

COOLANT REPORT

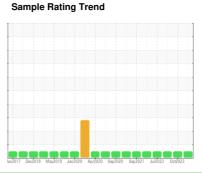
Cranes [450255636]

Crane - Fwd Engine Coolant (12 L Tank) (S/N Sample Tag: MA-04003)

Component

Coolant

EXTENDED LIFE COOLANT (12 LTR)





DIAGNOSIS

Recommendation

The fluid is suitable for further service. 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.

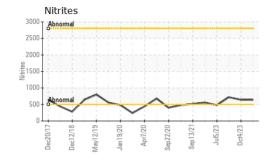
Coolant Condition

The nitrite level is acceptable. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable.

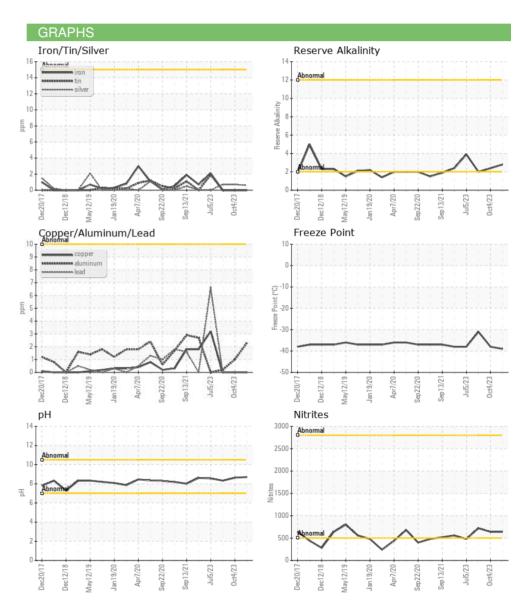
SAMPLE INFORMATION method limit/base current history1 history2			lec2017 Dec20	18 May2019 Jan2020 Ap	or2020 Sep2020 Sep2021 Jul2023	Oct2023	
Sample Date Client Info 24 Jan 2024 04 Oct 2023 12 Aug 2023	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0 0 0 Oil Age hrs Client Info 0 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A PHYSICAL TEST RESULTS method limit/base current history1 history2 Specific Gravity ASTM D1298* 1.069 1.065 1.065 1.069 1.065 PH Scale 0.14 ASTM D1287* 9.0 8.71 8.63 8.33 Nitrites ppm ASTM D1287* 9.0 8.71 8.63 8.33 Nitrites ppm ASTM D122* 2.8 2.4 2.0 0 Percentage Glycol % ASTM D3321* 50 51.6 51.4 48.6 Freezing Point °C ASTM D3321* 40 -39 -38 -31 Boiling Point °C </th <th>Sample Number</th> <th></th> <th>Client Info</th> <th></th> <th>PC0081066</th> <th>PC</th> <th>PC0052596</th>	Sample Number		Client Info		PC0081066	PC	PC0052596
Oil Age hrs Client Info N/A N/A N/A N/A Sample Status N/A N/A N/A N/A N/A PHYSICAL TEST RESULTS method limit/base current history1 history2 Specific Gravity ASTM D1281* 1.069 1.069 1.065 PH Scale 0-14 ASTM D1281* 1.069 1.069 1.065 Nitrites ppm ACATM D1281* 9.0 8.71 8.63 8.33 Nitrites ppm ACATM D3321* 50 51.6 51.4 48.6 Freezing Point °C ASTM D3321* 40 -39 -38 -31 Boiling Point °C WC Method* 108 Carboxylate "Thistory1 history1 history2 Silicon ppm ASTM D5185(m) 8 8 4 Phosphorus ppm ASTM D5185(m) 18 1	Sample Date		Client Info		24 Jan 2024	04 Oct 2023	12 Aug 2023
Oil Changed Sample Status Client Info N/A N/A N/A N/A N/A N/A SAMAL NORMAL NO	Machine Age	hrs	Client Info		0	0	0
NORMAL NORMAL NORMAL PHYSICAL TEST RESULTS method limit/base current history1 history2	Oil Age	hrs	Client Info		0	0	0
Physical Test Results	Oil Changed		Client Info		N/A	N/A	N/A
Specific Gravity	Sample Status				NORMAL	NORMAL	NORMAL
PH	PHYSICAL TEST F	RESULTS	method	limit/base	current	history1	history2
Nitrites	Specific Gravity		ASTM D1298*		1.069	1.069	1.065
Reserve Alkalinity Scale 0-20 ASTM D1121* 2.8 2.4 2.0	pH	Scale 0-14	ASTM D1287*	9.0	8.71	8.63	8.33
Percentage Glycol	Nitrites	ppm	Alcan Test Kit*		640	640	720
Freezing Point °C ASTM D3321* -40 -39 -38 -31 Boiling Point °C WC Method* 108 Carboxylate CORROSION INHIBITORS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) 18 14 31 Boron ppm ASTM D5185(m) 19 24 10 Molybdenum ppm ASTM D5185(m) 181 179 185 CORROSION method limit/base current history1 history2 Iron ppm ASTM D5185(m) >15 0 0 0 Aluminum ppm ASTM D5185(m) >10 2 1 <1 Copper ppm ASTM D5185(m) >10 0 0 0 Lead ppm ASTM D5185(m) >10 0 0 0 Silver <t< th=""><th>Reserve Alkalinity</th><th>Scale 0-20</th><th>ASTM D1121*</th><th></th><th>2.8</th><th>2.4</th><th>2.0</th></t<>	Reserve Alkalinity	Scale 0-20	ASTM D1121*		2.8	2.4	2.0
Boiling Point °C WC Method* 108 Carboxylate CORROSION INHIBITORS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) 8 8 4 Phosphorus ppm ASTM D5185(m) 18 14 31 Boron ppm ASTM D5185(m) 19 24 10 Molybdenum ppm ASTM D5185(m) 181 179 185 CORROSION method limit/base current history1 history2 Iron ppm ASTM D5185(m) >15 0 0 0 Aluminum ppm ASTM D5185(m) >10 2 1 <1 Copper ppm ASTM D5185(m) >10 0 0 Lead ppm ASTM D5185(m) >10 0 0 Tin ppm ASTM D5185(m) >10 0 0 Silver ppm ASTM D5185(m) >10 <1 <1 <1 Zinc ppm ASTM D5185(m) 1 0 0 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D5185(m) 6308 5707 5816 Potassium ppm ASTM D5185(m) >100 9 5 7 Magnesium ppm ASTM D5185(m) >100 9 5 7 Magnesium ppm ASTM D5185(m) >100 9 5 7 Magnesium ppm ASTM D5185(m) >40 4 4 3	Percentage Glycol	%	ASTM D3321*	50	51.6	51.4	48.6
Carboxylate CORROSION INHIBITORS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) 8 8 4 Phosphorus ppm ASTM D5185(m) 18 14 31 Boron ppm ASTM D5185(m) 19 24 10 Molybdenum ppm ASTM D5185(m) 181 179 185 CORROSION method limit/base current history1 history2 Iron ppm ASTM D5185(m) >15 0 0 0 Aluminum ppm ASTM D5185(m) >10 2 1 <1 Copper ppm ASTM D5185(m) >10 0 0 0 Lead ppm ASTM D5185(m) >10 0 0 0 Tin ppm ASTM D5185(m) >10 0 0 0 Silver ppm </th <th>Freezing Point</th> <th>°C</th> <th>ASTM D3321*</th> <th>-40</th> <th>-39</th> <th>-38</th> <th>-31</th>	Freezing Point	°C	ASTM D3321*	-40	-39	-38	-31
CORROSION INHIBITORS method limit/base current history1 history2	Boiling Point	°C	WC Method*		108		
Silicon	Carboxylate						
Phosphorus ppm ASTM D5185(m) 18 14 31 Boron ppm ASTM D5185(m) 19 24 10 Molybdenum ppm ASTM D5185(m) 181 179 185 CORROSION method limit/base current history1 history2 Iron ppm ASTM D5185(m) >15 0 0 0 Aluminum ppm ASTM D5185(m) >10 2 1 <1 Copper ppm ASTM D5185(m) >10 0 0 0 Lead ppm ASTM D5185(m) >10 0 0 0 Tin ppm ASTM D5185(m) >10 0 0 0 Silver ppm ASTM D5185(m) >10 <1 <1 <1 Zinc ppm ASTM D5185(m) 1 0 0 0 CARRIER SALTS method limit/base current history1 history2<	CORROSION INH	IBITORS	method	limit/base	current	history1	history2
Boron	Silicon	ppm	ASTM D5185(m)		8	8	4
Molybdenum ppm ASTM D5185(m) 181 179 185 CORROSION method limit/base current history1 history2 Iron ppm ASTM D5185(m) >15 0 0 0 Aluminum ppm ASTM D5185(m) >10 2 1 <1 Copper ppm ASTM D5185(m) >10 0 0 0 Lead ppm ASTM D5185(m) >10 0 0 0 Tin ppm ASTM D5185(m) >10 0 0 0 Silver ppm ASTM D5185(m) >10 <1 <1 <1 Zinc ppm ASTM D5185(m) 1 0 0 0 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D5185(m) 8461 7629 7850 SCALE POTENTIAL method limit/base current history1	Phosphorus	ppm	ASTM D5185(m)		18	14	31
CORROSION method limit/base current history1 history2 Iron ppm ASTM D5185(m) >15 0 0 0 Aluminum ppm ASTM D5185(m) >10 2 1 <1 Copper ppm ASTM D5185(m) >10 0 0 0 Lead ppm ASTM D5185(m) >10 0 0 0 Tin ppm ASTM D5185(m) >10 0 0 0 Silver ppm ASTM D5185(m) >10 <1 <1 <1 Zinc ppm ASTM D5185(m) 1 0 0 0 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D5185(m) 8461 7629 7850 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D5185(m) >100 9	Boron	ppm	ASTM D5185(m)		19	24	10
Iron ppm ASTM D5185(m) >15 0 0 0 Aluminum ppm ASTM D5185(m) >10 2 1 <1	Molybdenum	ppm	ASTM D5185(m)		181	179	185
Aluminum ppm ASTM D5185(m) >10 2 1 <1	CORROSION		method	limit/base	current	history1	history2
Copper ppm ASTM D5185(m) >10 0 0 0 Lead ppm ASTM D5185(m) >10 0 0 0 Tin ppm ASTM D5185(m) >10 0 0 0 Silver ppm ASTM D5185(m) >10 <1 <1 <1 Zinc ppm ASTM D5185(m) 1 0 0 0 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D5185(m) 6308 5707 5816 Potassium ppm ASTM D5185(m) 8461 7629 7850 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D5185(m) >100 9 5 7 Magnesium ppm ASTM D5185(m) >40 4 4 3	Iron	ppm	ASTM D5185(m)	>15	0	0	0
Lead ppm ASTM D5185(m) >10 0 0 0 Tin ppm ASTM D5185(m) >10 0 0 0 Silver ppm ASTM D5185(m) >10 <1 <1 <1 Zinc ppm ASTM D5185(m) 1 0 0 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D5185(m) 6308 5707 5816 Potassium ppm ASTM D5185(m) 8461 7629 7850 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D5185(m) >100 9 5 7 Magnesium ppm ASTM D5185(m) >40 4 4 3	Aluminum	ppm	ASTM D5185(m)	>10	2	1	<1
Tin ppm ASTM D5185(m) >10 0 0 0 Silver ppm ASTM D5185(m) >10 <1	Copper	ppm	ASTM D5185(m)	>10	0	0	0
Silver ppm ASTM D5185(m) >10 <1	Lead	ppm	ASTM D5185(m)	>10	0	0	0
Zinc ppm ASTM D5185(m) 1 0 0 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D5185(m) 6308 5707 5816 Potassium ppm ASTM D5185(m) 8461 7629 7850 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D5185(m) >100 9 5 7 Magnesium ppm ASTM D5185(m) >40 4 4 3	Tin	ppm	ASTM D5185(m)	>10	0	0	0
CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D5185(m) 6308 5707 5816 Potassium ppm ASTM D5185(m) 8461 7629 7850 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D5185(m) >100 9 5 7 Magnesium ppm ASTM D5185(m) >40 4 4 3	Silver	ppm	ASTM D5185(m)	>10	<1	<1	<1
Sodium ppm ASTM D5185(m) 6308 5707 5816 Potassium ppm ASTM D5185(m) 8461 7629 7850 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D5185(m) >100 9 5 7 Magnesium ppm ASTM D5185(m) >40 4 4 3	Zinc	ppm	ASTM D5185(m)		1	0	0
Potassium ppm ASTM D5185(m) 8461 7629 7850 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D5185(m) >100 9 5 7 Magnesium ppm ASTM D5185(m) >40 4 4 3	CARRIER SAL	TS	method	limit/base	current	history1	history2
SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D5185(m) >100 9 5 7 Magnesium ppm ASTM D5185(m) >40 4 4 3	Sodium	ppm	ASTM D5185(m)		6308	5707	5816
Calcium ppm ASTM D5185(m) >100 9 5 7 Magnesium ppm ASTM D5185(m) >40 4 4 3	Potassium	ppm	ASTM D5185(m)		8461	7629	7850
Magnesium ppm ASTM D5185(m) >40 4 4 3	SCALE POTEN	NTIAL	method	limit/base	current	history1	history2
pp	Calcium	ppm	ASTM D5185(m)	>100	9	5	7
Hardness mg/LCaCO3 In-house* <75	Magnesium	ppm	ASTM D5185(m)	>40	4	4	3
	Hardness	mg/L CaCO3	In-house*	<75	37	29	29



COOLANT REPORT



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





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02616476

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : PC0081066

Tested Diagnosed

Received : 16 Feb 2024 : 21 Feb 2024

: 21 Feb 2024 - Kevin Marson

Unique Number : 5733586 **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.

Suncor - Terra Nova Projects

Scotia Centre, 235 Water Strret St. John`s, NL CA A1C 1B6 Contact: Josh Hynes

> joshynes@suncor.com T: (709)778-3575 F: (709)724-2835