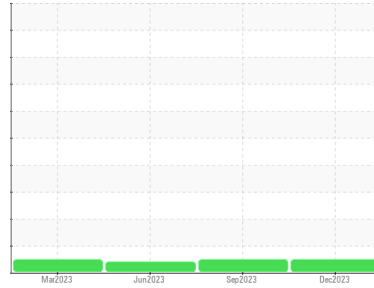




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**RONI**  
 Machine Id  
**455**  
 Component  
**Diesel Engine**  
 Fluid

**PETRO CANADA DURON SHP 10W30 (--- 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

Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0872923</b>	LH0275340	LH0265808
Sample Date	Client Info			<b>08 Dec 2023</b>	08 Sep 2023	06 Jun 2023
Machine Age	hrs	Client Info		<b>0</b>	2651	2071
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>2.1		<b>&lt;1.0</b>	<1.0	1.2
Water	WC Method	>0.21		<b>NEG</b>	NEG	NEG
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>51	<b>14</b>	17	12
Chromium	ppm	ASTM D5185(m)	>11	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	2
Aluminum	ppm	ASTM D5185(m)	>31	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m)	>26	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>26	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

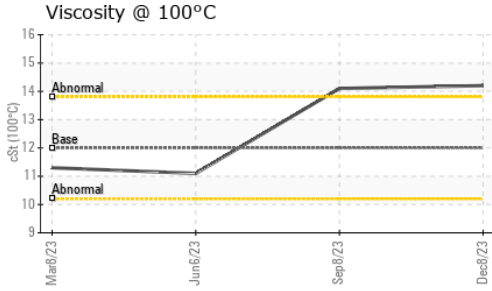
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	<b>2</b>	1	2
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>59</b>	58	61
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>974</b>	980	992
Calcium	ppm	ASTM D5185(m)	1050	<b>1051</b>	1052	1104
Phosphorus	ppm	ASTM D5185(m)	995	<b>984</b>	1069	1113
Zinc	ppm	ASTM D5185(m)	1180	<b>1219</b>	1202	1214
Sulfur	ppm	ASTM D5185(m)	2600	<b>2572</b>	2586	2675
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>22	<b>4</b>	5	4
Sodium	ppm	ASTM D5185(m)	>31	<b>2</b>	2	1
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	2	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.3</b>	6.2	6.2
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>18.1</b>	18.1	18.4



# OIL ANALYSIS REPORT



### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	14.5	14.2

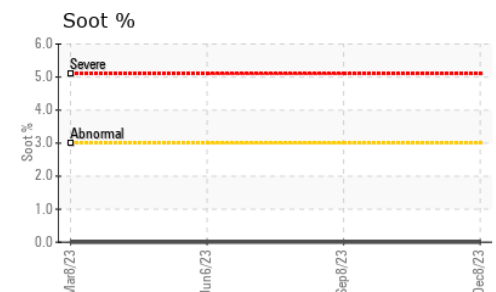
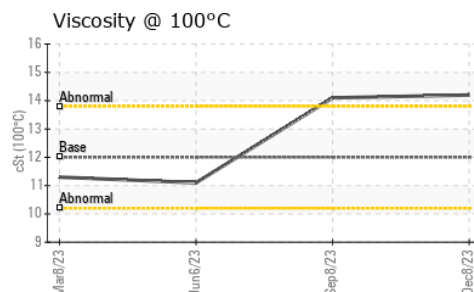
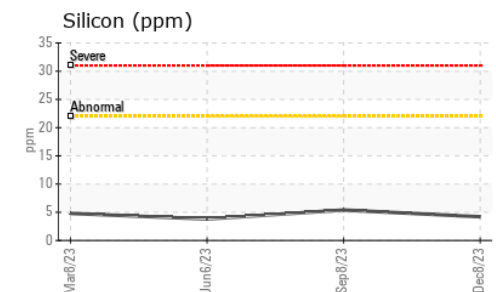
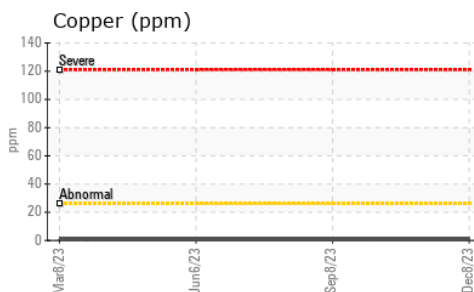
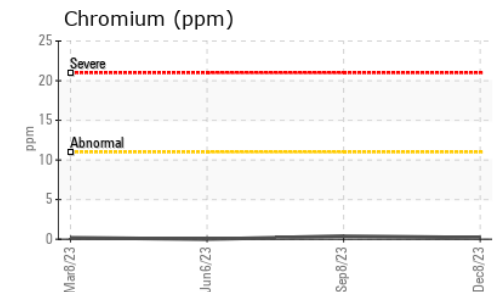
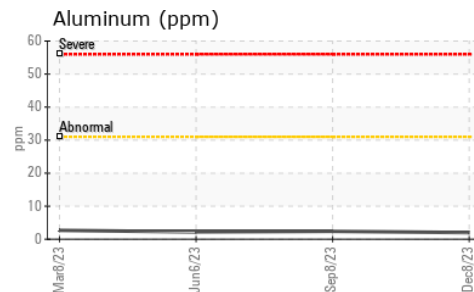
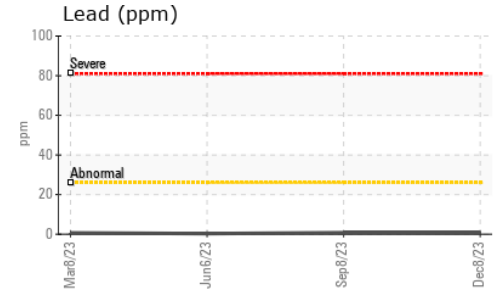
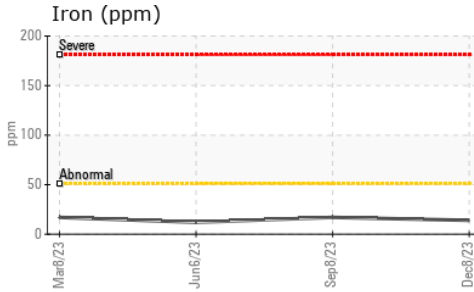
### VISUAL

	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.21	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

### FLUID PROPERTIES

	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	14.2	14.1 ▲ 11.1

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **RONI/IRON SHORE EXCAVATING LTD.**  
**Sample No.** : WC0872923 **Received** : 14 Dec 2023 **100 MACINTOSH BLVD**  
**Lab Number** : 02603064 **Diagnosed** : 14 Dec 2023 **VAUGHAN, ON**  
**Unique Number** : 5696149 **Diagnostician** : Kevin Marson **CA L4K 4P3**  
**Test Package** : MOBCE **Contact: Service Team**  
**service.team@roni.ca**

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.