

Reading a Coolant Sample Report

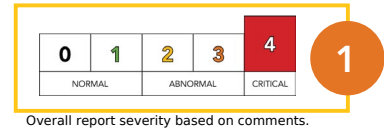
These instructions will walk you through how to read your coolant sample report, a definition of what each section means and how to interpret the information.

Sample Summary

Open a sample report in HORIZON® using one of the methods in the “Find a Sample” instructions. The top of the report has all of the information you need to take action on the results.

Coolant Analysis Report

North America: +1-877-808-3750



Account Information	Component Information	Sample Information
Account Number: 123456-7890-0000 Company Name: ABC COMPANY Contact: JOHN DOE Address: 123 MAIN ST. ANYTOWN, USA Phone Number: 877-808-3750	Component ID: 2 COOL Secondary ID: Component Type: COOLANT - NAPS FREE EG USED Manufacturer: Information Requested Model: Information Requested Application: UNKNOWN System Capacity: 23 gallons	Tracking Number: 12345X12345 Lab Number: I-123456 Lab Location: Indianapolis Data Analyst: ENC Sampled: 17-Nov-2020 Received: 21-Dec-2020 Completed: 23-Dec-2020
	Miscellaneous Information	Product Information

1. Severity Scale

A color coded scale ranging in severity 0-4, the severity of this report is displayed in a larger box with a white number on a colored field. The overall report severity is based on comments, not individual test results.

SEVERITY 0 - All parameters including corrosion metals are within normal limits for the information provided.

SEVERITY 1 - Test parameters and/or corrosion metals are within normal limits but one or more are slightly out of limits but not yet abnormal. Continue to monitor for changes in upward trends with corrosion and changes with the fluid properties. In the Data Analyst comments, language used for severity 1 is MINOR.

SEVERITY 2 - Test parameters and/or corrosion metals are within lower levels of abnormal limits with one or more that are increasingly out of limits. This level of severity brings the coolant and equipment into a state of closer monitoring for corrosion, contamination and or/changes with the fluid properties. A secondary maintenance action for glycol and/or inhibitor recommendations will be indicated when only adjustments are needed to the fluid for proper protection. In the Data Analyst comments, language used for severity 2 is MODERATE.

SEVERITY 3 - Test parameters and/or corrosion metals are within higher levels of abnormal limits with several or more that are increasingly out of limits. This level of severity brings the coolant and equipment into a higher state of closer monitoring and suggested maintenance action(s). Replacing the coolant may be recommended if conditions indicate levels will further harm equipment. In the Data Analyst comments, language used for severity 3 is SIGNIFICANT.

SEVERITY 4 - Test parameters and/or corrosion metals are within much higher levels of abnormal limits with several or more that are increasingly out of limits. This level of severity brings the coolant and equipment into a higher state of monitoring and suggested maintenance action(s). Flushing the cooling system to remove contaminants may be one of the actions suggested. In the Data Analyst comments, language used for severity 4 is SEVERE.

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0	1	2	3	4
NORMAL		ABNORMAL		CRITICAL

Overall report severity based on comments.

2	Account Information		Component Information		Sample Information	
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			Miscellaneous Information		Product Information	
					Product Manufacturer: Information Requested Product Name: Information Requested	
	Comments	Suggest using a heat sensing gun to check engine components (block, radiator, coolant hoses/lines, etc.) for excessive temperature. Suggest flushing this system with water that meets specifications and install new recommended coolant; Glycolate is at a SEVERE level; Minor amount of Acetate present; Minor amount of Formate present; Degradation acids indicate the glycol is breaking down due to localized overheating, cooling system hot spots (restriction of flow, low coolant pressure, trapped air, or improperly plumbed coolant lines), age of fluid, or residual from a previous issue. Please provide missing ENGINE MANUFACTURER and MODEL; We acknowledge the FLUID INFORMATION was provided, however we were not able to validate it within our database or from the fluid manufacturer. Please contact the Data Analysis Department to clarify the information. Thank you. Resample in 60 days;				
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2. Information Summary

This area contains information about the account, component, sample, filter, product (fluid) and miscellaneous information. Filling in miscellaneous information is not required when submitting the sample. Examples of miscellaneous information can include the time the sample was taken or the initials of the person taking the sample. Sample received date will highlight in yellow or red when sample date indicates the time sent/shipped to the lab was delayed based on the sample date provided.

3. Comments

This section includes the analysis of the test results, including maintenance recommendations and feedback from our Data Analysis Team. These comments determine the overall severity of the report.

Test Results

The past and current test results are included in the sample report. Results from past samples can either be displayed above or below the current results. The orientation of the report results can be controlled in your user settings.

4. Elemental Analysis

The elemental analysis data will detect corrosion, contaminants, carrier salts, and inorganic corrosion inhibitors to help determine system health.

5. Visual Testing

Samples are visually examined to detect symptoms of problems that manifest visibly. A true-color light and a magnet are used during the examination.

Sample #	Sample Information							Corrosion Metals (ppm)							Contaminants (ppm)		Corrosion Inhibitors (ppm)			Carrier Salts (ppm/10)			
	Date Sampled	Date Received	Coolant Time h	Unit Time h	Coolant Change	SCA Added gal	Filter Change	Iron	Aluminum	Copper	Lead	Tin	Silver	Zinc	Titanium	Calcium	Magnesium	Silicon	Phosphates	Boron	Molybdenum	Sodium	Potassium
1	01-Aug-2019	15-Aug-2019	26750	26750	No	0	No									1	10	94	37	2	635	458	49
2	04-Mar-2020	26-Mar-2020	74720	74720	No	0	Yes	0	1	0	0	0	0	0									
3	17-Nov-2020	21-Dec-2020	121055	0	No	12105	No	1	5	2	0	0	0	0	2	11	123	11	2	664	481	44	

Visual Testing							
#	Foam	Color	Oil	Fuel	Magnetic Precipitate	Non-Magnetic Precipitation	Odor
1	None	Clear Fluorescent Orange / Pink	None	None	None	None	None
2	None	Clear Dark Pink	None	None	None	None	None
3	None	Clear Pink	None	None	None	None	None

Basic Testing									
#	Freeze Point (°F)	Boil Point (°F)	Antifreeze Percent (%)	pH Waters (pH)	Total Hardness (ppm)	Nitrite (ppm)	Specific Conductance (µS)	SCA Number	Carboxylic Acid (Pass / Fail)
1	-50	227	56	7.6		180 - Strip			PASS
2	-53	228	57	7.7	37	86 - IC	3410	0.0	
3	-67	230	61	7.6	43	48 - IC	3280	0.0	

Additional Testing																		
Sample #	Sulfate	Chloride	Nitrate	Glycolate	Formate	Acetate	Oxalate	Adipic Acid	BZT	TTZ	Benzoic Acid	Sebacic Acid	MBT	P-toluic Acid	2-EH	Octanoic Acid	4-tert-Butylbenzoic Acid	Total Dissolved Solids
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
1																		
2	31	3		1969	190	335	35	NA	65	937	741	1899	<10	<20	16963	<25	NA	1810
3	33	11		3059	251	278	47	NA	116	943	747	1590	<10	<20	17924	<25	NA	1739

Comments are advisory only and are based on the assumption that the sample and data submitted are valid. Results relate only to the items tested. Missing fluid or component information limits the evaluation. No warranty is expressed or implied. Measurement uncertainty available upon request.

6. Basic Testing

The basic testing will report the fluid properties and determine if concerns are identified. Fields without a result would indicate testing was not included in purchased sample kit.

7. Additional Testing

Additional testing will appear when advanced coolant testing is included with the testing suite.

8. Flagged Results

Flagged test results will have a colored background that coordinates with the severity of the scale at the top.

9. Links to Additional Sources

When viewing reports in HORIZON®, many test names will have blue hyperlinks to additional test information, including the possible cause of high or low results.

Historical Comments	1	In order to properly compare data to the correct standards, please provide manufacturer and model of the component, and the manufacturer and product name of the coolant. Test results for this sample are consistent with an OAT (Organic Acid Technology) formulation. If so, Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. The nitrite level is low. Without coolant manufacturer and product name, CARBOXYLATE ACIDS can not be accurately determined; Resample at normal interval;
	2	Suggest using a heat sensing gun to check engine components (block, radiator, coolant hoses/lines, etc.) for excessive temperature. Glycolate is at a SIGNIFICANT level; Minor amount of Acetate present; Minor amount of Formate present; Degradation acids indicate the glycol is breaking down due to localized overheating, cooling system hot spots (restriction of flow, low coolant pressure, trapped air, or improperly plumbed coolant lines), age of fluid, or residual from a previous issue. Please provide missing ENGINE MANUFACTURER and MODEL; Please provide missing COOLANT MANUFACTURER and PRODUCT NAME;

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Posted Messages	10-DEC-2020	John Doe	check for overheating and areas of excessive temperatures
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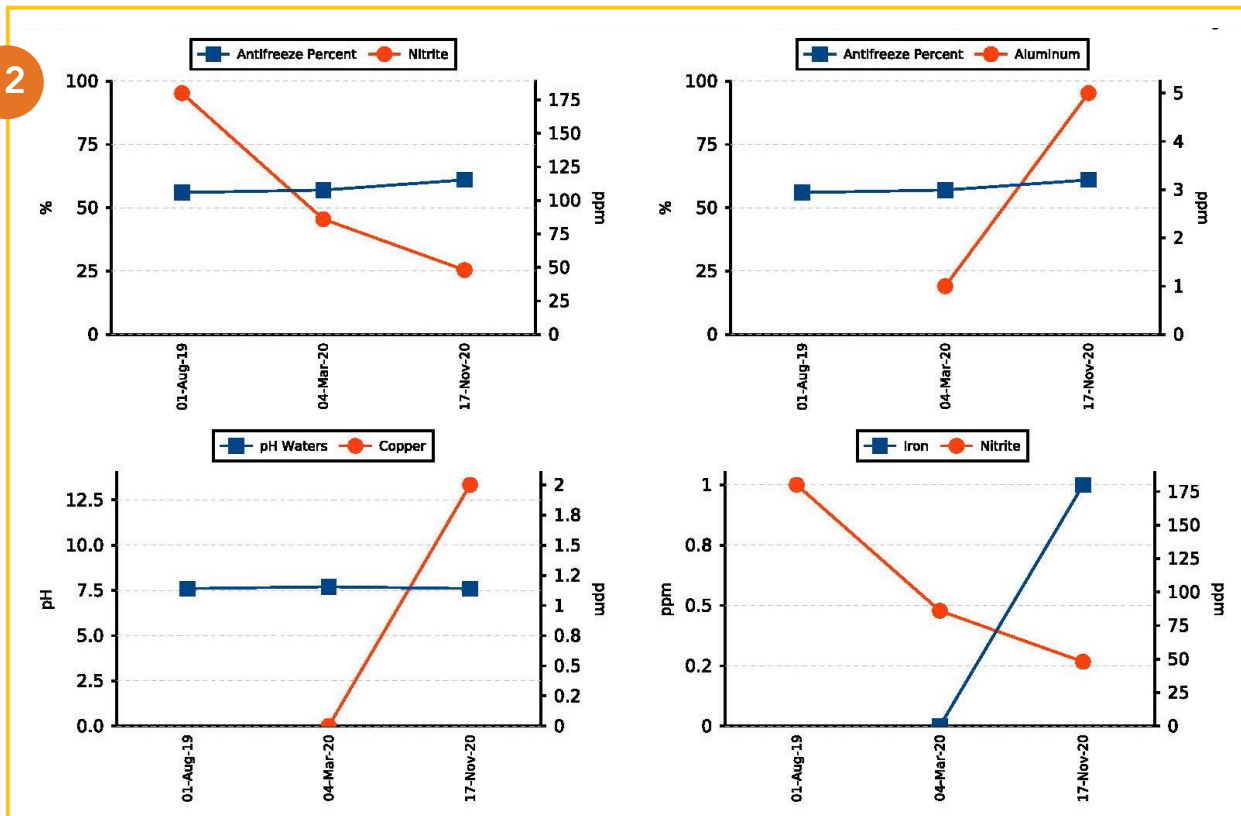
10. Historical Comments

Comments from previous sample reports are included along with the severity of the overall report.

11. Messages

Messages about the sample will be posted below the comments with a date stamp and the user who posted it.

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12. Sample Graphs

The graphs that display on the report help you visualize result trends from sample to sample. They can be turned on or off using the "Sample Report Display" settings under "My Settings" in your HORIZON account.

If you have additional questions, the Technical Library in HORIZON® includes how-to-guides, videos and other resources to help you. You can also contact us at custserv@oilreports.com.