

# **COOLANT REPORT**

# AURORA [200006927] Machine Id 05WEA87209 - H02 - V (S/N 7773623)

Component

Coolant

**ISENTHAL VARIDOS 45 (--- LTR)** 





## DIAGNOSIS

## Recommendation

We recommend drain/flush system, and refill with 50/50 antifreeze water mixture. We advise that you replenish the supplemental coolant additives (SCAs) and add per manufacturer's recommendations.

## Corrosion

The aluminum level is severe.

## Contaminants

There is no indication of any contamination in the coolant.

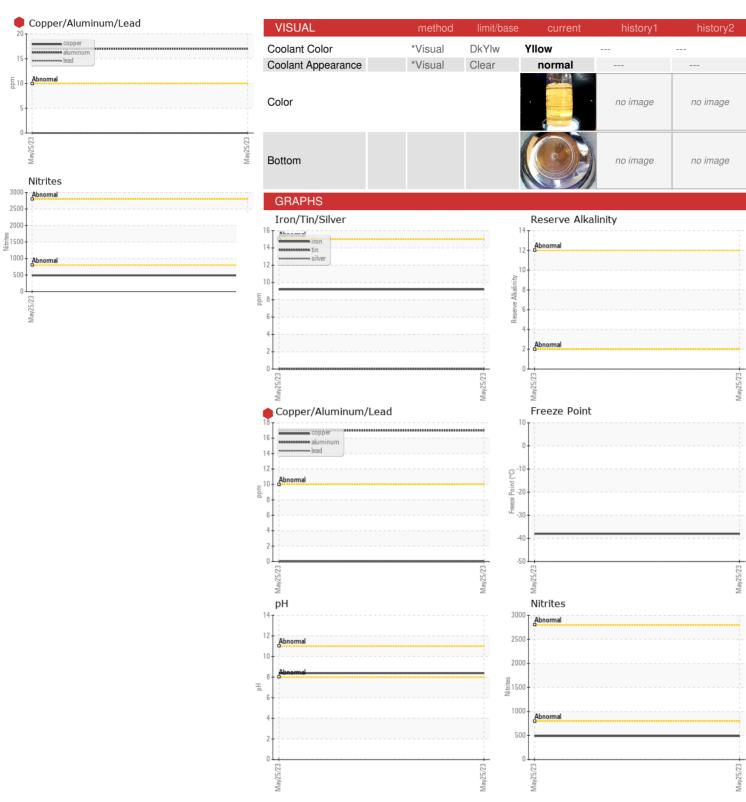
## **Coolant Condition**

Glycol and nitrite levels are acceptable. The pH level of this fluid is within the acceptable limits.

SAMPLE INFORMATION         method         limit/base         current         history1         history2           Sample Number         Client Info         NX05981585			<u></u>		May2023		
Sample Date         Client Info         25 May 2023            Machine Age         hrs         Client Info         19320            Oil Age         hrs         Client Info         0            Oil Changed         Client Info         N/A            Sample Status         SEVERE            PHYSICAL TEST RESULTS         method         limit/base         current         history1         history2           Specific Gravity         "ASTM D1288         1.0699              PHYSICAL TEST RESULTS         method         limit/base         current         history1         history2           Specific Gravity         "ASTM D1288         1.0699              PH         Scale 0-14         ASTM D1288         1.0699             PH         Scale 0-14         ASTM D1288         1.0699             PHYSICAL TEST RESULTS         method         limit/base         current         history1         history2           PROSIDION INHIBITORS         method Scale 0-20         488 <th>SAMPLE INFORM</th> <th>MATION</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age         hrs         Client Info         19320             Oil Age         hrs         Client Info         0             Oil Changed         Client Info         N/A             Sample Status         SEVERE             PHYSICAL TEST RESULTS         method         limit/base         current         history1         history2           Specific Gravity         **ASTM D1298         1.069              PHY SICAL TEST RESULTS         method         limit/base         current         history1         history2           Specific Gravity         **ASTM D1298         1.069              PHYSICAL TEST RESULTS         method         1.069              Specific Gravity         **ASTM D1298         1.069              PHYSICAL TEST RESULTS         method         1.069         488              Specific Gravity         **ASTM D1302         45         51.9 <t< td=""><td>Sample Number</td><td></td><td>Client Info</td><td></td><td>NX05981585</td><td></td><td></td></t<>	Sample Number		Client Info		NX05981585		
Oil Age         hrs         Client Info         N/A             Sample Status         SEVERE             PHYSICAL TEST RESULTS         method         limit/base         current         history1         history2           Specific Gravity         'ASTM D1287         8.5         8.38             PH         Scale 0.44         ASTM D1287         8.5         8.38              Nitrites         ppm         AP-053:2009         260         488	Sample Date		Client Info		25 May 2023		
Oil Changed Sample Status         Client Info Sample Status         N/A SEVERE	Machine Age	hrs	Client Info		19320		
SEVERE	Oil Age	hrs	Client Info		0		
PHYSICAL TEST RESULTS         method         limit/base         current         history1         history2           Specific Gravity         "ASTM D1298"         1.069             pH         Scale 0-14         ASTM D1287         8.5         8.38            Nitrites         ppm         AP-053-2009         260         488             Reserve Alkalinity         Scale 0-20         "ASTM D3321               Percentage Glycol         % ASTM D3321         45         51.9              Freezing Point         °F         ASTM D3321         -24         -38              Freezing Point         °F         ASTM D3321         -24         -38              Total Dissolved Solids         174.5                Carboxylate         n/a         174.5               CORROSION INHIBITORS         method         limit/base         current         history1         history2           Silicon	Oil Changed		Client Info		N/A		
Specific Gravity	Sample Status				SEVERE		
pH   Scale 0-14   ASTM D1287   8.5   8.38       Nitrites   ppm   AP-053-2009   260   488       Reserve Alkalinity   Scale 0-20   "ASTM D1121       Percentage Glycol   %   ASTM D321   45   51.9     Freezing Point   °F   ASTM D321   -24   -38       Total Dissolved Solids   174.5     Carboxylate     n/a     CORROSION INHIBITORS   method   limit/base   current   history1   history2   Silicon   ppm   ASTM D6130   25   <1       Phosphorus   ppm   ASTM D6130   0   0       Boron   ppm   ASTM D6130   1075   689       CORROSION   method   limit/base   current   history1   history2   Iron   ppm   ASTM D6130   >15   9       CORROSION   method   limit/base   current   history1   history2   Iron   ppm   ASTM D6130   >10   0   17       Copper   ppm   ASTM D6130   >10   0   17       Lead   ppm   ASTM D6130   >10   0       Tin   ppm   ASTM D6130   >10   0       Tin   ppm   ASTM D6130   >10   0       Tin   ppm   ASTM D6130   >10   0       Zinc   ppm   ASTM D6130   39       CONTAMINANTS   method   limit/base   current   history1   history2   CONTAMINANTS   method   limit/base   current   history1   history2   CARRIER SALTS   method   limit/base   current   history1   history2   SCALE POTENTIAL   method   limit/base   current   history1   history2   Calcium   ppm   ASTM D6130   5   829         SCALE POTENTIAL   method   limit/base   current   history1   history2   Calcium   ppm   ASTM D6130   5   829           SCALE POTENTIAL   method   limit/base   current   history1   history2	PHYSICAL TEST F	RESULTS	method	limit/base	current	history1	history2
Nitrites	Specific Gravity		*ASTM D1298		1.069		
Reserve Alkalinity	рН	Scale 0-14	ASTM D1287	8.5	8.38		
Percentage Glycol         %         ASTM D3321         45         51.9             Freezing Point         °F         ASTM D3321         -24         -38             Total Dissolved Solids         174.5              Carboxylate         n/a             CORROSION INHIBITORS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D6130         25         <1             Phosphorus         ppm         ASTM D6130         140         146             Boron         ppm         ASTM D6130         10         0             CORROSION         method         limit/base         current         history1         history2           Iron         ppm         ASTM D6130         >15         9             CORROSION         method         limit/base         current         history1         history2           Iron         ppm         ASTM D6130         >10         0	Nitrites	ppm	AP-053:2009	260	488		
Freezing Point         °F         ASTM D3321         -24         -38             Total Dissolved Solids         174.5              Carboxylate         n/a             CORROSION INHIBITORS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D6130         25         <1	Reserve Alkalinity	Scale 0-20	*ASTM D1121				
Total Dissolved Solids         174.5             Carboxylate         n/a             CORROSION INHIBITORS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D6130         25         <1             Phosphorus         ppm         ASTM D6130         140         146             Boron         ppm         ASTM D6130         0         0             Molybdenum         ppm         ASTM D6130         1075         689             CORROSION         method         limit/base         current         history1         history2           Iron         ppm         ASTM D6130         >15         9             Aluminum         ppm         ASTM D6130         >10         0             Copper         ppm         ASTM D6130         >10         0             Lead         ppm         ASTM D6130         39             Zinc         ppm	Percentage Glycol	%	ASTM D3321	45	51.9		
Carboxylate         n/a             CORROSION INHIBITORS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D6130         25         <1	Freezing Point	°F	ASTM D3321	-24	-38		
CORROSION INHIBITORS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D6130         25         <1	Total Dissolved Solids				174.5		
Silicon	Carboxylate				n/a		
Phosphorus         ppm         ASTM D6130         140         146             Boron         ppm         ASTM D6130         0         0             Molybdenum         ppm         ASTM D6130         1075         689             CORROSION         method         limit/base         current         history1         history2           Iron         ppm         ASTM D6130         >15         9             Aluminum         ppm         ASTM D6130         >10         17             Copper         ppm         ASTM D6130         >10         0             Lead         ppm         ASTM D6130         >10         0             Tin         ppm         ASTM D6130         39             Zinc         ppm         ASTM D6130         39             CONTAMINANTS         method         limit/base         current         history1         history2           Colium         ppm         ASTM D6130         1075         745	CORROSION INH	IBITORS	method	limit/base	current	history1	history2
Boron	Silicon	ppm	ASTM D6130	25	<1		
Molybdenum         ppm         ASTM D6130         1075         689             CORROSION         method         limit/base         current         history1         history2           Iron         ppm         ASTM D6130         >15         9             Aluminum         ppm         ASTM D6130         >10         17             Copper         ppm         ASTM D6130         >10         0             Lead         ppm         ASTM D6130         >10         0             Zinc         ppm         ASTM D6130         >10         0             Zinc         ppm         ASTM D6130         39             CONTAMINANTS         method         limit/base         current         history1         history2           Chlorine         ppm         ASTM D6130         1075         745             CARRIER SALTS         method         limit/base         current         history1         history2           Sodium         ppm         ASTM D6130         5         829 <t< td=""><td>Phosphorus</td><td>ppm</td><td>ASTM D6130</td><td>140</td><td>146</td><td></td><td></td></t<>	Phosphorus	ppm	ASTM D6130	140	146		
CORROSION         method         limit/base         current         history1         history2           Iron         ppm         ASTM D6130         >15         9             Aluminum         ppm         ASTM D6130         >10         17             Copper         ppm         ASTM D6130         >10         0             Lead         ppm         ASTM D6130         >10         0             Tin         ppm         ASTM D6130         >10         0             Zinc         ppm         ASTM D6130         39             CONTAMINANTS         method         limit/base         current         history1         history2           Chlorine         ppm         ASTM D6130         1075         745             CARRIER SALTS         method         limit/base         current         history1         history2           Scale POTENTIAL         method         limit/base         current         history1         history2	Boron	ppm	ASTM D6130	0	0		
Iron         ppm         ASTM D6130         >15         9             Aluminum         ppm         ASTM D6130         >10         17             Copper         ppm         ASTM D6130         >10         0             Lead         ppm         ASTM D6130         >10         0             Tin         ppm         ASTM D6130         >10         0             Zinc         ppm         ASTM D6130         39             CONTAMINANTS         method         limit/base         current         history1         history2           Chlorine         ppm         ASTM D6130         1075         745             CARRIER SALTS         method         limit/base         current         history1         history2           Sodium         ppm         ASTM D6130         5         829             SCALE POTENTIAL         method         limit/base         current         history1         history2           Calcium         ppm         ASTM D6130         19 <t< td=""><td>Molybdenum</td><td>ppm</td><td>ASTM D6130</td><td>1075</td><td>689</td><td></td><td></td></t<>	Molybdenum	ppm	ASTM D6130	1075	689		
Aluminum         ppm         ASTM D6130         >10         17             Copper         ppm         ASTM D6130         >10         0             Lead         ppm         ASTM D6130         >10         0             Tin         ppm         ASTM D6130         >10         0             Zinc         ppm         ASTM D6130         39             CONTAMINANTS         method         limit/base         current         history1         history2           Chlorine         ppm         ASTM D6130         30             CARRIER SALTS         method         limit/base         current         history1         history2           Sodium         ppm         ASTM D6130         5         829             SCALE POTENTIAL         method         limit/base         current         history1         history2           Calcium         ppm         ASTM D6130         19	CORROSION		method	limit/base	current	history1	history2
Copper         ppm         ASTM D6130         >10         0             Lead         ppm         ASTM D6130         >10         0             Tin         ppm         ASTM D6130         >10         0             Zinc         ppm         ASTM D6130         39             CONTAMINANTS         method         limit/base         current         history1         history2           Chlorine         ppm         ASTM D6130         30             CARRIER SALTS         method         limit/base         current         history1         history2           Sodium         ppm         ASTM D6130         5         829             SCALE POTENTIAL         method         limit/base         current         history1         history2           Calcium         ppm         ASTM D6130         19	Iron	ppm	ASTM D6130	>15	9		
Lead         ppm         ASTM D6130         >10         0             Tin         ppm         ASTM D6130         >10         0             Zinc         ppm         ASTM D6130         39             CONTAMINANTS         method         limit/base         current         history1         history2           Chlorine         ppm         ASTM D6130         30             CARRIER SALTS         method         limit/base         current         history1         history2           Sodium         ppm         ASTM D6130         1075         745             Potassium         ppm         ASTM D6130         5         829             SCALE POTENTIAL         method         limit/base         current         history1         history2           Calcium         ppm         ASTM D6130         19	Aluminum	ppm	ASTM D6130	>10	<b>1</b> 7		
Tin         ppm         ASTM D6130         >10         0             Zinc         ppm         ASTM D6130         39             CONTAMINANTS         method         limit/base         current         history1         history2           Chlorine         ppm         ASTM D6130         30             CARRIER SALTS         method         limit/base         current         history1         history2           Sodium         ppm         ASTM D6130         5         745             Potassium         ppm         ASTM D6130         5         829             SCALE POTENTIAL         method         limit/base         current         history1         history2           Calcium         ppm         ASTM D6130         19	Copper	ppm	ASTM D6130	>10	0		
Zinc         ppm         ASTM D6130         39             CONTAMINANTS         method         limit/base         current         history1         history2           Chlorine         ppm         ASTM D6130         30             CARRIER SALTS         method         limit/base         current         history1         history2           Sodium         ppm         ASTM D6130         1075         745             Potassium         ppm         ASTM D6130         5         829             SCALE POTENTIAL         method         limit/base         current         history1         history2           Calcium         ppm         ASTM D6130         19	Lead	ppm	ASTM D6130	>10	0		
CONTAMINANTS         method         limit/base         current         history1         history2           Chlorine         ppm         ASTM D6130         30             CARRIER SALTS         method         limit/base         current         history1         history2           Sodium         ppm         ASTM D6130         1075         745             Potassium         ppm         ASTM D6130         5         829             SCALE POTENTIAL         method         limit/base         current         history1         history2           Calcium         ppm         ASTM D6130         19	Tin	ppm	ASTM D6130	>10	0		
Chlorine         ppm         ASTM D6130         30             CARRIER SALTS         method         limit/base         current         history1         history2           Sodium         ppm         ASTM D6130         1075         745             Potassium         ppm         ASTM D6130         5         829             SCALE POTENTIAL         method         limit/base         current         history1         history2           Calcium         ppm         ASTM D6130         19	Zinc	ppm	ASTM D6130		39		
CARRIER SALTS         method         limit/base         current         history1         history2           Sodium         ppm         ASTM D6130         1075         745             Potassium         ppm         ASTM D6130         5         829             SCALE POTENTIAL         method         limit/base         current         history1         history2           Calcium         ppm         ASTM D6130         19	CONTAMINANTS	;	method	limit/base	current	history1	history2
Sodium         ppm         ASTM D6130         1075         745             Potassium         ppm         ASTM D6130         5         829             SCALE POTENTIAL         method         limit/base         current         history1         history2           Calcium         ppm         ASTM D6130         19	Chlorine	ppm	ASTM D6130		30		
Potassium         ppm         ASTM D6130         5         829             SCALE POTENTIAL         method         limit/base         current         history1         history2           Calcium         ppm         ASTM D6130         19	CARRIER SALTS		method	limit/base	current	history1	history2
SCALE POTENTIAL method limit/base current history1 history2  Calcium ppm ASTM D6130 19	Sodium	ppm	ASTM D6130	1075	745		
Calcium         ppm         ASTM D6130         19	Potassium	ppm	ASTM D6130	5	829		
The second secon	SCALE POTENTI	AL	method	limit/base	current	history1	history2
Magnesium ppm ASTM D6130 2	Calcium	ppm	ASTM D6130		19		
	Magnesium	ppm	ASTM D6130		2		



# **COOLANT REPORT**







Laboratory Sample No. Lab Number Unique Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : NX05981585

: 05981585 : 10698880 Received Diagnosed

: 17 Oct 2023 : 30 Oct 2023 Diagnostician : Jonathan Hester

300 SOUTH WACKER DRIVE, SUITE 1500

CHICAGO, IL US 60606 Contact: DEVIN LINEHAN DLinehan@nordex-online.com

T: (312)386-4124 F: (312)386-7102

**NORDEX USA - Chicago** 

Test Package : COOL- ( Additional Tests: COOL, ICP ) Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: NORDEX [WUSCAR] 05981585 (Generated: 10/30/2023 10:46:31) Rev: 1

Contact/Location: DEVIN LINEHAN - NORDEX