

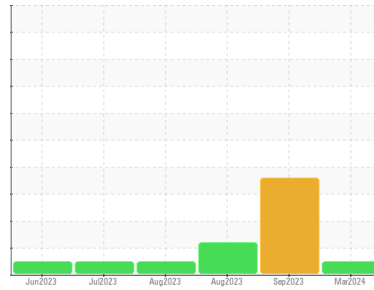


OIL ANALYSIS REPORT



Area
(363346) IRON SHORING
 Machine Id
223
 Component
Hydraulic System
 Fluid
PETRO CANADA HYDREX AW 46 (200 LTR)

Sample Rating Trend



NORMAL



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0920803	LH0202924	LH0275128
Sample Date	Client Info		21 Mar 2024	27 Sep 2023	22 Aug 2023
Machine Age	hrs	Client Info	0	2028	2026
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	Changed	Changed
Sample Status			NORMAL	ABNORMAL	ATTENTION

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >20	1	<1	4
Chromium	ppm	ASTM D5185(m) >10	0	0	<1
Nickel	ppm	ASTM D5185(m) >10	0	<1	<1
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	<1	0
Aluminum	ppm	ASTM D5185(m) >10	0	0	<1
Lead	ppm	ASTM D5185(m) >10	0	1	2
Copper	ppm	ASTM D5185(m) >75	<1	<1	14
Tin	ppm	ASTM D5185(m) >10	0	0	0
Antimony	ppm	ASTM D5185(m)	0	0	0
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	0	<1	<1
Barium	ppm	ASTM D5185(m) 0	0	<1	<1
Molybdenum	ppm	ASTM D5185(m) 0	0	0	<1
Manganese	ppm	ASTM D5185(m) 0	0	0	<1
Magnesium	ppm	ASTM D5185(m) 0	2	<1	3
Calcium	ppm	ASTM D5185(m) 50	156	197	112
Phosphorus	ppm	ASTM D5185(m) 330	643	623	895
Zinc	ppm	ASTM D5185(m) 430	816	798	1099
Sulfur	ppm	ASTM D5185(m) 760	1584	1673	2335
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

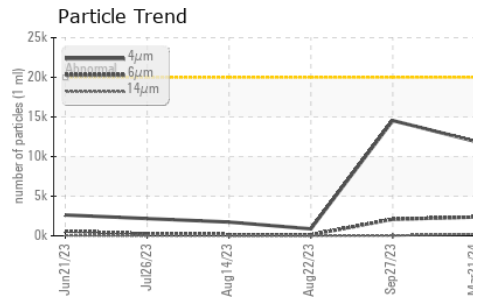
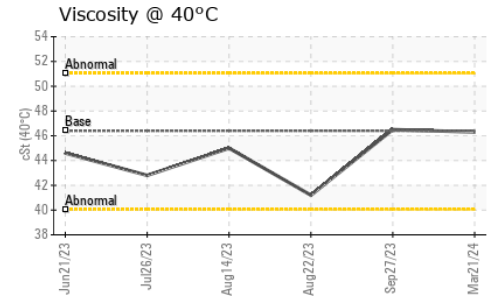
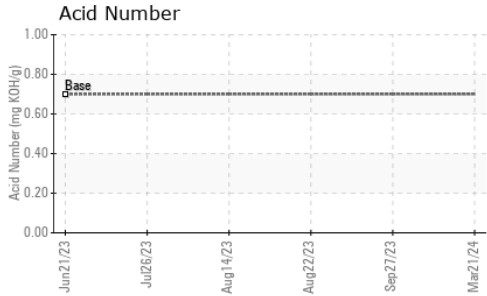
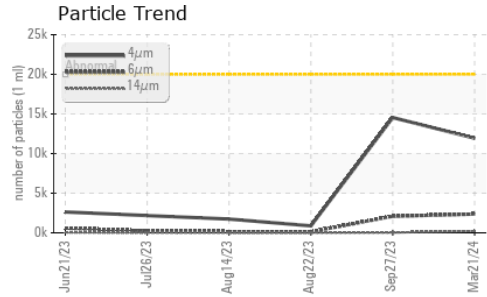
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	0	<1	3
Sodium	ppm	ASTM D5185(m)	0	<1	2
Potassium	ppm	ASTM D5185(m) >20	<1	0	<1

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	11935	14546	881
Particles >6µm	ASTM D7647	>5000	2369	2088	124
Particles >14µm	ASTM D7647	>640	223	35	14
Particles >21µm	ASTM D7647	>160	57	7	6
Particles >38µm	ASTM D7647	>40	3	1	1
Particles >71µm	ASTM D7647	>10	1	0	1
Oil Cleanliness	ISO 4406 (c)	>21/19/16	21/18/15	21/18/12	17/14/11



OIL ANALYSIS REPORT

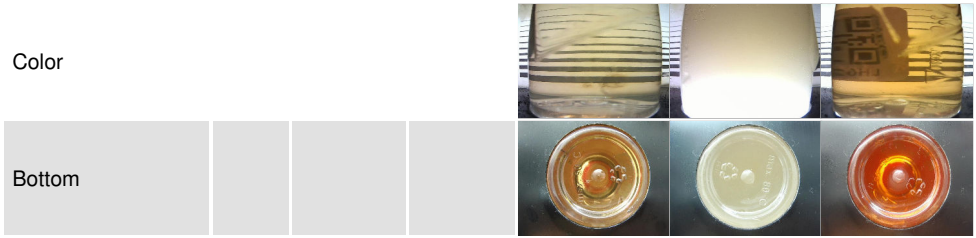


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	0.84	---	---

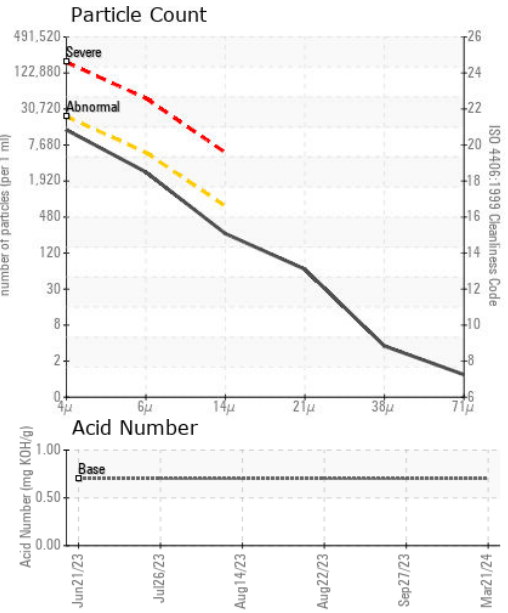
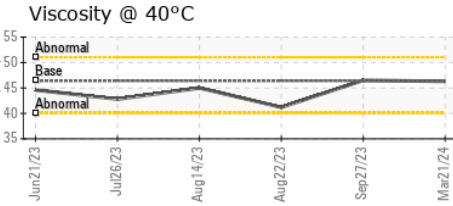
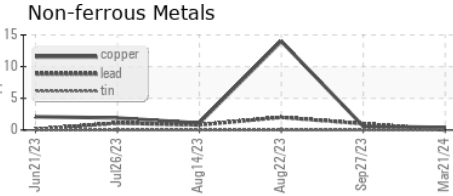
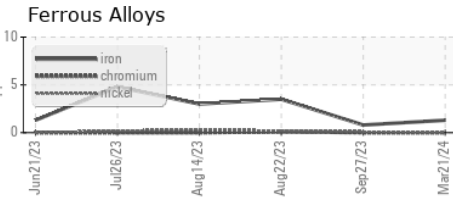
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	▲ LIGHT
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE
Appearance	scalar	Visual*	NORML	NORML	▲ MILKY
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	▲ .5%
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	46.3	46.5	41.2

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0920803
Lab Number : 02629246
Unique Number : 5762378
Test Package : MOBCE (Additional Tests: TAN Man)
Received : 16 Apr 2024
Tested : 17 Apr 2024
Diagnosed : 17 Apr 2024 - Wes Davis

RONI/IRON SHORE EXCAVATING LTD.
 100 MACINTOSH BLVD
 VAUGHAN, ON
 CA L4K 4P3
 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.