



**POWER SYSTEMS**  
**SYSTÈMES DE PUISSANCE**

**COOLANT REPORT**

**CORROSION**

**SEVERE**

**CONTAMINANTS**

**ABNORMAL**

**COOLANT CONDITION**

**ABNORMAL**

Area

**NAVIGATER [288631]**

Machine Id

**06VF218260**

Component

**Coolant**

Fluid

**CONVENTIONAL COOLANT (--- LTR)**

**RECOMMENDATION**

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WA0021514</b>	WA0017225	WA0015579
Sample Date		Client Info		<b>10 May 2024</b>	07 Nov 2021	11 Oct 2020
Machine Age	hrs	Client Info		<b>223</b>	210	202
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>SEVERE</b>	SEVERE	SEVERE

**CORROSION**

Copper and iron ppm levels are severe. PQ levels are severe. Aluminum and lead ppm levels are abnormal. The iron level is high indicating rust in the system which clogs the cooling system. The high metal levels indicate corrosion in the system.

Iron	ppm	ASTM D5185(m)	>15	<b>▲ 6275</b>	▲ 332	▲ 1263
Aluminum	ppm	ASTM D5185(m)	>10	<b>▲ 27</b>	2	<1
Copper	ppm	ASTM D5185(m)	>10	<b>▲ 103</b>	2	▲ 17
Lead	ppm	ASTM D5185(m)	>10	<b>▲ 41</b>	3	3
Tin	ppm	ASTM D5185(m)	>10	<b>1</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	0
Zinc	ppm	ASTM D5185(m)	>10	<b>60</b>	4	4

**CONTAMINANTS**

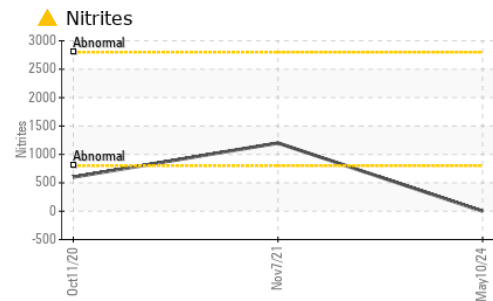
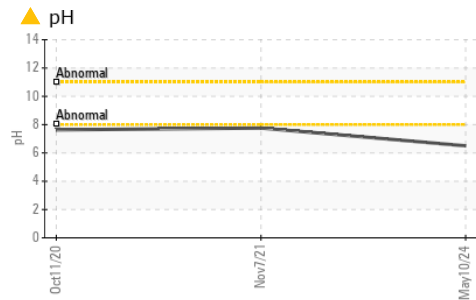
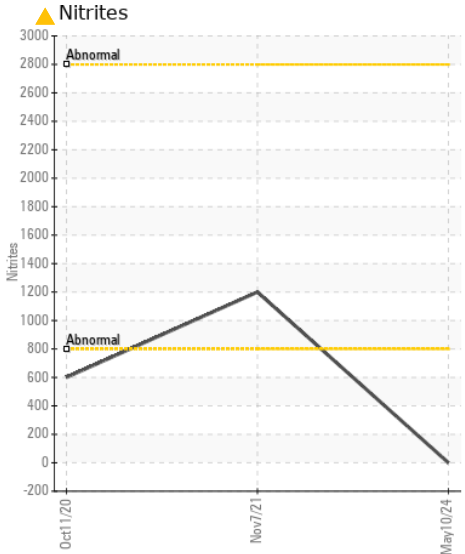
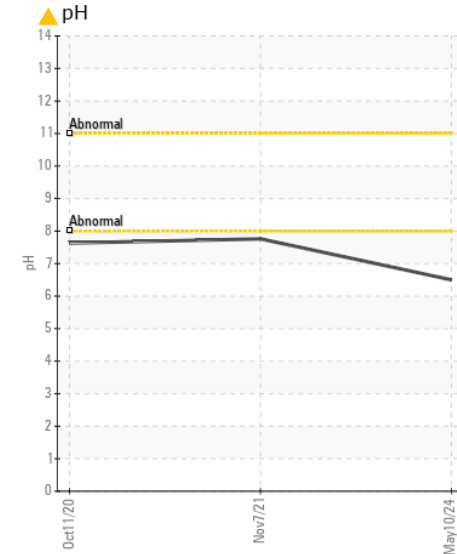
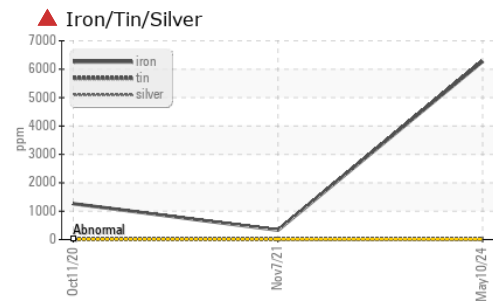
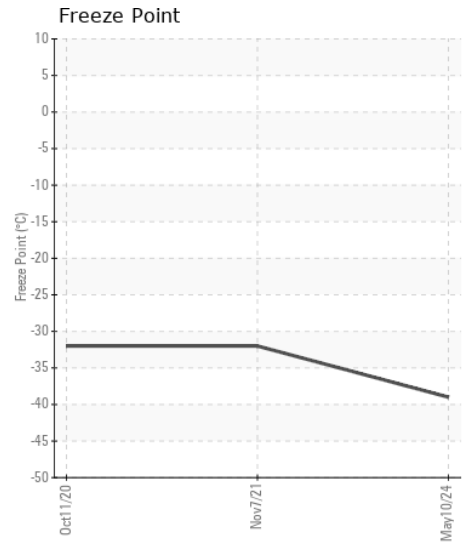
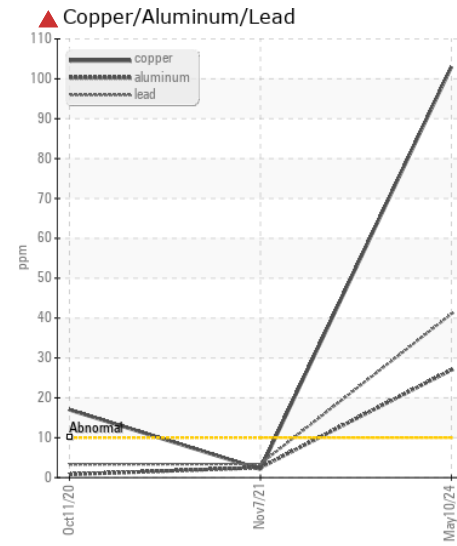
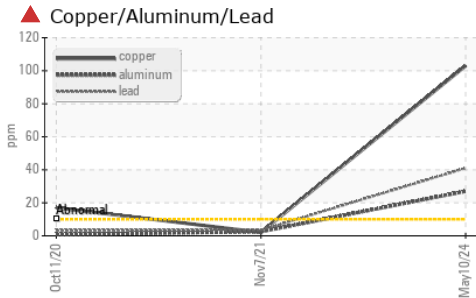
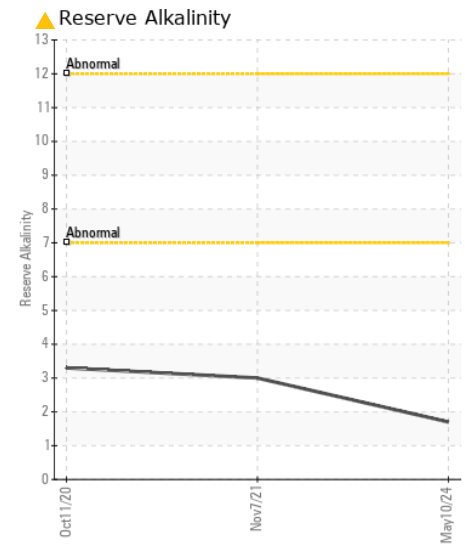
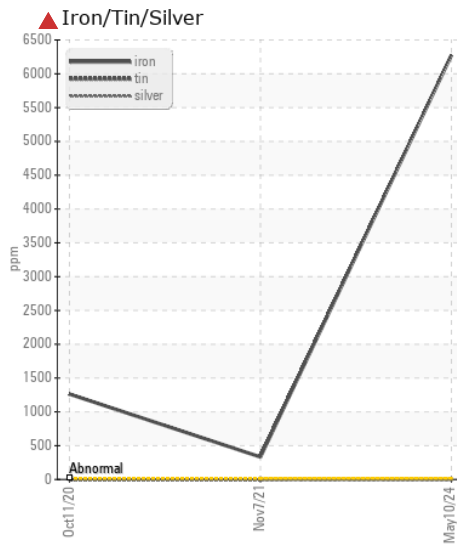
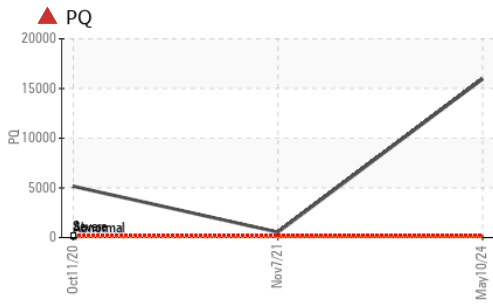
There is no indication of any contamination in the component(unconfirmed).

Calcium	ppm	ASTM D5185(m)	>100	<b>13</b>	5	1
Magnesium	ppm	ASTM D5185(m)	>40	<b>4</b>	2	2
Appearance	scalar	Visual*	NORML	<b>▲ OILWG</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Coolant Appearance		Visual*	Clear	<b>▲ Opaque</b>	▲ Opaque	▲ Opaque

**COOLANT CONDITION**

The reserve alkalinity of this fluid is lower than acceptable. The coolant is cloudy indicating either an overconcentration of coolant additives, or a mixing of incompatible coolant technologies. The low nitrite level indicates reduced cavitation protection which leads to corrosion and ammonia formation. The pH is low which causes rust formation.

Boiling Point	°C	WC Method*		<b>108</b>	---	---
Specific Gravity		ASTM D1298*		<b>1.069</b>	1.063	1.063
pH	Scale 0-14	ASTM D1287*	9.5	<b>▲ 6.50</b>	▲ 7.76	▲ 7.63
Nitrites	ppm	Alcan Test Kit*	1500	<b>▲ 0</b>	1200	▲ 600
Reserve Alkalinity	Scale 0-20	ASTM D1121*	8.5	<b>▲ 1.7</b>	3.0	▲ 3.3
Percentage Glycol	%	ASTM D3321*	50	<b>51.0</b>	46.0	46.0
Freezing Point	°C	ASTM D3321*	-40	<b>-39</b>	-32	-32
Carboxylate				<b>---</b>	---	---
Silicon	ppm	ASTM D5185(m)		<b>295</b>	25	23
Phosphorus	ppm	ASTM D5185(m)		<b>98</b>	10	8
Boron	ppm	ASTM D5185(m)		<b>105</b>	424	561
Molybdenum	ppm	ASTM D5185(m)		<b>20</b>	<1	<1
Sodium	ppm	ASTM D5185(m)		<b>1304</b>	1775	2657
Potassium	ppm	ASTM D5185(m)		<b>1491</b>	187	35
Coolant Color		Visual*	Green	<b>Other</b>	Other	Other



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WA0021514 **Received** : 16 May 2024  
**Lab Number** : 02636213 **Tested** : 17 May 2024  
**Unique Number** : 5785375 **Diagnosed** : 21 May 2024 - Kevin Marson  
**Test Package** : COOL ( Additional Tests: GlycolType, PQ )

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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