

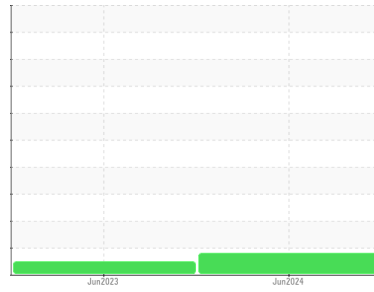


OIL ANALYSIS REPORT



Area
ORIN CONTRACTORS
 Machine Id
366
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

Sample Rating Trend



WEAR



DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

Iron ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0932554	LH0256891	---
Sample Date	Client Info		29 Jun 2024	19 Jun 2023	---
Machine Age	hrs	Client Info	0	6188	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			ABNORMAL	NORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	0.7	---
Water	WC Method	>0.2	NEG	NEG	---
Glycol	WC Method		NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	---	---
Iron	ppm	ASTM D5185(m) >100	▲ 103	57	---
Chromium	ppm	ASTM D5185(m) >20	1	1	---
Nickel	ppm	ASTM D5185(m) >2	<1	0	---
Titanium	ppm	ASTM D5185(m) >2	0	<1	---
Silver	ppm	ASTM D5185(m) >2	0	0	---
Aluminum	ppm	ASTM D5185(m) >25	12	16	---
Lead	ppm	ASTM D5185(m) >40	0	<1	---
Copper	ppm	ASTM D5185(m) >330	2	3	---
Tin	ppm	ASTM D5185(m) >15	0	0	---
Antimony	ppm	ASTM D5185(m)	0	0	---
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) 0	12	70	---
Barium	ppm	ASTM D5185(m) 0	0	0	---
Molybdenum	ppm	ASTM D5185(m) 60	59	41	---
Manganese	ppm	ASTM D5185(m) 0	<1	<1	---
Magnesium	ppm	ASTM D5185(m) 1010	906	268	---
Calcium	ppm	ASTM D5185(m) 1070	1199	1926	---
Phosphorus	ppm	ASTM D5185(m) 1150	1031	1096	---
Zinc	ppm	ASTM D5185(m) 1270	1222	1202	---
Sulfur	ppm	ASTM D5185(m) 2060	2639	2821	---
Lithium	ppm	ASTM D5185(m)	<1	<1	---

CONTAMINANTS

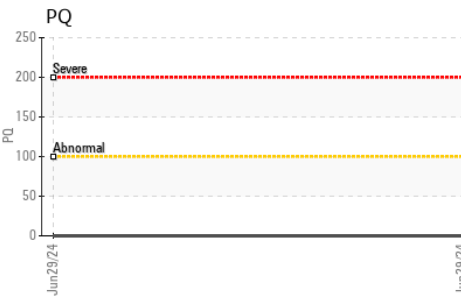
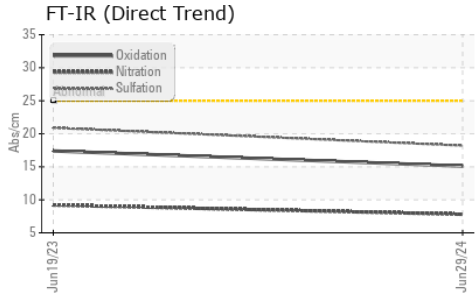
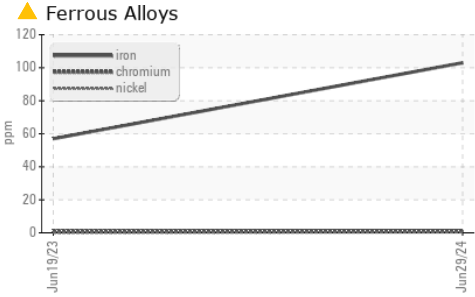
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	7	10	---
Sodium	ppm	ASTM D5185(m)	4	2	---
Potassium	ppm	ASTM D5185(m) >20	1	3	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0.1	0.2	---
Nitration	Abs/cm	ASTM D7624* >20	7.8	9.2	---
Sulfation	Abs/.1mm	ASTM D7415* >30	18.2	20.9	---



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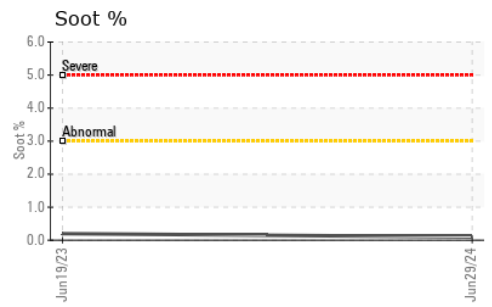
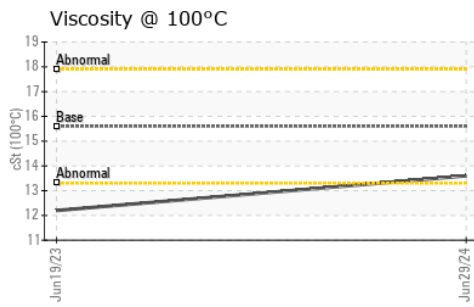
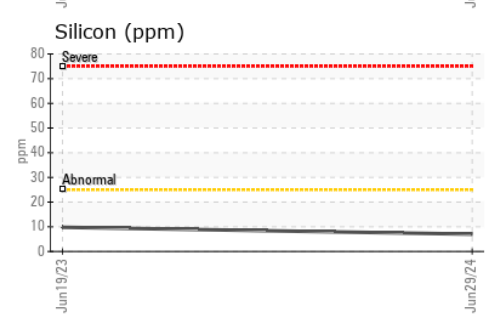
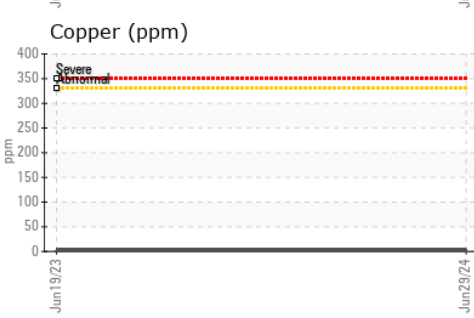
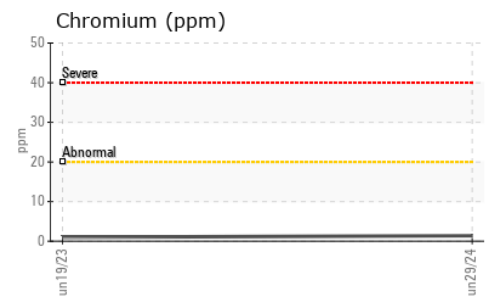
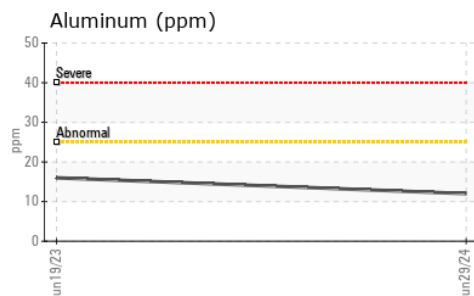
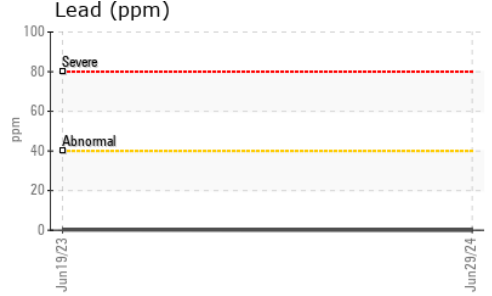
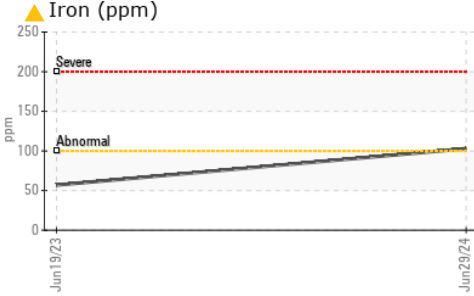


FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm ASTM D7414*	>25	15.1	17.4	---

VISUAL	method	limit/base	current	history1	history2
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 D7279(m)	15.6	13.6	12.2	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **RONI/IRON SHORE EXCAVATING LTD.**
Sample No. : WC0932554 **Received** : 10 Jul 2024 100 MACINTOSH BLVD
Lab Number : **02646938** **Tested** : 10 Jul 2024 VAUGHAN, ON
Unique Number : 5812490 **Diagnosed** : 11 Jul 2024 - Kevin Marson CA L4K 4P3
Test Package : MOBCE (Additional Tests: PQ) 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.