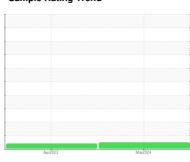


# **OIL ANALYSIS REPORT**

Sample Rating Trend







Machine Id 100-005 Component

Diesel Engine

PETRO CANADA 10W30 (--- GAL)

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#### 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.

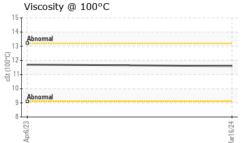
### **Fluid Condition**

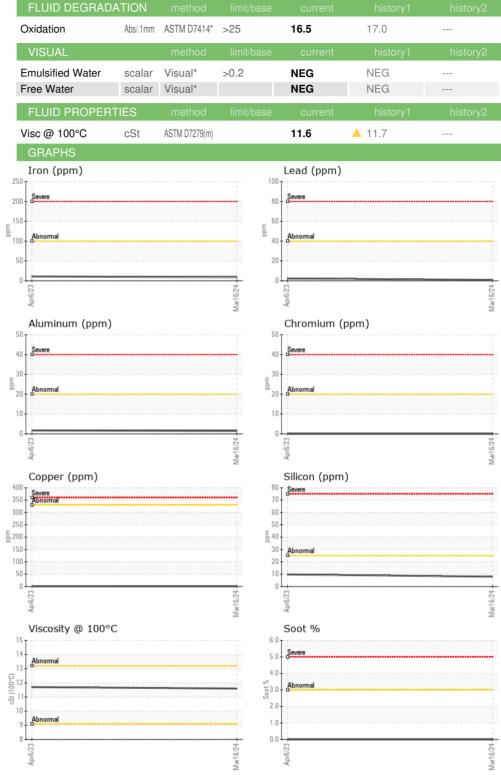
The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION   method   limit/base   current   history1   history2				Apr2023	Mar2024		
Sample Number   Client Info   WC0920779   LH0232536     Sample Date   Client Info   16 Mar 2024   06 Apr 2023       Machine Age   hrs   Client Info   0	SAMPLE INFORM	/ATION	method			history1	history2
Client Info		/// TIOIV		mmobase			
Machine Age   hrs   Client Info   0   1000							
Oil Changed	•	la una					
Contamped   Client Info   Changed   NORMAL   ABNORMAL   Contamped   Co					_		
CONTAMINATION	· ·	nrs			-		
CONTAMINATION			Client Into			_	
Fuel   WC Method   S	•						
Water   WC Method   20.2   NEG   N		١	method	limit/base	current		history2
WEAR METALS	Fuel		WC Method				
WEAR METALS	Water		WC Method	>0.2			
Irron	Glycol		WC Method		NEG	NEG	
Chromium	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185(m)	>100	9	11	
Description	Chromium	ppm	ASTM D5185(m)	>20	0	0	
Silver	Nickel	ppm	ASTM D5185(m)	>4	0	<1	
Aluminum	Titanium	ppm	ASTM D5185(m)		0	<1	
Lead	Silver	ppm	ASTM D5185(m)	>3	0	0	
Copper         ppm         ASTM D5185(m)         >330         <1         <1            Tin         ppm         ASTM D5185(m)         >15         0         <1	Aluminum	ppm	ASTM D5185(m)	>20	2	2	
Tin	Lead	ppm	ASTM D5185(m)	>40	<1	2	
Antimony	Copper	ppm	ASTM D5185(m)	>330	<1	<1	
Vanadium         ppm         ASTM D5185(m)         0         0            Beryllium         ppm         ASTM D5185(m)         0         0            Cadmium         ppm         ASTM D5185(m)         0         0            ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         <1         13            Barium         ppm         ASTM D5185(m)         <1         0            Molybdenum         ppm         ASTM D5185(m)         62         62            Manganese         ppm         ASTM D5185(m)         0         <1            Magnesium         ppm         ASTM D5185(m)         1031         907            Calcium         ppm         ASTM D5185(m)         1104         1254            Phosphorus         ppm         ASTM D5185(m)         1252         1226            Sulfur         ppm         ASTM D5185(m)         2544         2784            Lithium         ppm         ASTM D5185(m)         <1         <1 <td>Tin</td> <td>ppm</td> <td>ASTM D5185(m)</td> <td>&gt;15</td> <th>0</th> <td>&lt;1</td> <td></td>	Tin	ppm	ASTM D5185(m)	>15	0	<1	
Beryllium	Antimony	ppm	ASTM D5185(m)		0	0	
Cadmium         ppm         ASTM D5185(m)         0         0            ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         <1	Vanadium	ppm	ASTM D5185(m)		0	0	
ADDITIVES	Beryllium	ppm	ASTM D5185(m)		0	0	
Boron	Cadmium	ppm	ASTM D5185(m)		0	0	
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185(m)         62         62            Manganese         ppm         ASTM D5185(m)         0         <1	Boron	ppm	ASTM D5185(m)		<1	13	
Manganese         ppm         ASTM D5185(m)         0         <1            Magnesium         ppm         ASTM D5185(m)         1031         907            Calcium         ppm         ASTM D5185(m)         1104         1254            Phosphorus         ppm         ASTM D5185(m)         1034         1129            Zinc         ppm         ASTM D5185(m)         1252         1226            Sulfur         ppm         ASTM D5185(m)         2544         2784            Lithium         ppm         ASTM D5185(m)         <1	Barium	ppm	ASTM D5185(m)		<1	0	
Magnesium         ppm         ASTM D5185(m)         1031         907            Calcium         ppm         ASTM D5185(m)         1104         1254            Phosphorus         ppm         ASTM D5185(m)         1034         1129            Zinc         ppm         ASTM D5185(m)         1252         1226            Sulfur         ppm         ASTM D5185(m)         2544         2784            Lithium         ppm         ASTM D5185(m)         <1	Molybdenum	ppm	ASTM D5185(m)		62	62	
Calcium         ppm         ASTM D5185(m)         1104         1254            Phosphorus         ppm         ASTM D5185(m)         1034         1129            Zinc         ppm         ASTM D5185(m)         1252         1226            Sulfur         ppm         ASTM D5185(m)         2544         2784            Lithium         ppm         ASTM D5185(m)         <1	Manganese	ppm	ASTM D5185(m)		0	<1	
Phosphorus         ppm         ASTM D5185(m)         1034         1129            Zinc         ppm         ASTM D5185(m)         1252         1226            Sulfur         ppm         ASTM D5185(m)         2544         2784            Lithium         ppm         ASTM D5185(m)         <1         <1            CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >25         8         10            Sodium         ppm         ASTM D5185(m)         <1         1            Potassium         ppm         ASTM D5185(m)         >20         <1         6            INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         >3         0         0            Nitration         Abs/cm         ASTM D7624*         >20         8.1         8.6	Magnesium	ppm	ASTM D5185(m)		1031	907	
Zinc   ppm   ASTM D5185(m)   1252   1226       Sulfur   ppm   ASTM D5185(m)   2544   2784       Lithium   ppm   ASTM D5185(m)   <1   <1       CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185(m)   >25   8   10       Sodium   ppm   ASTM D5185(m)   <1   1       Potassium   ppm   ASTM D5185(m)   >20   <1   6       INFRA-RED   method   limit/base   current   history1   history2     Soot %   ASTM D7844*   >3   0   0       Nitration   Abs/cm   ASTM D7624*   >20   8.1   8.6	Calcium	ppm	ASTM D5185(m)		1104	1254	
Sulfur         ppm         ASTM D5185(m)         2544         2784            Lithium         ppm         ASTM D5185(m)         <1         <1            CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >25         8         10            Sodium         ppm         ASTM D5185(m)         <1	Phosphorus	ppm	ASTM D5185(m)		1034	1129	
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >25         8         10            Sodium         ppm         ASTM D5185(m)         <1	Zinc	ppm	ASTM D5185(m)		1252	1226	
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >25         8         10            Sodium         ppm         ASTM D5185(m)         <1	Sulfur	ppm	ASTM D5185(m)		2544	2784	
Silicon         ppm         ASTM D5185(m)         >25         8         10            Sodium         ppm         ASTM D5185(m)         <1         1            Potassium         ppm         ASTM D5185(m)         >20         <1         6            INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         >3         0         0            Nitration         Abs/cm         ASTM D7624*         >20         8.1         8.6	Lithium	ppm	ASTM D5185(m)		<1	<1	
Sodium         ppm         ASTM D5185(m)         <1	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium         ppm         ASTM D5185(m)         >20         <1         6            INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         >3         0         0            Nitration         Abs/cm         ASTM D7624*         >20         8.1         8.6	Silicon	ppm	ASTM D5185(m)	>25	8	10	
INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         ASTM D7844*         >3         0         0            Nitration         Abs/cm         ASTM D7624*         >20         8.1         8.6	Sodium	ppm	ASTM D5185(m)		<1	1	
Soot %         %         ASTM D7844*         >3         0         0            Nitration         Abs/cm         ASTM D7624*         >20         8.1         8.6	Potassium	ppm	ASTM D5185(m)	>20	<1	6	
Nitration         Abs/cm         ASTM D7624*         >20         8.1         8.6	INFRA-RED		method	limit/base	current	history1	history2
Nitration         Abs/cm         ASTM D7624*         >20         8.1         8.6	Soot %	%	ASTM D7844*	>3	0	0	
	Nitration					8.6	
	Sulfation						



## **OIL ANALYSIS REPORT**







CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WC0920779 Lab Number : 02624098 Unique Number : 5749217

Test Package : MOBCE

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 RONI/IRON SHORE EXCAVATING LTD. Received **Tested** 

Diagnosed

: 25 Mar 2024 : 25 Mar 2024

: 25 Mar 2024 - Wes Davis

100 MACINTOSH BLVD VAUGHAN, ON CA L4K 4P3

> Contact: Service Team service.team@roni.ca T:

To discuss this sample report, contact Customer Service at 1-800-268-2131.

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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