



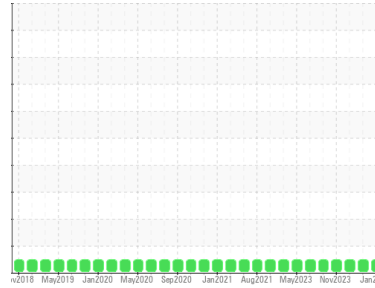
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**(546HPY)**  
Machine Id  
**1034A**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON UHP 5W30 (11 GAL)**



## 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>GFL0102443</b>	GFL0102425	GFL0098587
Sample Date	Client Info		<b>05 Jan 2024</b>	14 Dec 2023	21 Nov 2023
Machine Age	hrs	Client Info	<b>16906</b>	16764	16613
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Chngd</b>	N/A	N/A
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>3</b>	2	<1
Chromium	ppm	ASTM D5185m >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>1</b>	<1	<1
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>0</b>	<1	0
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>3</b>	<1	9
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 64	<b>54</b>	56	60
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m 1160	<b>889</b>	925	1036
Calcium	ppm	ASTM D5185m 820	<b>964</b>	1000	1183
Phosphorus	ppm	ASTM D5185m 1160	<b>1050</b>	1017	1189
Zinc	ppm	ASTM D5185m 1260	<b>1217</b>	1203	1496
Sulfur	ppm	ASTM D5185m 3000	<b>3002</b>	3072	3684

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>3</b>	3	2
Sodium	ppm	ASTM D5185m	<b>2</b>	3	1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0

## INFRA-RED

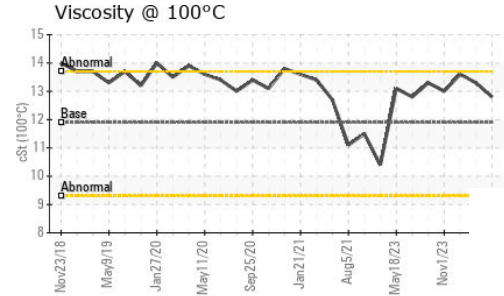
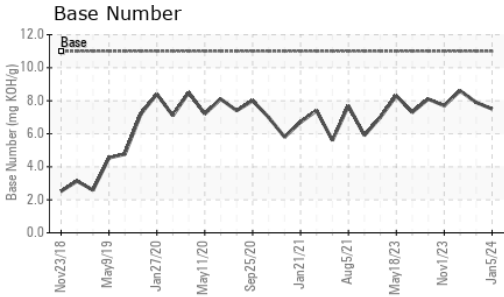
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	<b>0.3</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.0</b>	6.7	5.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.5</b>	18.4	17.8

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.6</b>	14.8	14.2
Base Number (BN)	mg KOH/g	ASTM D2896 11.0	<b>7.5</b>	7.9	8.6



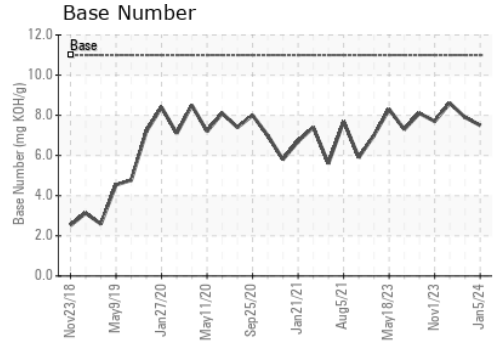
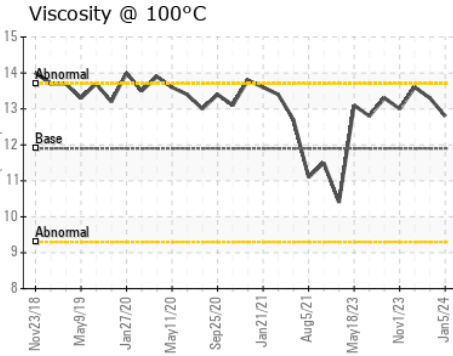
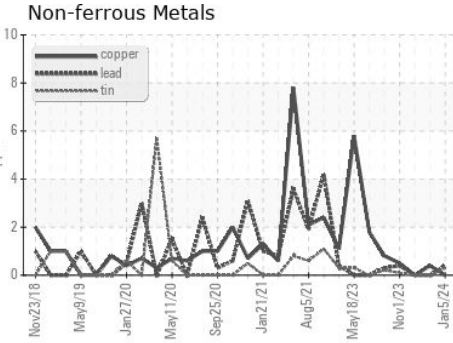
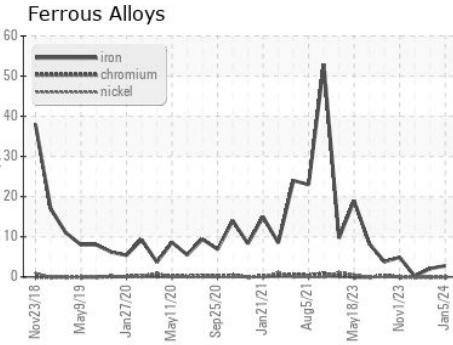
# OIL ANALYSIS REPORT



VISUAL	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	11.9	<b>12.8</b>	13.3	13.6

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0102443 **Recieved** : 17 Jan 2024  
**Lab Number** : **06063409** **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10834791 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 837 - Harrison TS**  
 22820 S State Route 291  
 Harrisonville, MO  
 US 64701  
 Contact: BRYAN SWANSON  
 bryanswanson@gflenv.com  
 T:  
 F:

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)