



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area

IRON SHORING

Machine Id

100-017

Component

Auxiliary Winch

Fluid

PETRO CANADA TRAXON 75W90 SYNTHETIC (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0289419	LH0234714	LH0195303
Sample Date		Client Info		12 Jun 2024	16 Jul 2022	05 Jun 2021
Machine Age	hrs	Client Info		4035	2025	506
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>150	3	10	26
Chromium	ppm	ASTM D5185(m)	>10	0	0	<1
Nickel	ppm	ASTM D5185(m)	>10	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>5	0	<1	1
Lead	ppm	ASTM D5185(m)	>15	0	<1	1
Copper	ppm	ASTM D5185(m)	>80	<1	3	3
Tin	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

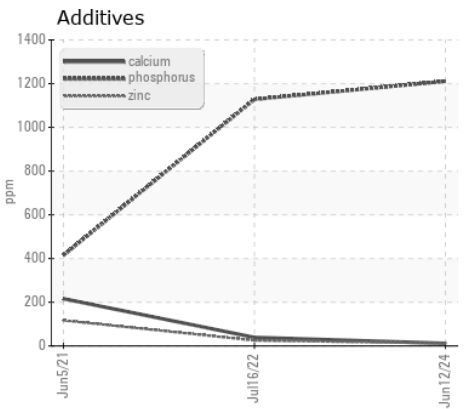
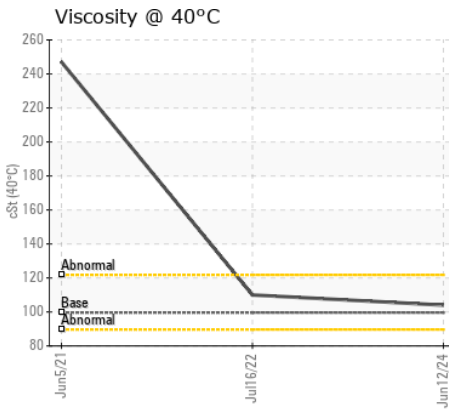
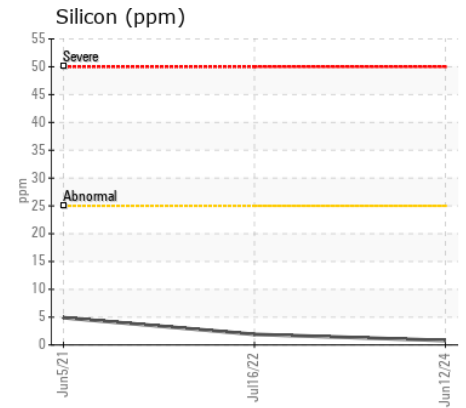
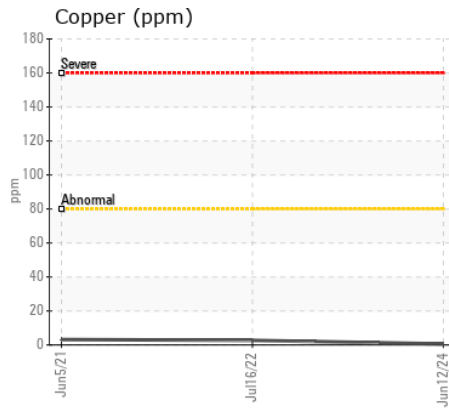
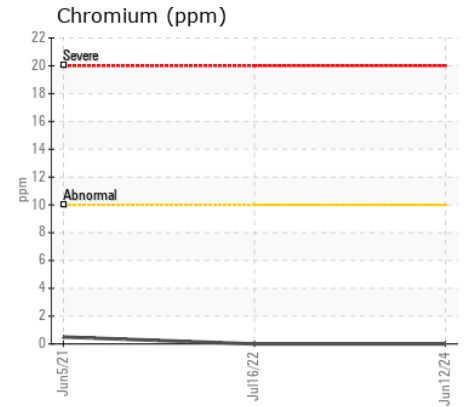
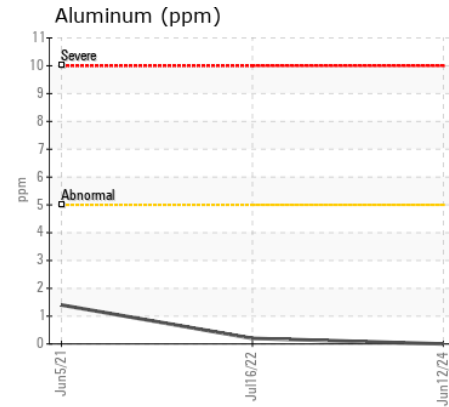
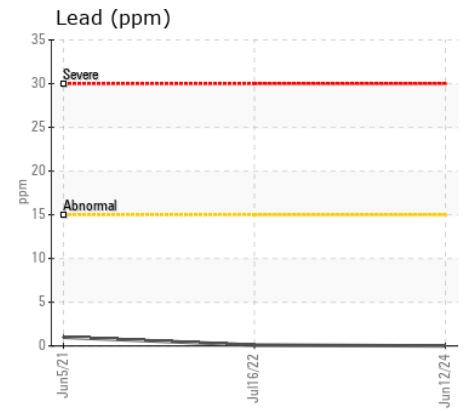
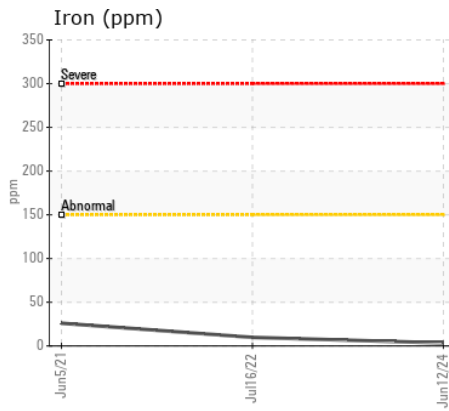
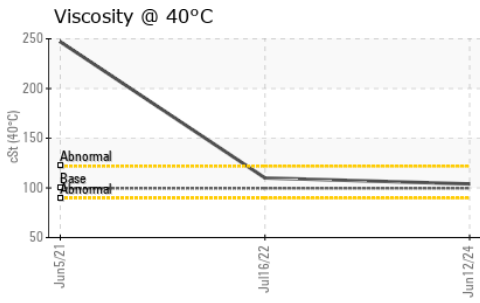
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<1	2	5
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	LIGHT	NONE
Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<1	1	2
Boron	ppm	ASTM D5185(m)	328	309	268	7
Barium	ppm	ASTM D5185(m)	1	0	0	2
Molybdenum	ppm	ASTM D5185(m)		0	<1	1
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1	1	2	2
Calcium	ppm	ASTM D5185(m)	7	12	39	216
Phosphorus	ppm	ASTM D5185(m)	1145	1211	1128	415
Zinc	ppm	ASTM D5185(m)	3	12	25	117
Sulfur	ppm	ASTM D5185(m)	17909	20637	20512	11118
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	104	110	247



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0289419
Lab Number : 02642053
Unique Number : 5799592
Test Package : MOB 1
Received : 14 Jun 2024
Tested : 14 Jun 2024
Diagnosed : 14 Jun 2024 - Wes Davis

RONI/IRON SHORE EXCAVATING LTD.
 100 MACINTOSH BLVD
 VAUGHAN, ON
 CA L4K 4P3
 Contact: Nathan Fernandes
 nfernandes@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.

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F: