CORROSION CONTAMINANTS COOLANT CONDITION

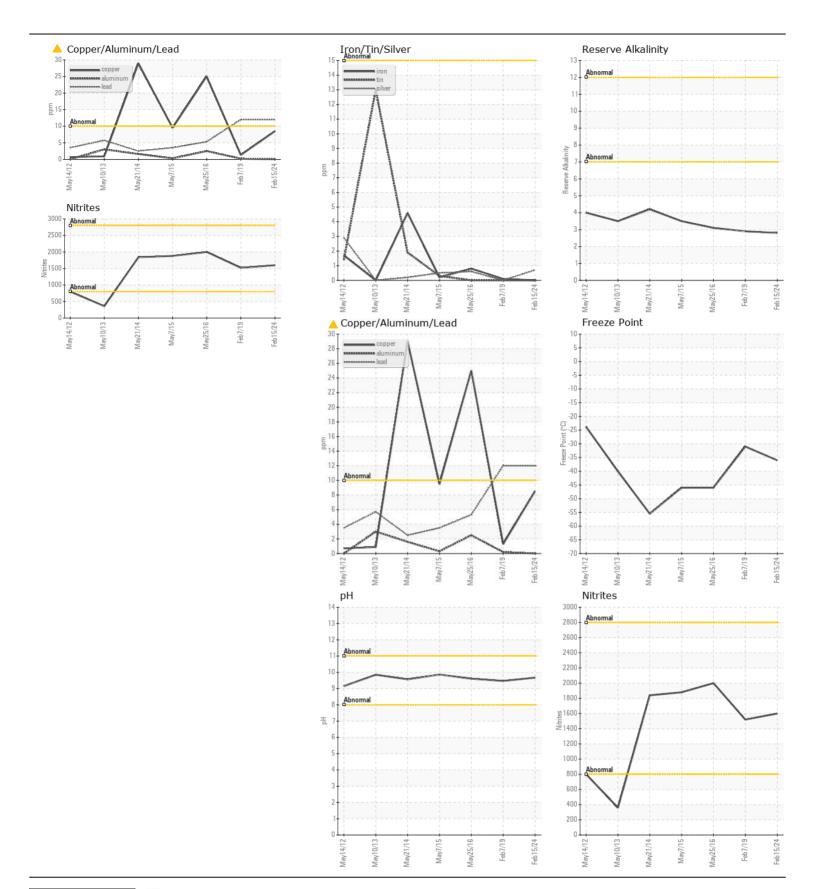
ABNORMAL NORMAL NORMAL

[142229]

HERCULES HAYCROFT RESERVOIR

Component Coolant

CONVENTIONAL COOLANT (25 LTR)					-		
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We recommend drain system, and refill with 50/50 antifreeze water mixture. We advise that you replenish the supplemental coolant additives (SCAs) and add per manufacturer's specifications. We recommend an early resample to monitor this condition.	Sample Number		Client Info		WC0791167	WC113441	WC961912
	Sample Date		Client Info		15 Feb 2024	07 Feb 2019	25 May 2016
	Machine Age	hrs	Client Info		0	413	332
	Oil Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		N/A	N/A	Not Changd
	Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
CORROSION	Iron	ppm	ASTM D5185(m)	>15	0	<1	<1
Lead ppm levels are abnormal. The high metal levels indicate corrosion in the system.	Aluminum	ppm	ASTM D5185(m)	>10	0	<1	2
	Copper	ppm	ASTM D5185(m)	>10	8	1	<u>^</u> 25
	Lead	ppm	ASTM D5185(m)	>10	<u> </u>	<u> </u>	5
	Tin	ppm	ASTM D5185(m)	>10	0	0	0
	Silver	ppm	ASTM D5185(m)	>10	<1	0	<1
	Zinc	ppm	ASTM D5185(m)	>10	1	<1	0
CONTAMINANTS	Calcium	ppm	ASTM D5185(m)	>100	<1	2	4
There is no indication of any contamination in the coolant.	Magnesium	ppm	ASTM D5185(m)	>40	<1	<1	6
	Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
	Odor	scalar	Visual*	NORML	NORML	NORML	NORML
	Coolant Appearance		Visual*	Clear	Clear	Clear	Clear
COOLANT CONDITION	Specific Gravity		ASTM D1298*		1.067	1.060	1.075
The nitrite level is acceptable. The pH level of this fluid is within the acceptable limits.	рН	Scale 0-14	ASTM D1287*	9.5	9.67	9.47	9.61
	Nitrites	ppm	Alcan Test Kit*	1500	1600	1520	2000
	Reserve Alkalinity	Scale 0-20	ASTM D1121*	8.5	2.8	2.9	3.1
	Percentage Glycol	%	ASTM D3321*	50	49.2	44.0	56.0
	Freezing Point	°C	ASTM D3321*	-40	-36	-31	-46
	Carboxylate						
	Silicon	ppm	ASTM D5185(m)		40	29	22
	Phosphorus	ppm	ASTM D5185(m)		23	45	100
	Boron	ppm	ASTM D5185(m)		141	271	189
	Molybdenum	ppm	ASTM D5185(m)		4	27	72
	Sodium	ppm	ASTM D5185(m)		1858	1511	1832
	Potassium	ppm	ASTM D5185(m)	0	208	394	976
	Coolant Color		Visual*	Green	Green	Green	Pink





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0791167 Received : 16 Feb 2024 Lab Number : 02616480 **Tested** : 21 Feb 2024

: 21 Feb 2024 - Kevin Marson Unique Number : 5733590 Diagnosed **Test Package**: COOL (Additional Tests: GlycolType)

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.

GENREP LTD 476 HWY 77, R.R. #3

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