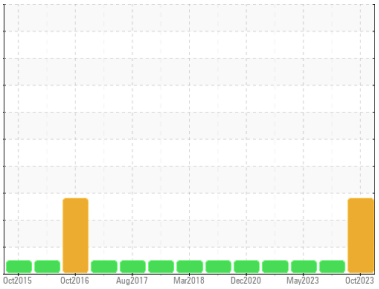
COOLANT REPORT

Sample Rating Trend



SCAS

Area
Cranes [450207986]
Machine Id
Crane - Mid Ship Engine Coolant (12 L Tank) (S/N Sample Tag: MA-04002)
Component
Coolant
Fluid
DETROIT DIESEL POWER COOL PLUS (12 LTR)

DIAGNOSIS

▲ Recommendation

We recommend that you perform a partial drain and top off with straight water to decrease abnormal level of overconcentrated antifreeze. Resample at the next service interval to monitor.

Corrosion

All metal levels are normal indicating no corrosion in the cooling system.

Contaminants

There is no indication of any contamination in the coolant.

▲ Coolant Condition

The reserve alkalinity of this fluid is lower than acceptable. The nitrites levels are too high which leads to additive drop-out and scale formation. The pH level of this fluid is within the acceptable limits.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PC**	PC0052197	PC0040550
Sample Date		Client Info		**04 Oct 2023**	14 Jun 2023	02 May 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				**ABNORMAL**	NORMAL	NORMAL

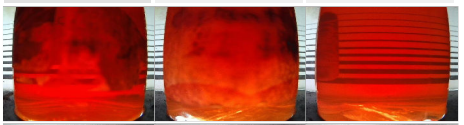
PHYSICAL TEST RESULTS		method	limit/base	current	history1	history2
Specific Gravity		ASTM D1298*		**1.067**	1.069	1.069
pH	Scale 0-14	ASTM D1287*	9.0	**8.59**	8.52	8.53
Nitrites	ppm	Alcan Test Kit*	0	▲ **920**	600	480
Reserve Alkalinity	Scale 0-20	ASTM D1121*		▲ **1.6**	2.7	2.3
Percentage Glycol	%	ASTM D3321*	50	**49.2**	51.6	51.7
Freezing Point	°C	ASTM D3321*	-40	**-33**	-38	-38
Carboxylate				**---**	---	---

CORROSION INHIBITORS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		**3**	10	18
Phosphorus	ppm	ASTM D5185(m)	0	**3**	24	47
Boron	ppm	ASTM D5185(m)		**6**	24	49
Molybdenum	ppm	ASTM D5185(m)		**173**	161	203

CORROSION		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>15	**0**	2	<1
Aluminum	ppm	ASTM D5185(m)	>10	**<1**	0	3
Copper	ppm	ASTM D5185(m)	>10	**0**	3	2
Lead	ppm	ASTM D5185(m)	>10	**0**	7	0
Tin	ppm	ASTM D5185(m)	>10	**0**	2	0
Silver	ppm	ASTM D5185(m)	>10	**<1**	0	0
Zinc	ppm	ASTM D5185(m)		**0**	0	2

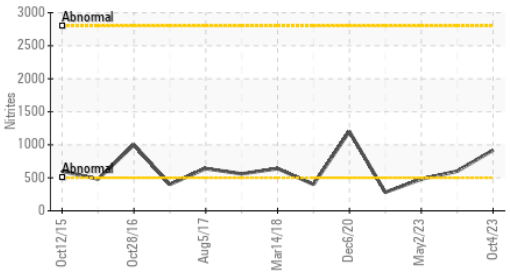
CARRIER SALTS		method	limit/base	current	history1	history2
Sodium	ppm	ASTM D5185(m)		**5441**	2666	3018
Potassium	ppm	ASTM D5185(m)		**7573**	1966	2875

SCALE POTENTIAL		method	limit/base	current	history1	history2
Calcium	ppm	ASTM D5185(m)	>100	**2**	7	8
Magnesium	ppm	ASTM D5185(m)	>40	**3**	3	7
Hardness	mg/L CaCO3	In-house*	<75	**16**	27	45

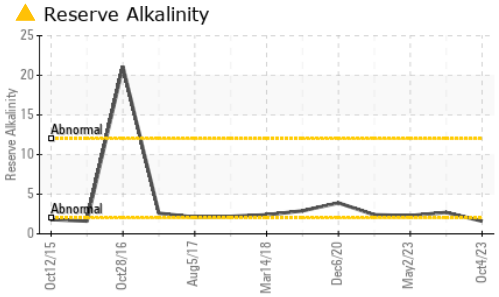
VISUAL		method	limit/base	current	history1	history2
Coolant Color		Visual*	Red	**Red**	Red	Orange
Coolant Appearance		Visual*	Clear	**Clear**	Clear	Clear
Color						
Bottom						

COOLANT REPORT

Nitrites

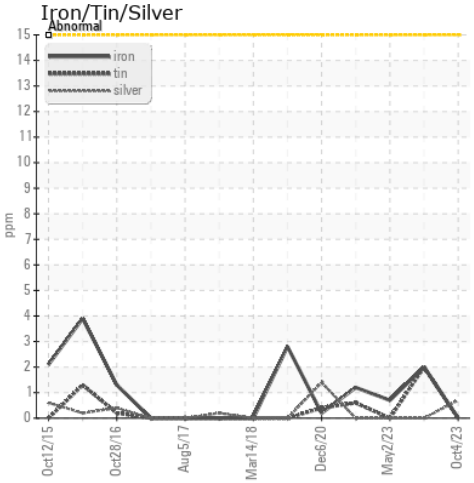


Reserve Alkalinity

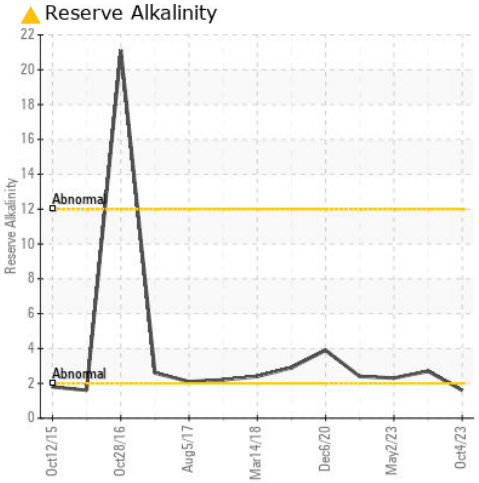


GRAPHS

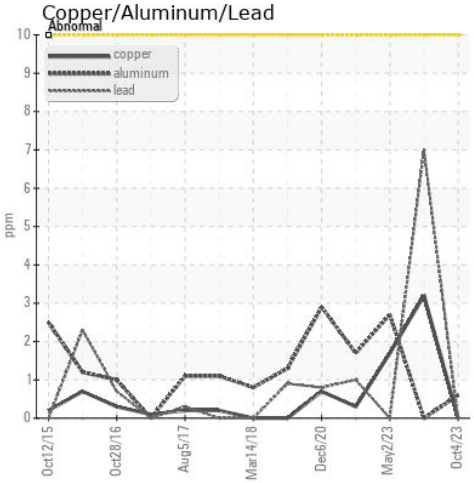
Iron/Tin/Silver



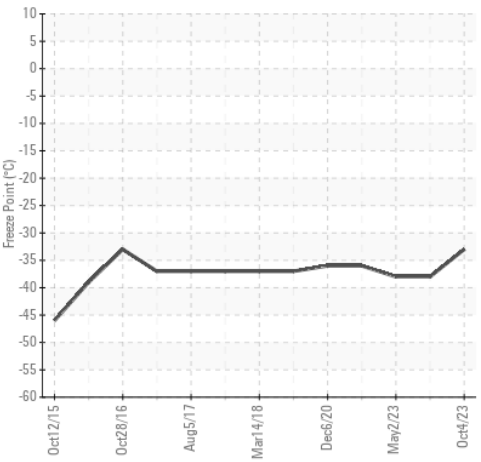
Reserve Alkalinity



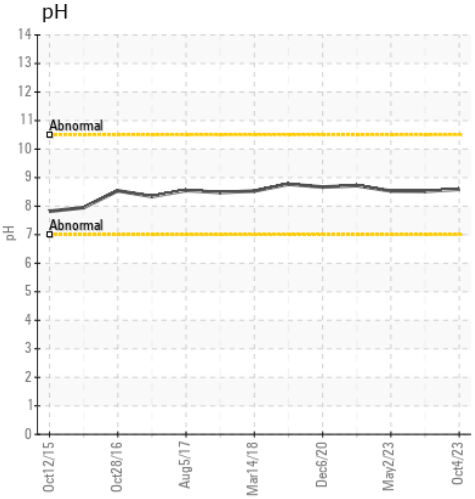
Copper/Aluminum/Lead



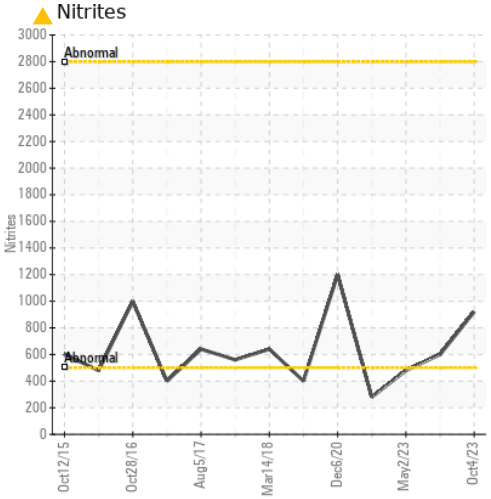
Freeze Point



pH



Nitrites



ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: PC	**Received**	: 18 Oct 2023
Lab Number	: 02590144	**Diagnosed**	: 19 Oct 2023
Unique Number	: 5659210	**Diagnostician**	: Kevin Marson
Test Package	: COOL		

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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