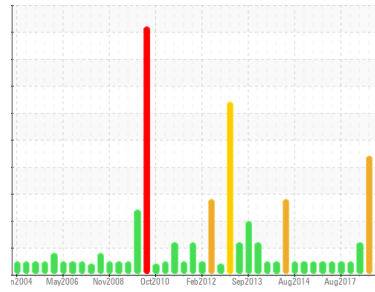




OIL ANALYSIS REPORT

Area
COULÉE
 Machine Id
68140710R - UNITÉ HYDRAULIQUE (Four 3 et 4)
 Component
Hydraulic System
 Fluid
QUAKER CHEMICAL QUINTOLUBRIC 888-46 (1000 LTR)

Sample Rating Trend



NORMAL



DIAGNOSIS

Recommendation

Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition.

Wear

Les taux d'usure de tous les composants sont normaux.

Contamination

Il n'y a aucun indice de contamination dans l'huile.

Fluid Condition

L'état de l'huile est acceptable pour la durée de service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0910678	WC0767652	WC0817510
Sample Date	Client Info		02 Apr 2024	08 Aug 2023	09 Jun 2023
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	SEVERE	MARGINAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.05	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>20	3	3	2
Chromium	ppm	ASTM D5185(m)	>20	7	5	5
Nickel	ppm	ASTM D5185(m)	>20	<1	<1	0
Titanium	ppm	ASTM D5185(m)		1	2	1
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>20	5	7	6
Copper	ppm	ASTM D5185(m)	>20	4	2	2
Tin	ppm	ASTM D5185(m)	>20	300	305	296
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)		<1	1	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		2	2	2
Calcium	ppm	ASTM D5185(m)		<1	1	1
Phosphorus	ppm	ASTM D5185(m)		102	114	108
Zinc	ppm	ASTM D5185(m)		14	10	9
Sulfur	ppm	ASTM D5185(m)		547	611	542
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	4	7	8
Sodium	ppm	ASTM D5185(m)		4	3	4
Potassium	ppm	ASTM D5185(m)	>20	1	<1	<1

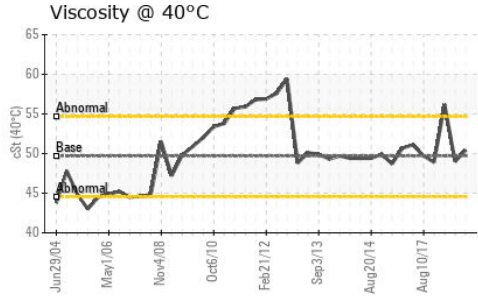
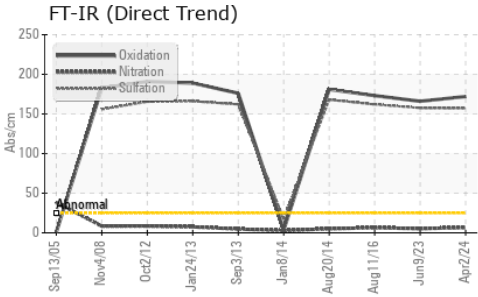
INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	---	0
Nitration	Abs/cm	ASTM D7624*		6.6	---	5.3
Sulfation	Abs/.1mm	ASTM D7415*		157.1	---	157.5

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*		172.0	---	166.0

OIL ANALYSIS REPORT



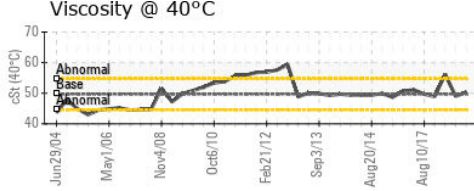
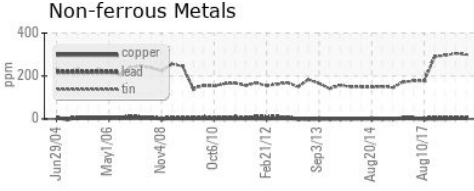
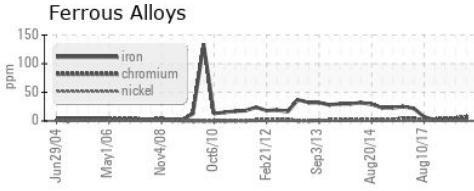
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	▲ VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	49.7	50.4	49.0 56.2

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

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0910678
Lab Number : 02627872
Unique Number : 5761004
Test Package : IND 1 (Additional Tests: FT-IR)
Received : 10 Apr 2024
Tested : 10 Apr 2024
Diagnosed : 10 Apr 2024 - Wes Davis

Rio Tinto Alcan (SECAL) USINE LATERRIERE
 6301 BOUL. TALBOT
 LATERRIERE, QC
 CA G0V 1K0
 Contact: Sylvain Payer
 sylvain.payer@riotinto.com
 T: (418)818-9426
 F: (418)678-1876

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.