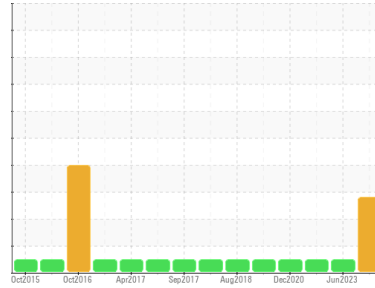


# COOLANT REPORT

Sample Rating Trend

SCAS

Area  
**Cranes [450207986]**  
Machine Id  
**Crane - Mid Ship Engine Coolant (62 L Tank) (S/N Sample Tag: MA-04002)**  
Component  
**Coolant**  
Fluid  
**DETROIT DIESEL POWER COOL PLUS (62 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			<b>PC</b>	PC0052196	PC0052689
Sample Date	Client Info			<b>04 Oct 2023</b>	14 Jun 2023	02 May 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

PHYSICAL TEST RESULTS		method	limit/base	current	history1	history2
Specific Gravity	ASTM D1298*			<b>1.067</b>	1.067	1.067
pH	Scale 0-14	ASTM D1287*	9.0	<b>8.11</b>	8.26	8.25
Nitrites	ppm	Alcan Test Kit*	0	<b>▲ 1200</b>	680	560
Reserve Alkalinity	Scale 0-20	ASTM D1121*		<b>▲ 1.7</b>	2.8	2.1
Percentage Glycol	%	ASTM D3321*	50	<b>49.6</b>	49.5	49.6
Freezing Point	°C	ASTM D3321*	-40	<b>-33</b>	-33	-33
Carboxylate				---	---	---

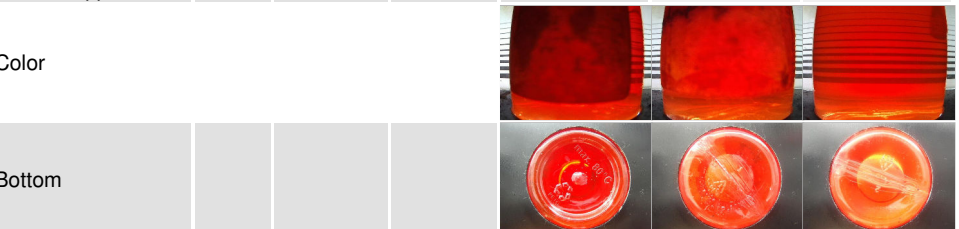
CORROSION INHIBITORS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		<b>10</b>	9	14
Phosphorus	ppm	ASTM D5185(m)	0	<b>20</b>	28	45
Boron	ppm	ASTM D5185(m)		<b>18</b>	32	31
Molybdenum	ppm	ASTM D5185(m)		<b>160</b>	157	198

CORROSION		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>15	<b>0</b>	2	2
Aluminum	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	0	3
Copper	ppm	ASTM D5185(m)	>10	<b>0</b>	3	2
Lead	ppm	ASTM D5185(m)	>10	<b>0</b>	8	0
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	2	<1
Silver	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	0	0
Zinc	ppm	ASTM D5185(m)		<b>0</b>	0	2

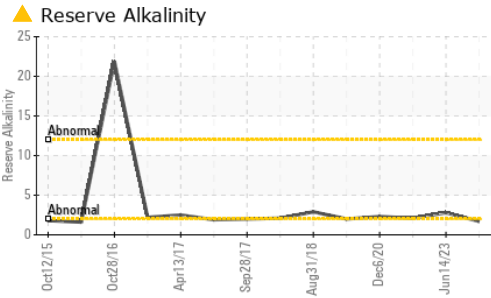
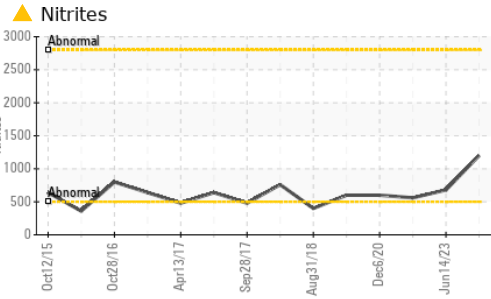
CARRIER SALTS		method	limit/base	current	history1	history2
Sodium	ppm	ASTM D5185(m)		<b>5037</b>	2588	2943
Potassium	ppm	ASTM D5185(m)		<b>7368</b>	1961	2871

SCALE POTENTIAL		method	limit/base	current	history1	history2
Calcium	ppm	ASTM D5185(m)	>100	<b>4</b>	7	12
Magnesium	ppm	ASTM D5185(m)	>40	<b>2</b>	3	8
Hardness	mg/L CaCO3	In-house*	<75	<b>18</b>	28	62

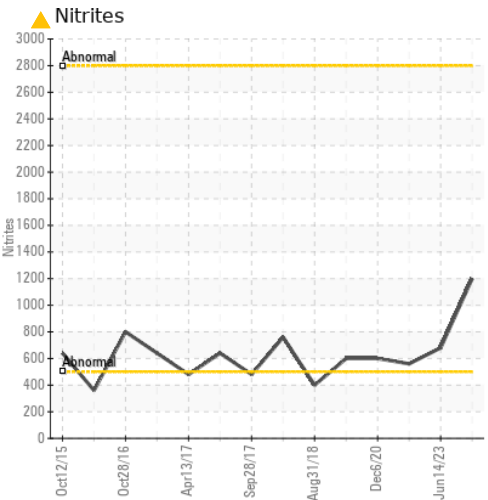
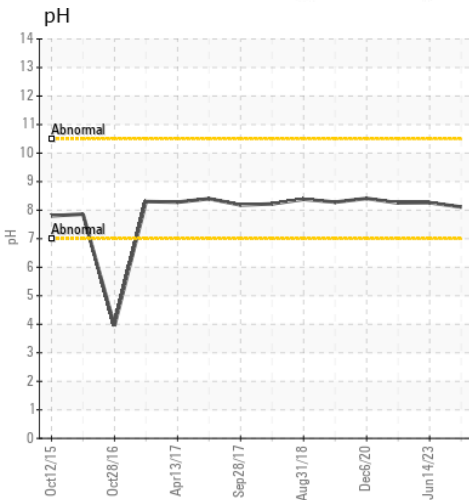
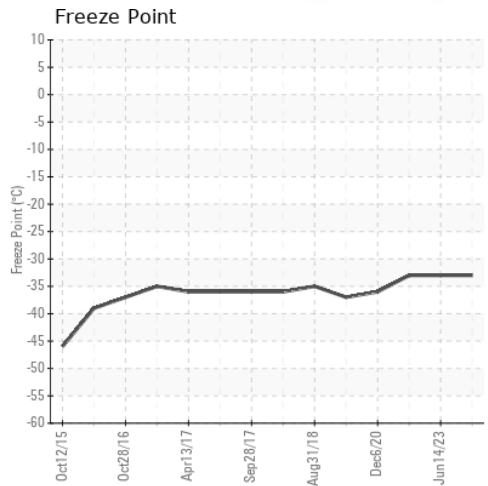
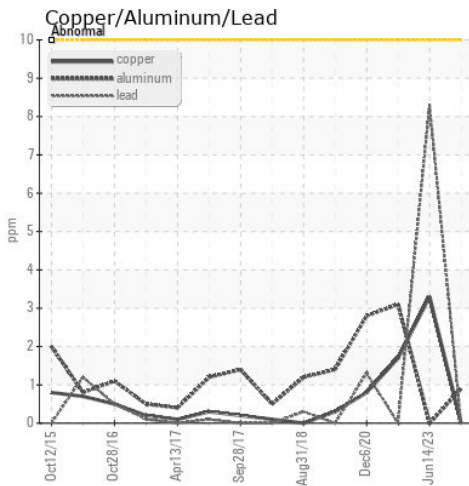
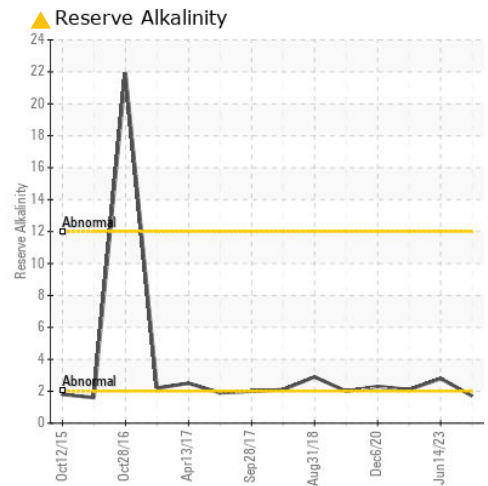
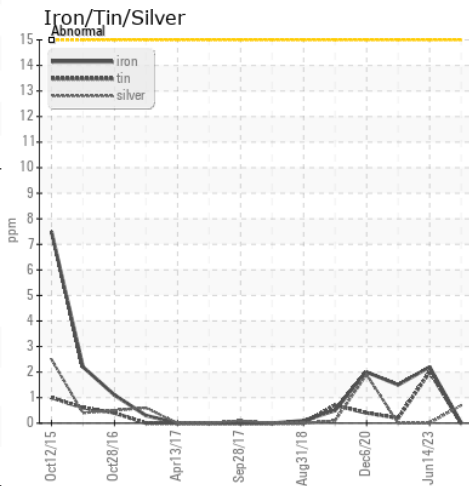
VISUAL		method	limit/base	current	history1	history2
Coolant Color	Visual*	Red		<b>Red</b>	Red	Orange
Coolant Appearance	Visual*	Clear		<b>Clear</b>	Clear	Clear



# COOLANT REPORT



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC  
**Lab Number** : 02590145  
**Unique Number** : 5659211  
**Test Package** : COOL

**Received** : 18 Oct 2023  
**Diagnosed** : 19 Oct 2023  
**Diagnostician** : Kevin Marson

**Suncor - Terra Nova Projects**  
 Scotia Centre, 235 Water Street  
 St. John's, NL  
 CA A1C 1B6  
 Contact: Josh Hynes  
 joshhynes@suncor.com  
 T: (709)778-3575  
 F: (709)724-2835

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.