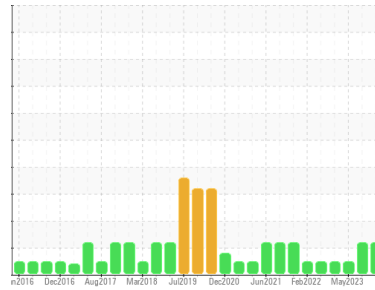




# OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Area  
**GFL035**  
 Machine Id  
**2629**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (30 GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

### 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>GFL0116429</b>	GFL0071553	GFL0071539
Sample Date	Client Info	<b>01 Apr 2024</b>	21 Jun 2023	09 May 2023
Machine Age	hrs	Client Info	<b>16576</b>	16576
Oil Age	hrs	Client Info	<b>600</b>	600
Oil Changed	Client Info	<b>Not Chngd</b>	Changed	Changed
Sample Status		<b>ABNORMAL</b>	ABNORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	▲ 4.6	<1.0
Water	WC Method >0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >100	<b>45</b>	14	19
Chromium	ppm	ASTM D5185m >20	<b>2</b>	3	2
Nickel	ppm	ASTM D5185m >4	<b>1</b>	2	2
Titanium	ppm	ASTM D5185m	<b>0</b>	2	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	1	<1
Aluminum	ppm	ASTM D5185m >20	<b>11</b>	6	1
Lead	ppm	ASTM D5185m >40	<b>1</b>	5	2
Copper	ppm	ASTM D5185m >330	<b>2</b>	2	<1
Tin	ppm	ASTM D5185m >15	<b>0</b>	2	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	1	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	2	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	<b>13</b>	23	4
Barium	ppm	ASTM D5185m 0	<b>0</b>	18	0
Molybdenum	ppm	ASTM D5185m 60	<b>51</b>	49	58
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	2	<1
Magnesium	ppm	ASTM D5185m 1010	<b>806</b>	633	895
Calcium	ppm	ASTM D5185m 1070	<b>1141</b>	776	977
Phosphorus	ppm	ASTM D5185m 1150	<b>832</b>	733	986
Zinc	ppm	ASTM D5185m 1270	<b>1027</b>	904	1219
Sulfur	ppm	ASTM D5185m 2060	<b>2947</b>	2580	3516

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>8</b>	7	7
Sodium	ppm	ASTM D5185m	<b>11</b>	33	5
Potassium	ppm	ASTM D5185m >20	▲ <b>44</b>	8	3
Glycol	%	*ASTM D2982	<b>NEG</b>	NEG	NEG

## INFRA-RED

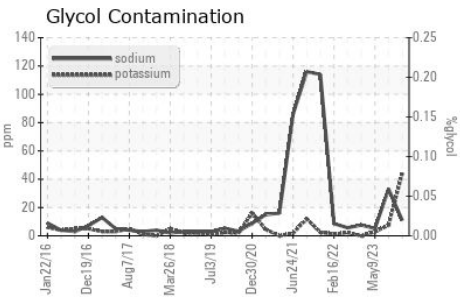
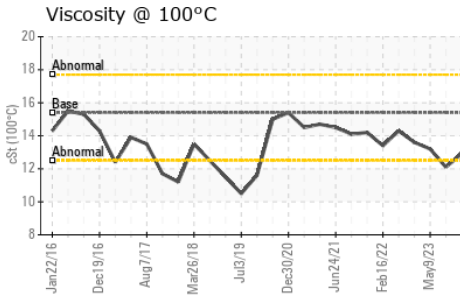
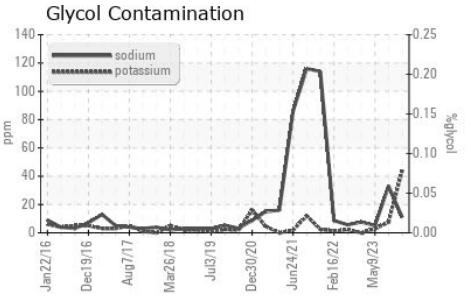
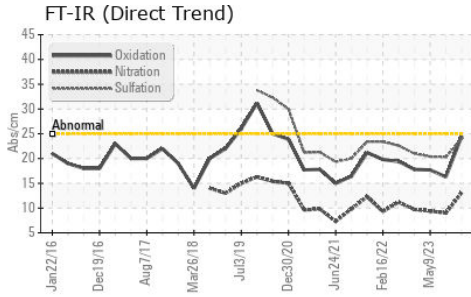
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844 >3	<b>1.4</b>	0.4	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>13.1</b>	9.0	9.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>23.9</b>	20.3	20.4

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>24.5</b>	16.3	17.7
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.1</b>	8.8	8.8



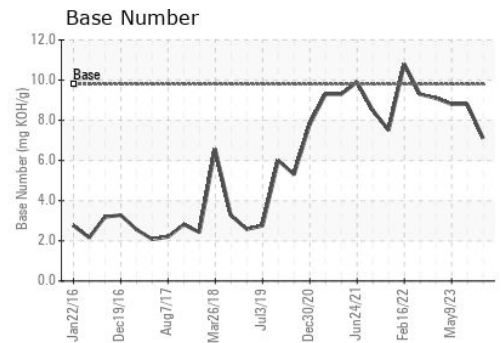
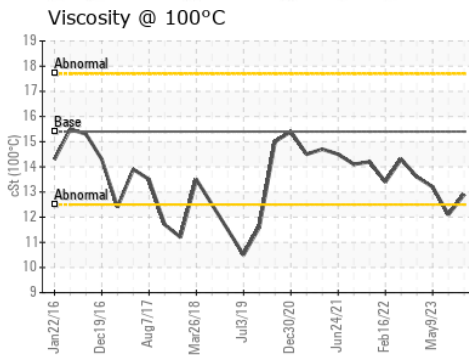
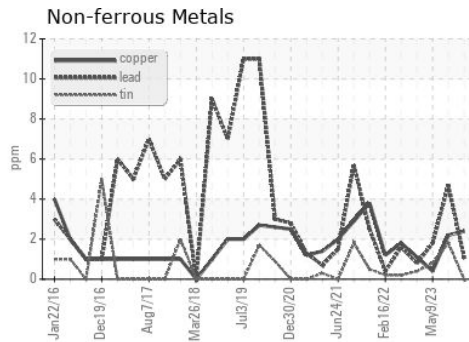
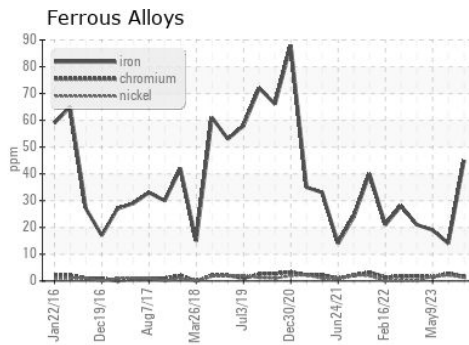
# OIL ANALYSIS REPORT



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	15.4	12.9	▲ 12.1 13.2

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0116429 **Received** : 03 Apr 2024  
**Lab Number** : 06137215 **Tested** : 05 Apr 2024  
**Unique Number** : 10956680 **Diagnosed** : 05 Apr 2024 - Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: Glycol )

**GFL Environmental - 035 - Greensboro**  
 1236 Elon Place  
 High Point, NC  
 US 27263  
 Contact: JORGE COSTA  
 jorge.costa@gflenv.com  
 T: (336)668-3712  
 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)