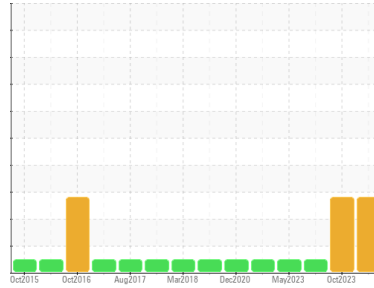


# COOLANT REPORT

Sample Rating Trend

SCAS



Area  
**Cranes [450255637]**  
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			<b>PC0076317</b>	PC	PC0052197
Sample Date	Client Info			<b>20 Jan 2024</b>	04 Oct 2023	14 Jun 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>	ABNORMAL	NORMAL

PHYSICAL TEST RESULTS		method	limit/base	current	history1	history2
Specific Gravity	ASTM D1298*			<b>1.068</b>	1.067	1.069
pH	Scale 0-14	ASTM D1287*	9.0	<b>8.72</b>	8.59	8.52
Nitrites	ppm	Alcan Test Kit*	0	<b>▲ 880</b>	▲ 920	600
Reserve Alkalinity	Scale 0-20	ASTM D1121*		<b>▲ 1.9</b>	▲ 1.6	2.7
Percentage Glycol	%	ASTM D3321*	50	<b>50.1</b>	49.2	51.6
Freezing Point	°C	ASTM D3321*	-40	<b>-37</b>	-33	-38
Carboxylate				---	---	---

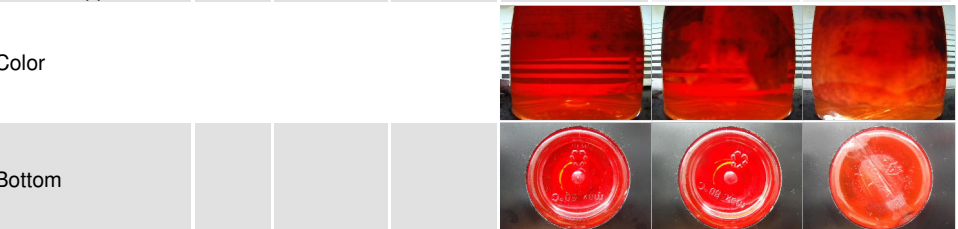
CORROSION INHIBITORS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		<b>6</b>	3	10
Phosphorus	ppm	ASTM D5185(m)	0	<b>6</b>	3	24
Boron	ppm	ASTM D5185(m)		<b>12</b>	6	24
Molybdenum	ppm	ASTM D5185(m)		<b>177</b>	173	161

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

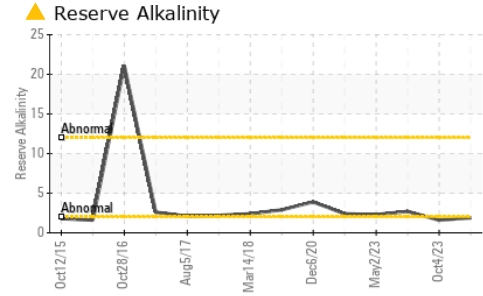
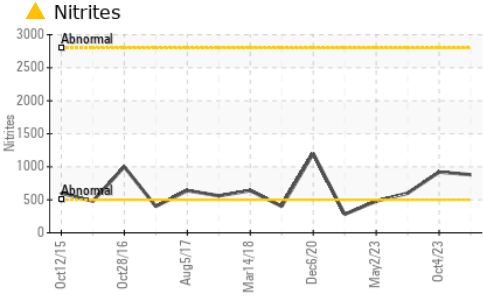
CARRIER SALTS		method	limit/base	current	history1	history2
Sodium	ppm	ASTM D5185(m)		<b>5843</b>	5441	2666
Potassium	ppm	ASTM D5185(m)		<b>7942</b>	7573	1966

SCALE POTENTIAL		method	limit/base	current	history1	history2
Calcium	ppm	ASTM D5185(m)	>100	<b>3</b>	2	7
Magnesium	ppm	ASTM D5185(m)	>40	<b>3</b>	3	3
Hardness	mg/L CaCO3	In-house*	<75	<b>17</b>	16	27

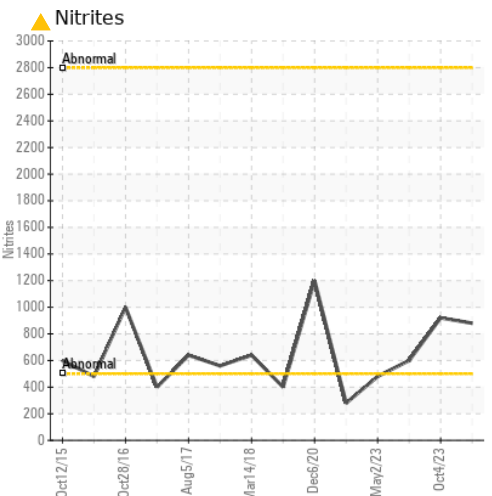
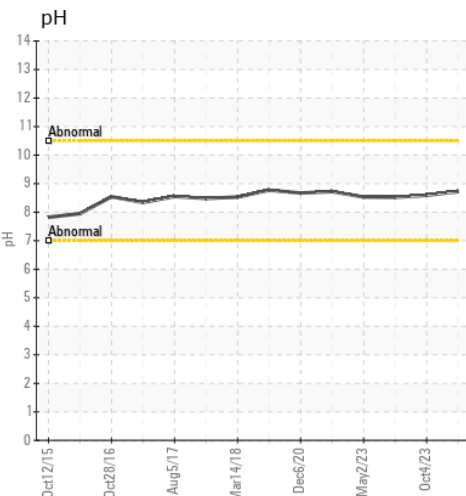
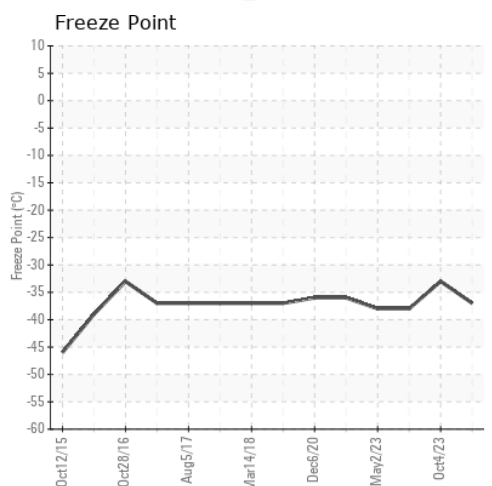
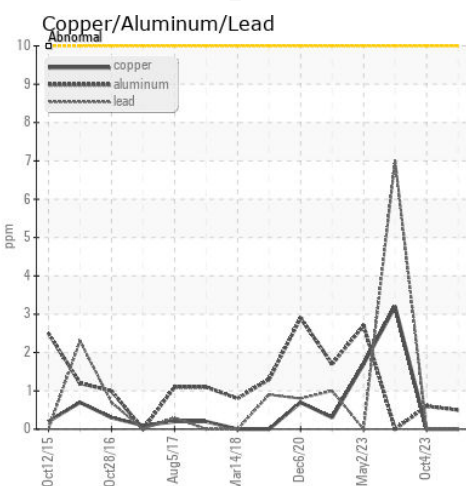
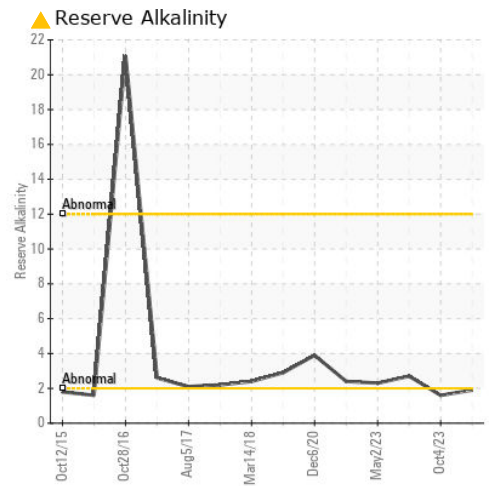
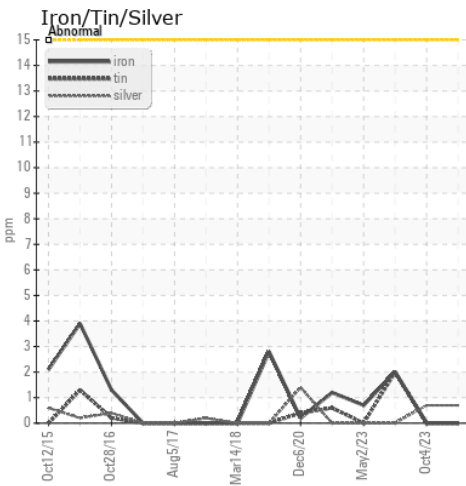
VISUAL		method	limit/base	current	history1	history2
Coolant Color	Visual*	Red		<b>Red</b>	Red	Red
Coolant Appearance	Visual*	Clear		<b>Clear</b>	Clear	Clear



# COOLANT REPORT



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0076317  
**Lab Number** : 02614833  
**Unique Number** : 5723928  
**Test Package** : COOL  
**Received** : 09 Feb 2024  
**Tested** : 13 Feb 2024  
**Diagnosed** : 13 Feb 2024 - Kevin Marson

**Suncor - Terra Nova Projects**  
 Scotia Centre, 235 Water Street  
 St. John's, NL  
 CA A1C 1B6  
 Contact: Josh Hynes  
 joshynes@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.