



OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area
RONI
Machine Id
182

Component
Hydraulic System
Fluid

PETRO CANADA HYDREX AW 46 (--- GAL)



DIAGNOSIS

▲ Recommendation

The filter change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

▲ Wear

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

▲ Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. 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		WC0899422	---	---
Sample Date	Client Info		06 Mar 2024	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		Not Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	---	---
Iron	ppm	ASTM D5185(m) >20	▲ 49	---	---
Chromium	ppm	ASTM D5185(m) >10	2	---	---
Nickel	ppm	ASTM D5185(m) >10	0	---	---
Titanium	ppm	ASTM D5185(m)	<1	---	---
Silver	ppm	ASTM D5185(m)	0	---	---
Aluminum	ppm	ASTM D5185(m) >10	4	---	---
Lead	ppm	ASTM D5185(m) >10	0	---	---
Copper	ppm	ASTM D5185(m) >75	10	---	---
Tin	ppm	ASTM D5185(m) >10	<1	---	---
Antimony	ppm	ASTM D5185(m)	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

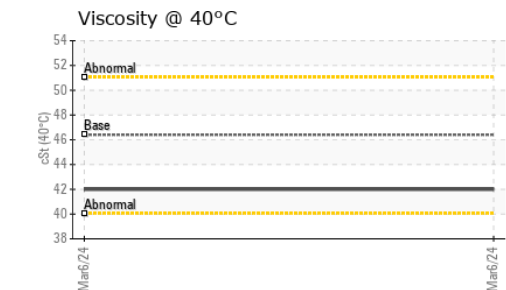
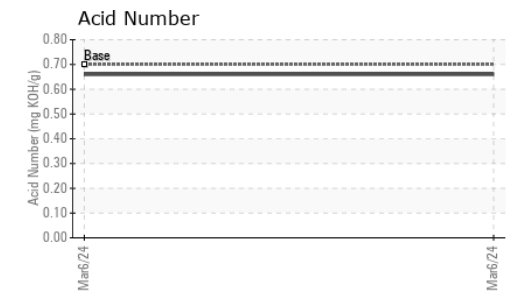
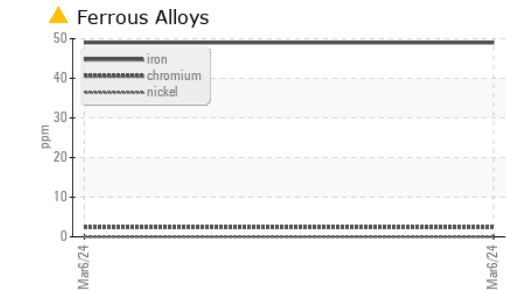
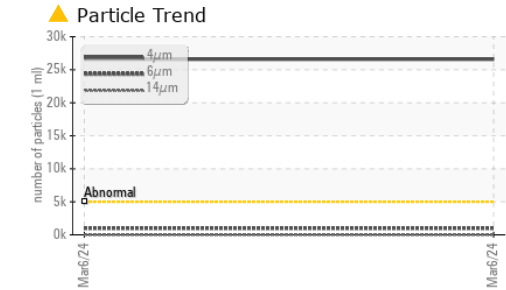
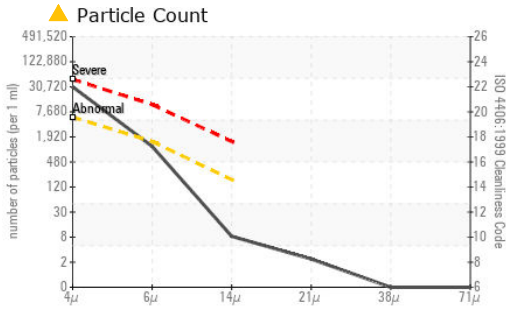
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<1	---	---
Barium	ppm	ASTM D5185(m) 0	<1	---	---
Molybdenum	ppm	ASTM D5185(m) 0	0	---	---
Manganese	ppm	ASTM D5185(m) 0	0	---	---
Magnesium	ppm	ASTM D5185(m) 0	36	---	---
Calcium	ppm	ASTM D5185(m) 50	501	---	---
Phosphorus	ppm	ASTM D5185(m) 330	345	---	---
Zinc	ppm	ASTM D5185(m) 430	409	---	---
Sulfur	ppm	ASTM D5185(m) 760	921	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

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



OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0899422
Lab Number : 02624337
Unique Number : 5749456
Test Package : MOBCE (Additional Tests: PQ, TAN Man)

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.

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 26583	---	---
Particles >6µm	ASTM D7647	>1300	997	---	---
Particles >14µm	ASTM D7647	>160	7	---	---
Particles >21µm	ASTM D7647	>40	2	---	---
Particles >38µm	ASTM D7647	>10	0	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 22/17/10	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	0.66	---	---

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---	---
Free Water	scalar	Visual*		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	42.0	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color					no image	no image
Bottom					no image	no image