

# **OIL ANALYSIS REPORT**

Sample Rating Trend



# Machine Id 352133

Component Gasoline Engine

Fluid PETRO CANADA SUPREME SYNTHETIC 5W30 (--- GAL)

## DIAGNOSIS

#### Recommendation

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

## Wear

All component wear rates are normal.

#### Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

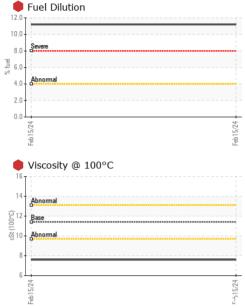
#### Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION         method         limit/base         current         history1         history2           Sample Date         Client Info         IF Feb 2024             Machine Age         kms         Client Info         0             Oil Age         kms         Client Info         0             Oil Changed         kms         Client Info         N/A             Sample Status         Client Info         N/A              CONTAMINATION         method         Imit/base         current         history1         history2           Water         WC Method         >0.2         NEG             Method         Sample Status         0              Water         WC Method         >0.2         NEG             Chromium         ppm         ASTM 051650         >20         0             Nickel         ppm         ASTM 051650         >20              Auminum         ppm         ASTM 05165	· · · ·				Feb2024		
Sample Date         Client Info         15 Feb 2024             Machine Age         kms         Client Info         0             Oil Age         Client Info         0              Sample Status         Client Info         N/A              Sample Status         Client Info         N/A              CONTAMINATION         method         Imit/base         current         history1         history2           Water         WC Method         >0.2         NEG             Chromium         ppm         ASTM 05/85(m)         >20         0             Nickel         ppm         ASTM 05/85(m)         >20         0             Aluminum         ppm         ASTM 05/85(m)         >20         0             Autimonum         ppm         ASTM 05/85(m)         >50         0             Autimonum         ppm         ASTM 05/85(m)         >50         0             Role ppm	SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Machine Age         kms         Client Info         0             Oil Age         kms         Client Info         N/A             Oil Changed         Client Info         N/A             Sample Status         Client Info         N/A             CONTAMINATION         method         Imit/base         current         history1         history2           Water         WC Method         >0.2         NEG             WEAR METALS         method         Imit/base         current         history1         history2           Iron         ppm         ASTM DSIS(m)         >150         8             Mickel         ppm         ASTM DSIS(m)         >5         <1             Silver         ppm         ASTM DSIS(m)         >5         0             Copper         ppm         ASTM DSIS(m)         >10         0             Artimomy         ppm         ASTM DSIS(m)         0              Astm DSISS(m)         0 <td>Sample Number</td> <td></td> <td>Client Info</td> <td></td> <th>GFL0097577</th> <td></td> <td></td>	Sample Number		Client Info		GFL0097577		
Oil Age         kms         Client Info         N/A             Sample Status         Imit/base         current         history1         history2           Water         WC Method         >0.2         NEG             Water         WC Method         >0.2         NEG             WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D518(m)         >150         8             Nickel         ppm         ASTM D518(m)         >20         0             Nickel         ppm         ASTM D518(m)         >50         8             Aluminum         ppm         ASTM D518(m)         >50         0             Aduminum         ppm         ASTM D518(m)         >50         0             Aduminum         ppm         ASTM D518(m)         >50         0             Aduminum         ppm         ASTM D518(m)         >50         0	Sample Date		Client Info		15 Feb 2024		
Oil Changed Sample Status         Client Info         N/A             CONTAMINATION         method         limit/base         current         history1         history2           Water         WC Method         >0.2         NEG             Wear METALS         method         imit/base         current         history1         history2           Iron         ppm         ASTM 0585(m)         >50         8             Aluminum         ppm         ASTM 0585(m)         >20         0             Aluminum         ppm         ASTM 0585(m)         >20         0             Aluminum         ppm         ASTM 0585(m)         >10         0             Aluminum         ppm         ASTM 0585(m)         0         0	Machine Age	kms	Client Info		0		
Sample Status         Imate of the interval sector of the	Oil Age	kms	Client Info		0		
CONTAMINATION         method         limit/base         current         history1         history2           Water         WC Method         >0.2         NEG             WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185(m)         >150         8             Nickel         ppm         ASTM D5185(m)         >20         0             Nickel         ppm         ASTM D5185(m)         >5         <1             Aluminum         ppm         ASTM D5185(m)         >2         0             Aluminum         ppm         ASTM D5185(m)         >50         0             Auminum         ppm         ASTM D5185(m)         >10         0             Auminum         ppm         ASTM D5185(m)         >10         0             Auminum         ppm         ASTM D5185(m)         10         0             Autimony         ppm         ASTM D5185(m)         10	Oil Changed		Client Info		N/A		
Water         WC Method         >0.2         NEG            Glycol         WC Method         NEG             WEAR METALS         method         imit/base         current         history1         history2           Iron         ppm         ASTM D5185(m)         >55         <1             Nickel         ppm         ASTM D5185(m)         >5         <1             Nickel         ppm         ASTM D5185(m)         >5         <1             Aluminum         ppm         ASTM D5185(m)         >50         0             Lead         ppm         ASTM D5185(m)         >50         0             Tin         ppm         ASTM D5185(m)         >10         0             Antimony         ppm         ASTM D5185(m)         >10         0             Astm D5185(m)         ppm         ASTM D5185(m)         16         37             Beryllium         ppm         ASTM D5185(m)         78         465          <	Sample Status				SEVERE		
Glycol         WC Method         NEG             WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185(m)         >150         8             Nickel         ppm         ASTM D5185(m)         >20         0             Nickel         ppm         ASTM D5185(m)         >22         0             Aluminum         ppm         ASTM D5185(m)         >22         0             Lead         ppm         ASTM D5185(m)         >40         3             Lead         ppm         ASTM D5185(m)         >50         0             Lead         ppm         ASTM D5185(m)         10         0             Antimony         ppm         ASTM D5185(m)         0              Vanadium         pm         ASTM D5185(m)         0              Vanadium         pm         ASTM D5185(m)         0	CONTAMINATIO	ON	method	limit/base	current	history1	history2
WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5186(m)         >150         8             Chromium         ppm         ASTM D5186(m)         >20         0             Nickel         ppm         ASTM D5186(m)         >5         <1             Titanium         ppm         ASTM D5186(m)         >2         0             Silver         ppm         ASTM D5186(m)         >40         3             Lead         ppm         ASTM D5186(m)         >10         0             Copper         ppm         ASTM D5186(m)         >10         0             Vanadium         ppm         ASTM D5186(m)         0              Cadmium         ppm         ASTM D5186(m)         0              Cadmium         ppm         ASTM D5186(m)         186         37             Barium         ppm         ASTM D5186(m)	Water		WC Method	>0.2	NEG		
Iron         ppm         ASTM D5185(m)         >150         8             Chromium         ppm         ASTM D5185(m)         >20         0             Nickel         ppm         ASTM D5185(m)         >5         <1             Silver         ppm         ASTM D5185(m)         >2         0             Lead         ppm         ASTM D5185(m)         >2         0             Lead         ppm         ASTM D5185(m)         >50         0             Lead         ppm         ASTM D5185(m)         >10         0             Copper         ppm         ASTM D5185(m)         >10         0             Antimony         ppm         ASTM D5185(m)         0              Vanadium         ppm         ASTM D5185(m)         16         37             Beryllium         ppm         ASTM D5185(m)         168         37        Manganesium         ppm         AS	Glycol		WC Method		NEG		
Chromium         ppm         ASTM D5185(m)         >20         0             Nickel         ppm         ASTM D5185(m)         >5         <1             Titanium         ppm         ASTM D5185(m)         >2         0             Silver         ppm         ASTM D5185(m)         >2         0             Aluminum         ppm         ASTM D5185(m)         >50         0             Lead         ppm         ASTM D5185(m)         >10         0             Copper         ppm         ASTM D5185(m)         >10         0             Antimony         ppm         ASTM D5185(m)         0              Antimony         ppm         ASTM D5185(m)         0              Cadmium         ppm         ASTM D5185(m)         186         37             ADD1TIVES         method         Imit/base         current         history1         history2           Boron         ppm <t< th=""><th>WEAR METALS</th><th></th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></t<>	WEAR METALS		method	limit/base	current	history1	history2
Nickel         ppm         ASTM D5185(m)         >5         <1	Iron	ppm	ASTM D5185(m)	>150	8		
Titanium         ppm         ASTM D5185(m)         >2         0             Silver         ppm         ASTM D5185(m)         >2         0             Aluminum         ppm         ASTM D5185(m)         >60         0             Lead         ppm         ASTM D5185(m)         >50         0             Copper         ppm         ASTM D5185(m)         >10         0             Antimony         ppm         ASTM D5185(m)         >10         0             Vanadium         ppm         ASTM D5185(m)         0              Antimony         ppm         ASTM D5185(m)         0              Adadium         ppm         ASTM D5185(m)         0              ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         79         63             Marganese         ppm         ASTM D5185(m)	Chromium	ppm	ASTM D5185(m)	>20	0		
Silver         ppm         ASTM D5185(m)         >2         0             Aluminum         ppm         ASTM D5185(m)         >40         3             Lead         ppm         ASTM D5185(m)         >50         0             Copper         ppm         ASTM D5185(m)         >155         2             Tin         ppm         ASTM D5185(m)         0              Antimony         ppm         ASTM D5185(m)         0              Vanadium         ppm         ASTM D5185(m)         0              Beryllium         ppm         ASTM D5185(m)         0              ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         79         63             Magnese         ppm         ASTM D5185(m)         79         636             Galcium         ppm         ASTM D5185(m)	Nickel	ppm	ASTM D5185(m)	>5	<1		
Aluminum         ppm         ASTM D5186(m)         >40         3             Lead         ppm         ASTM D5185(m)         >50         0             Copper         ppm         ASTM D5185(m)         >155         2             Tin         ppm         ASTM D5185(m)         >10         0             Antimony         ppm         ASTM D5185(m)         0              Vanadium         ppm         ASTM D5185(m)         0              Beryllium         ppm         ASTM D5185(m)         0              Cadmium         ppm         ASTM D5185(m)         0              Boron         ppm         ASTM D5185(m)         186         37             Malganesize         ppm         ASTM D5185(m)         79         63             Galcium         ppm         ASTM D5185(m)         0         0             Calcium         ppm         ASTM D5185(m)	Titanium	ppm	ASTM D5185(m)		0		
Lead         ppm         ASTM D5185(m)         >50         0             Copper         ppm         ASTM D5185(m)         >155         2             Tin         ppm         ASTM D5185(m)         >10         0             Antimony         ppm         ASTM D5185(m)         >10         0             Vanadium         ppm         ASTM D5185(m)         0              Beryllium         ppm         ASTM D5185(m)         0              ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         186         37             Molybdenum         ppm         ASTM D5185(m)         186         37             Magnessem         ppm         ASTM D5185(m)         186         37             Magnesium         ppm         ASTM D5185(m)         758         465        Sulfur         ppm         AST	Silver	ppm	ASTM D5185(m)	>2	0		
Copper         ppm         ASTM D5185(m)         >155         2             Tin         ppm         ASTM D5185(m)         >10         0             Antimony         ppm         ASTM D5185(m)         0             Vanadium         ppm         ASTM D5185(m)         0             Beryllium         ppm         ASTM D5185(m)         0             Cadmium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         74         0             Magnese         ppm         ASTM D5185(m)         79         63             Magnesium         ppm         ASTM D5185(m)         0         0             Magnesium         ppm         ASTM D5185(m)         745         628             Calcium         ppm         ASTM D5185(m)         202         2385 <td>Aluminum</td> <td>ppm</td> <td>ASTM D5185(m)</td> <td>&gt;40</td> <th>3</th> <td></td> <td></td>	Aluminum	ppm	ASTM D5185(m)	>40	3		
Tin         ppm         ASTM D5185(m)         >10             Antimony         ppm         ASTM D5185(m)         0             Vanadium         ppm         ASTM D5185(m)         0             Vanadium         ppm         ASTM D5185(m)         0             Beryllium         ppm         ASTM D5185(m)         0             Cadmium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         186         37             Molybdenum         ppm         ASTM D5185(m)         186         37             Manganese         ppm         ASTM D5185(m)         79         63             Calcium         ppm         ASTM D5185(m)         745         628             Calcium         ppm         ASTM D5185(m)         2502         2385             Su	Lead	ppm	ASTM D5185(m)	>50	0		
Antimony         ppm         ASTM D5185(m)         0             Vanadium         ppm         ASTM D5185(m)         0             Beryllium         ppm         ASTM D5185(m)         0             Cadmium         ppm         ASTM D5185(m)         0             Cadmium         ppm         ASTM D5185(m)         186 <b>37</b> ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         186 <b>37</b> Molybdenum         ppm         ASTM D5185(m)         79         63             Manganese         ppm         ASTM D5185(m)         79         63             Magnesium         ppm         ASTM D5185(m)         78         465             Calcium         ppm         ASTM D5185(m)         1002         1134             Vinspinut         ppm         ASTM D5185(m)         2502         2385	Copper	ppm	ASTM D5185(m)	>155	2		
Vanadium         ppm         ASTM D5185(m)         0             Beryllium         ppm         ASTM D5185(m)         0             Cadmium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         186         37             Barium         ppm         ASTM D5185(m)         186         37             Molybdenum         ppm         ASTM D5185(m)         79         63             Magnesee         ppm         ASTM D5185(m)         79         63             Magnesium         ppm         ASTM D5185(m)         78         465             Magnesium         ppm         ASTM D5185(m)         1002         1134             Calcium         ppm         ASTM D5185(m)         2502         2385             Sulfur         ppm         ASTM D5185(m)         >30	Tin	ppm	ASTM D5185(m)	>10	0		
Beryllium         ppm         ASTM D5185(m)         0             Cadmium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         186         37             Barium         ppm         ASTM D5185(m)         186         37             Molybdenum         ppm         ASTM D5185(m)         79         63             Magnesium         ppm         ASTM D5185(m)         79         63             Magnesium         ppm         ASTM D5185(m)         78         465             Magnesium         ppm         ASTM D5185(m)         578         465             Calcium         ppm         ASTM D5185(m)         1002         1134             Sulfur         ppm         ASTM D5185(m)         2502         2385             Sulfur         ppm         ASTM D5185(m)         >30	Antimony	ppm	ASTM D5185(m)		0		
Cadmium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         186         37             Barium         ppm         ASTM D5185(m)          0             Molybdenum         ppm         ASTM D5185(m)         79         63             Manganese         ppm         ASTM D5185(m)         79         63             Magnesium         ppm         ASTM D5185(m)         79         63             Magnesium         ppm         ASTM D5185(m)         78         465             Calcium         ppm         ASTM D5185(m)         1002         1134             Vistory1         ppm         ASTM D5185(m)         2502         2385             Sulfur         ppm         ASTM D5185(m)         >30         20             Solium         ppm         ASTM D5185(m) <th< th=""><td>Vanadium</td><td>ppm</td><td>ASTM D5185(m)</td><td></td><th>0</th><td></td><td></td></th<>	Vanadium	ppm	ASTM D5185(m)		0		
ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         186         37             Barium         ppm         ASTM D5185(m)         <1         0             Barium         ppm         ASTM D5185(m)         <1         0             Molybdenum         ppm         ASTM D5185(m)         79         63             Maganese         ppm         ASTM D5185(m)         0         0             Magnesium         ppm         ASTM D5185(m)         578         4655             Calcium         ppm         ASTM D5185(m)         1002         1134             Calcium         ppm         ASTM D5185(m)         745         628             Zinc         ppm         ASTM D5185(m)         2502         2385             Sulfur         ppm         ASTM D5185(m)         >30         20             Sodium         ppm         ASTM D518	Beryllium	ppm	. ,		0		
Boron         ppm         ASTM D5185(m)         186         37             Barium         ppm         ASTM D5185(m)         <1         0             Molybdenum         ppm         ASTM D5185(m)         79         63             Manganese         ppm         ASTM D5185(m)         0         0             Magnesium         ppm         ASTM D5185(m)         578         4655             Calcium         ppm         ASTM D5185(m)         1002         1134             Phosphorus         ppm         ASTM D5185(m)         745         628             Zinc         ppm         ASTM D5185(m)         2502         2385             Sulfur         ppm         ASTM D5185(m)         2502         2385             Lithium         ppm         ASTM D5185(m)         >30         20             Sodium         ppm         ASTM D5185(m)         >20         <1             Fuel         %         ASTM	Cadmium	ppm	ASTM D5185(m)		0		
Barium         ppm         ASTM D5185(m)         <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185(m)         79         63             Manganese         ppm         ASTM D5185(m)         0         0             Magnesium         ppm         ASTM D5185(m)         578         465             Calcium         ppm         ASTM D5185(m)         1002         1134             Calcium         ppm         ASTM D5185(m)         745         628             Zinc         ppm         ASTM D5185(m)         837         686             Sulfur         ppm         ASTM D5185(m)         2502         2385             Lithium         ppm         ASTM D5185(m)         2502         2385             Sulfur         ppm         ASTM D5185(m)         250         <11             Sulfur         ppm         ASTM D5185(m)         >30         20             Solicon         ppm         ASTM D5185(m)         >20         <11             Fuel <td< th=""><td>Boron</td><td>ppm</td><td>ASTM D5185(m)</td><td>186</td><th>37</th><td></td><td></td></td<>	Boron	ppm	ASTM D5185(m)	186	37		
Marganese       ppm       ASTM D5185(m)       0       0           Magnesium       ppm       ASTM D5185(m)       578       465           Calcium       ppm       ASTM D5185(m)       1002       1134           Calcium       ppm       ASTM D5185(m)       1002       1134           Phosphorus       ppm       ASTM D5185(m)       745       628           Zinc       ppm       ASTM D5185(m)       837       6866           Sulfur       ppm       ASTM D5185(m)       2502       2385           Lithium       ppm       ASTM D5185(m)       2502       2385           Sulfur       ppm       ASTM D5185(m)       2502       2385           Sulfur       ppm       ASTM D5185(m)       >30       20           Sodium       ppm       ASTM D5185(m)       >400       5           Potassium       ppm       ASTM D5185(m)       >20       <1	Barium	ppm	ASTM D5185(m)	<1	0		
Magnesium         ppm         ASTM D5185(m)         578         465             Calcium         ppm         ASTM D5185(m)         1002         1134             Phosphorus         ppm         ASTM D5185(m)         745         628             Zinc         ppm         ASTM D5185(m)         837         686             Sulfur         ppm         ASTM D5185(m)         2502         2385             Lithium         ppm         ASTM D5185(m)         2502         2385             Sulfur         ppm         ASTM D5185(m)         2502         2385             Lithium         ppm         ASTM D5185(m)         2502         2385             Solicon         ppm         ASTM D5185(m)         >30         20             Sodium         ppm         ASTM D5185(m)         >20         <1             Potassium         ppm         ASTM D5185(m)         >20         <1             INFRA-RED         method </th <td>Molybdenum</td> <td>ppm</td> <td>ASTM D5185(m)</td> <td>79</td> <th>63</th> <td></td> <td></td>	Molybdenum	ppm	ASTM D5185(m)	79	63		
Calcium         ppm         ASTM D5185(m)         1002         1134             Phosphorus         ppm         ASTM D5185(m)         745         628             Zinc         ppm         ASTM D5185(m)         837         686             Sulfur         ppm         ASTM D5185(m)         2502         2385             Lithium         ppm         ASTM D5185(m)         2502         2385             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >30         20             Sodium         ppm         ASTM D5185(m)         >400         5             Potassium         ppm         ASTM D5185(m)         >20         <1             Fuel         %         ASTM D5185(m)         >20         <11.2             Fuel         %         ASTM D7593*         >4.0         11.2             NFRA-RED         meth	0	ppm	ASTM D5185(m)	0	0		
Phosphorus         ppm         ASTM D5185(m)         745         628             Zinc         ppm         ASTM D5185(m)         837         686             Sulfur         ppm         ASTM D5185(m)         2502         2385             Lithium         ppm         ASTM D5185(m)         2502         2385             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >30         20             Sodium         ppm         ASTM D5185(m)         >400         5             Potassium         ppm         ASTM D5185(m)         >20         <1             Fuel         %         ASTM D5185(m)         >20         <1             Fuel         %         ASTM D7593*         >4.0         11.2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         % <td< th=""><td>Magnesium</td><td>ppm</td><td>ASTM D5185(m)</td><td>578</td><th>465</th><td></td><td></td></td<>	Magnesium	ppm	ASTM D5185(m)	578	465		
Zinc         ppm         ASTM D5185(m)         837         686             Sulfur         ppm         ASTM D5185(m)         2502         2385             Lithium         ppm         ASTM D5185(m)         2502         2385             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >30         20             Sodium         ppm         ASTM D5185(m)         >400         5             Potassium         ppm         ASTM D5185(m)         >20         <1             Fuel         %         ASTM D5185(m)         >20         <1             Fuel         %         ASTM D593*         >4.0         11.2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         0             Nitration         Abs/cm         ASTM D7624*         >20	Calcium	ppm	ASTM D5185(m)	1002	1134		
Sulfur         ppm         ASTM D5185(m)         2502         2385             Lithium         ppm         ASTM D5185(m)         <         <1             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >30         20             Sodium         ppm         ASTM D5185(m)         >400         5             Potassium         ppm         ASTM D5185(m)         >20         <1             Fuel         %         ASTM D5185(m)         >20         <1             Fuel         %         ASTM D7593*         >4.0         11.2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         0             Nitration         Abs/cm         ASTM D7624*         >20         12.2	Phosphorus	ppm	ASTM D5185(m)	745	628		
Lithium         ppm         ASTM D5185(m)         <1	Zinc	ppm	ASTM D5185(m)	837			
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >30         20             Sodium         ppm         ASTM D5185(m)         >400         5             Potassium         ppm         ASTM D5185(m)         >20         <1             Fuel         %         ASTM D7593*         >4.0         11.2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         0             Nitration         Abs/cm         ASTM D7624*         >20         12.2		ppm	( )	2502	2385		
Silicon         ppm         ASTM D5185(m)         >30         20             Sodium         ppm         ASTM D5185(m)         >400         5             Potassium         ppm         ASTM D5185(m)         >20         <1             Fuel         %         ASTM D7593*         >4.0         11.2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         0             Nitration         Abs/cm         ASTM D7624*         >20         12.2	Lithium	ppm	ASTM D5185(m)		<1		
Sodium         ppm         ASTM D5185(m)         >400         5             Potassium         ppm         ASTM D5185(m)         >20         <1             Fuel         %         ASTM D7593*         >4.0         11.2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         0             Nitration         Abs/cm         ASTM D7624*         >20         12.2	CONTAMINANT	S	method	limit/base	current	history1	history2
Potassium         ppm         ASTM D5185(m)         >20         <1	Silicon	ppm	ASTM D5185(m)	>30			
Fuel         %         ASTM D7593*         >4.0         11.2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         0             Nitration         Abs/cm         ASTM D7624*         >20         12.2	Sodium	ppm	. ,	>400	5		
INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         0             Nitration         Abs/cm         ASTM D7624*         >20         12.2							
Soot %         %         ASTM D7844*         0             Nitration         Abs/cm         ASTM D7624*         >20         12.2	Fuel	%	ASTM D7593*	>4.0	<b>11.2</b>		
Nitration         Abs/cm         ASTM D7624*         >20         12.2	INFRA-RED		method	limit/base	current	history1	history2
	Soot %	%	ASTM D7844*		0		
Sulfation         Abs/.1mm         ASTM D7415*         >30         23.0	Nitration	Abs/cm	ASTM D7624*	>20	12.2		
	Sulfation	Abs/.1mm	ASTM D7415*	>30			



# **OIL ANALYSIS REPORT**



	Oxidation	Abs/.1mm	ASTM D7414*	>25	16.1		
	VISUAL		method	limit/base	e current	history1	history2
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
	Precipitate	scalar	Visual*	NONE	NONE		
/24 -	Silt	scalar	Visual*	NONE	NONE		
Feb15/24	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
	Free Water	scalar	Visual*		NEG		
	FLUID PROPE	RTIES	method	limit/base	e current	history1	history2
	Visc @ 100°C	cSt	ASTM D7279(m)	11.4	<b>•</b> 7.6		
	GRAPHS						
L-1.1	Iron (ppm)				Lead (ppm)		
	500 400 - Severe				200 Severe		
					50 - Severe		
	a 300 - Abnormal			41 1	Abaamaal		
	100						
	0			/24	24+0		
	Feb 15/24			Feb 15/24	Feb 15/24		
	Aluminum (ppm)				 Chromium (pp	m)	
	100 Severe				50 T 8mm		
	80						
	40 - Abnormal			E A	30 - Abnormal		
	20 -				10-		
	0			24	24+10		
	Feb 15/24			Feb15/24	Feb15/24		
	Copper (ppm)			LL.	<sup>⊥⊥</sup> Silicon (ppm)		
	300				80 Severe		
	200				60-		
	Abnormal			mdd	40 Abnormal		
	100 -				20-		
	0			+			
	Feb 15/24			Feb15/24	Feb15/24		
	≝ ▲ Viscosity @ 100°C			9	Fuel Dilution		
		•			<sup>5.0</sup> T		
	Abnormal				0.0		
	0 12 - Base 5 10 - Abnormal			tr e %	Severe		
	8				5.0 - Abnormal		
	6				0.0		
	Feb 15/24			Feb15/24	Feb 15/24		
Laboratory Sample No. Lab Number	: WearCheck - C8-117 : GFL0097577	5 Appleby Recei Teste	i <b>ved</b> :16 d :20	ngton, ON L 6 Feb 2024 0 Feb 2024	7L 5H9		onmental - 21 mondsey Roa Toronto, O
	: 5733285	Diam	nosed : 20	) Feb 2024 -	Wee Davie		CA M4B 1

Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

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