<b>8904</b>	8440	7804
Oil Age	hrs	Client Info	<b>600</b>	636	423
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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 >120	<b>6</b>	12	11
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >20	<b>1</b>	2	3
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m >330	<b>0</b>	1	<1
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>4</b>	3	8
Barium	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>54</b>	59	61
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>843</b>	895	972
Calcium	ppm	ASTM D5185m 1070	<b>955</b>	1087	1193
Phosphorus	ppm	ASTM D5185m 1150	<b>898</b>	922	1019
Zinc	ppm	ASTM D5185m 1270	<b>1108</b>	1170	1276
Sulfur	ppm	ASTM D5185m 2060	<b>2548</b>	2938	3566

## CONTAMINANTS

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

## INFRA-RED

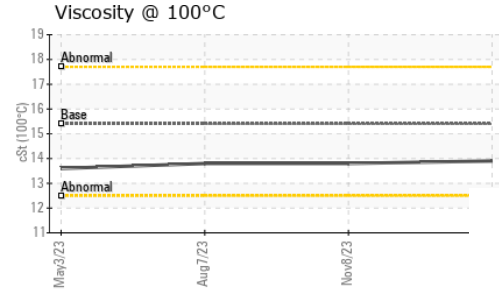
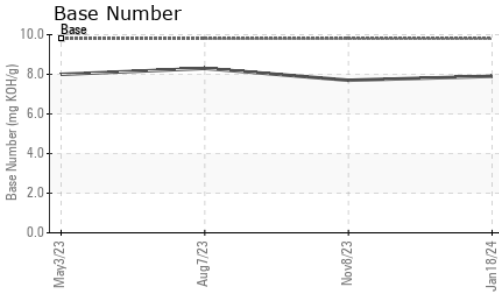
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	<b>0.5</b>	0.6	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.3</b>	7.6	7.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.2</b>	20.1	19.7

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.8</b>	15.3	15.1
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.9</b>	7.7	8.3



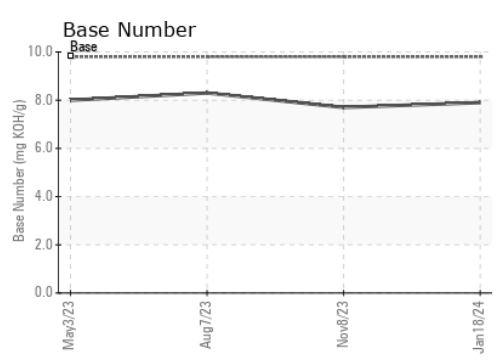
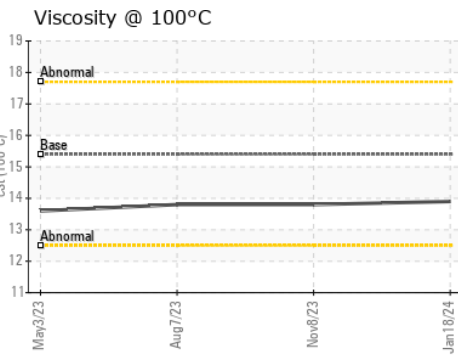
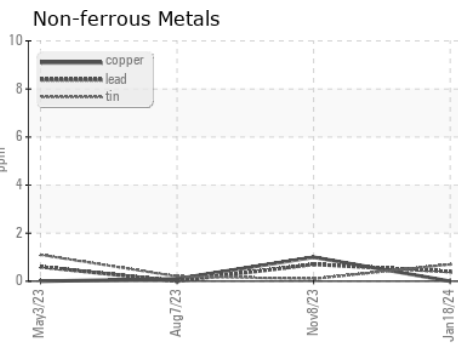
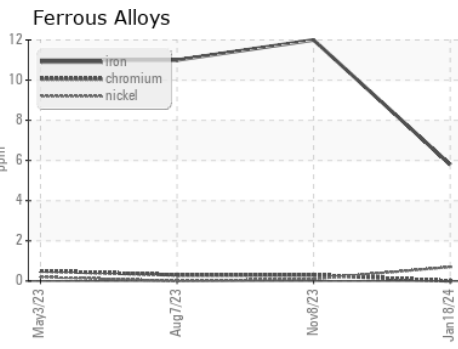
# OIL ANALYSIS REPORT



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	<b>13.9</b>	13.8	13.8

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0095939 **Recieved** : 26 Jan 2024  
**Lab Number** : **06071364** **Diagnosed** : 26 Jan 2024  
**Unique Number** : 10848041 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 916A - Suamico**  
 2300 Deerfield Ave E  
 Suamico, WI  
 US 54313  
 Contact: NICHOLAS WEIDNER  
 nweidner@gflenv.com

Certificate L2367  
 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)