

**REQUEST FOR PROPOSALS
ADDENDUM 3**

**DEMONSTRATION OF WASTEWATER COLLECTION
SYSTEM ODOR CONTROL TECHNOLOGY
BID NO: 13-1494**

BIDS DUE: July 26, 2013 @ 3:00 PM Central Time

Addendum 3 is issued to provide:

- Revise Objective, page 1 of 21 of RFP.
- The questions received and the responses to those questions.
- Provide the current unit cost of Ferrous Sulfate, and Hydrogen Peroxide.

You do not need to return this addendum with your proposal.

Revision to Objective

Revise 2nd paragraph of page 1 to read:

The objective of the demonstration will be to prove the concept whereby iron salts (e.g. FeSO₄) are added as the primary sulfide control agent in the upper reaches of the SAWS collection system, and hydrogen peroxide (H₂O₂) is intentionally added at specific points downstream to “regenerate” the spent iron (FeS). The treatment should provide cost benefits superior to either chemical alone and reduce sludge production. **Vendors may propose alternate proven technology concepts to achieve cost savings.**

The questions received, and the responses to the questions are listed below.

1. Timeline: Is a one month extension on the proposal submittal date possible? We would appreciate the opportunity to adequately prepare a response to this RFP. We have focused on this, but feel like additional time is needed.

Response: SAWS will provide a one week extension from date of Addendum posting. .

2. Technical Details: US Peroxide patent # 6,773,604 appears to limit the ability of Pencco to respond to this RFP. Is there a method SAWS suggests for response that does not infringe upon this patent?

Response: SAWS does not require any particular patent. All vendors are welcome to propose an alternate process that SAWS will review to determine if the proposed technology is consistent with SAWS objective.

3. Is it possible to get a diagram of the collection system diagram for the Hart application point?

Response: It is currently not available at this time.

4. What is the distance from Hart to the treatment plant?

Response: There is 92,400 feet of pipe between Hart and Dos Rios.

5. If possible, please provide OdaLog data for downstream of the Hart site.

Response: Odolog data requires special software in order to view the electronic data. However, SAWS has provided PDF's of the graphs for the last year. See attached.

6. RFP Structure: The RFP indicates that the awarded party will be responsible to provide the data collection and corresponding analysis. A SAWS technical committee will then evaluate the results and if no objections are found, approve full implementation of the tested technique. Since the cost of the data collection and analysis are included in the RFP, would it instead be reasonable to hire an engineering firm to propose, conduct and evaluate the trial as an independent third party? The funding could be reallocated from the proposed RFP and as a result would incur no additional cost to SAWS.

Response: SAWS does not plan to hire an engineering firm. It is intended that the awarded vendor will have to collect this data to adjust dosage and will be required to provide the raw data to SAWS to compare with the data that SAWS collects independently. SAWS will be overseeing and comparing data collected by SAWS to data collected by the vendor.

7. At the site visit, SAWS asked for proposals to assist them in achieving their desire to reduce their ferrous sulfate cost usage, while maintaining odor control. Not only with the method suggested in the RFP, but any additional as well. If there is not a third party firm to define the cost savings, how could the different proposals be evaluated effectively?

Response: SAWS will not be hiring a third part firm to define the cost savings. SAWS has internal resources that will be used to quantify the dollar amounts.

8. If SAWS feels that there is an advantage in having the firm that is awarded conduct the trial, would it be reasonable to require two firms to conduct trials on the same portion of the collection system in as similar conditions as possible? In other words, one firm designs and conducts a trial over a three month period, and then the second firm conducts their trial in the following three months in the same system. This would allow SAWS to not only evaluate performance, but also to ensure a fair evaluation of competing methods in the same environment and with similar parameters. The third option would be to allow separate trials over the same time period but in different parts of the collection system. This method would save time, but would leave uncertainty in evaluation of performance due to differing trial conditions.

Response: Consistent with the requirements of the RFP, SAWS will be awarding, and conducting one trial.

9. Criteria: Our next concern is regarding the grading portion of the selection criteria. What is the qualification for previous experience? Is it wastewater treatment via chemical application in a wastewater collection system, or is it specific to a particular chemical? For example, while Pencco does have experience with PRI-SC application Trinity River Authority and North Texas Municipal Water District, the majority of our wastewater treatment has consisted exclusively of ferrous salts. Conversely, US Peroxide has limited exposure to single chemical treatment, but does have experience adding their product to established treatment programs. Would the grading criteria consider these two equal? If not, should the 50 points which are assigned to previous experience be broken into subsections that would take into account various desirables for this type of trial such as: Industry experience, treatment program design and monitoring, sustainable manufacturing techniques, using iron and peroxide together, using iron and peroxide separately, and previous experience with SAWS? Failure to do clarify this section might result in an unequal advantage of one firm over the other. Since this portion of the grading criteria is 50% of all possible points, it is feasible that if only one firm meets the criteria, no others have a reasonable chance to compete.

Also, for the project teams and resumes grade, what types of projects would be counted? Only iron and peroxide when applied together, or trials involving either chemical.

The RFP also states that the grading criterion does not change after the trial. Assuming SAWS is interested in this concept providing long term competition, how would a vendor other than the one awarded, be able to bid in the future?

Response: SAWS has established the evaluation criteria to be 50% for Past Experience with Similar Project. SAWS is not interested in conducting a trial on emerging technology, but rather to conduct a trial on proven technology with a firm experience in utilizing proposed technology. SAWS intends to explore the effectiveness of proven technology when utilized in SAWS system. Past experience submitted will be evaluated accordingly.

10. Cost benefit analysis: At the site visit on Monday, July 8th, SAWS specified that the cost savings measurement would be in reducing the collection system chemical dosage cost. That being the

case, will the cost/savings reporting be limited to the collection system, or will impacts outside of the collection system be considered (Sludge reduction, plant conditions, etc..)?

Response: The primary consideration is cost savings in the collection system. Saws will not exclude data from outside the collection system from consideration especially if there is an adverse reaction in the treatment plant or elsewhere in the system.

11. If SAWS doesn't exclude cost impacts outside of the collection system, will the benefits (List below) of iron at current dosage rates be measured?

- Coagulation in the primaries
- Sludge conditioning tradeoffs
- Off-gas sulfide removal
- Odor control at the headworks
- By decreasing the iron throughput, there will be a loss in the previously mentioned areas. How will the cost benefit analysis quantify decreased performance in other areas?
- Does SAWS plan to fund a study on the current benefits of the iron in the system?

Response: SAWS will consider significant cost impacts outside of collection system as needed to meet our goals of this trial.

12. When performing the cost benefit analysis, will the overall cost of the chemicals required to keep the system in control, and at target levels of sulfide control be reported? That is to say: Does the cost of peroxide more than offset the reduction in iron feed, and the associated benefits of iron downstream?

Response: Not for the purposes of this trial.

13. PRI-SC Process: On a stoichiometric basis of 2:1 in the regeneration of iron using peroxide assuming 100% of the iron sulfide and hydrogen peroxide present participates in the reaction event, (which is unrealistic even in a laboratory setting) there will be inherent inefficiency in this process in terms of regeneration of iron. Therefore, how can using a hazardous product that is historically purchased at a higher equivalent cost of that chemical to be regenerated save money? If sludge volume is not an issue (per Frank Snyder), would it not make sense to simply add iron which is a cheaper and safer alternative? Unless there are downstream benefits that significantly outweigh those of iron, is this proposed technique reasonable?

Response: This is the reason for the study and not an outright change in processes. SAWS wants to determine if an alternative treatment will result in cost savings without significant detrimental effects. This RFP is not limited to peroxide and a proposal that can demonstrate a potential cost savings will be evaluated. SAWS will consider and evaluate all proven technologies and however, will not consider any proposals for experimental products, or unproved technologies.

Safety is of the utmost importance and concern to SAWS.

14. Orange County California, after using PRI-SC for a time, chose to discontinue doing so. We suppose that a list of satisfied customers was submitted to the SAWS by US Peroxide in proposing this trial. Have they also provided a list of prior customers that did not find the technique beneficial?

Response: Submittal of Past Experience with similar projects is a required submittal when responding to the RFP. Submitted information will be evaluated at that time.

15. Safety: From a safety standpoint, will the PRI-SC process be subject to the same Citizen Review Committee that the current iron odor and corrosion control program went through? How will the additional safety risks of having hydrogen peroxide transported through the city, and stored in the vicinity of residential areas be quantified?

Response: Safety is of the utmost importance and concern to SAWS.

16. RFP Clarification: Finally, there seems to be some conflicting information as well as some possible missing sections in the RFP itself. Exhibit A through G are referenced as part of the sample contract, but they are not included in the document we received. We would appreciate an opportunity to review the missing documents as well as sufficient time to do so as we prepare our proposal.

Response: The sample contract is provided for the sole purpose of giving the vendors an idea of the terms and conditions that they will be expected to adhere to. As the final agreement will be negotiated with the successful vendor, exhibits A through G do not exist yet. Therefore they cannot be provided.

17. The RFP stated that the site visit would be July 1 at 9:00 AM, while the actual site visit appears to be on 8 July at 9:00 AM. Additionally the RFP states that receipt of written questions is due on the 9th of July, but later in the document, it states that questions regarding this RFP received after July 5th will not be answered. Is it possible that this process is being rushed? Would it be possible to extend this RFP response for an additional month after the complete list of exhibits is published?

Response: The dates you reference were a typo that was corrected via addendum.

18. Demonstration Cost: How does the SAWS anticipate reviewing the cost of this proposal/demonstration? A significant portion of the selection criteria of the RFP is the compensation proposal; it would appear to be where the cost of the RFP will be submitted. It is referenced as Exhibit A on the example contract provided in the RFP, but there is not a form on which to supply this proposal. Additionally, how is the compensation analysis proposal broken down? To include cost of product, cost or of equipment, setup and tear down (Refer to OCSD specs and \$50,000 tear down cost here).

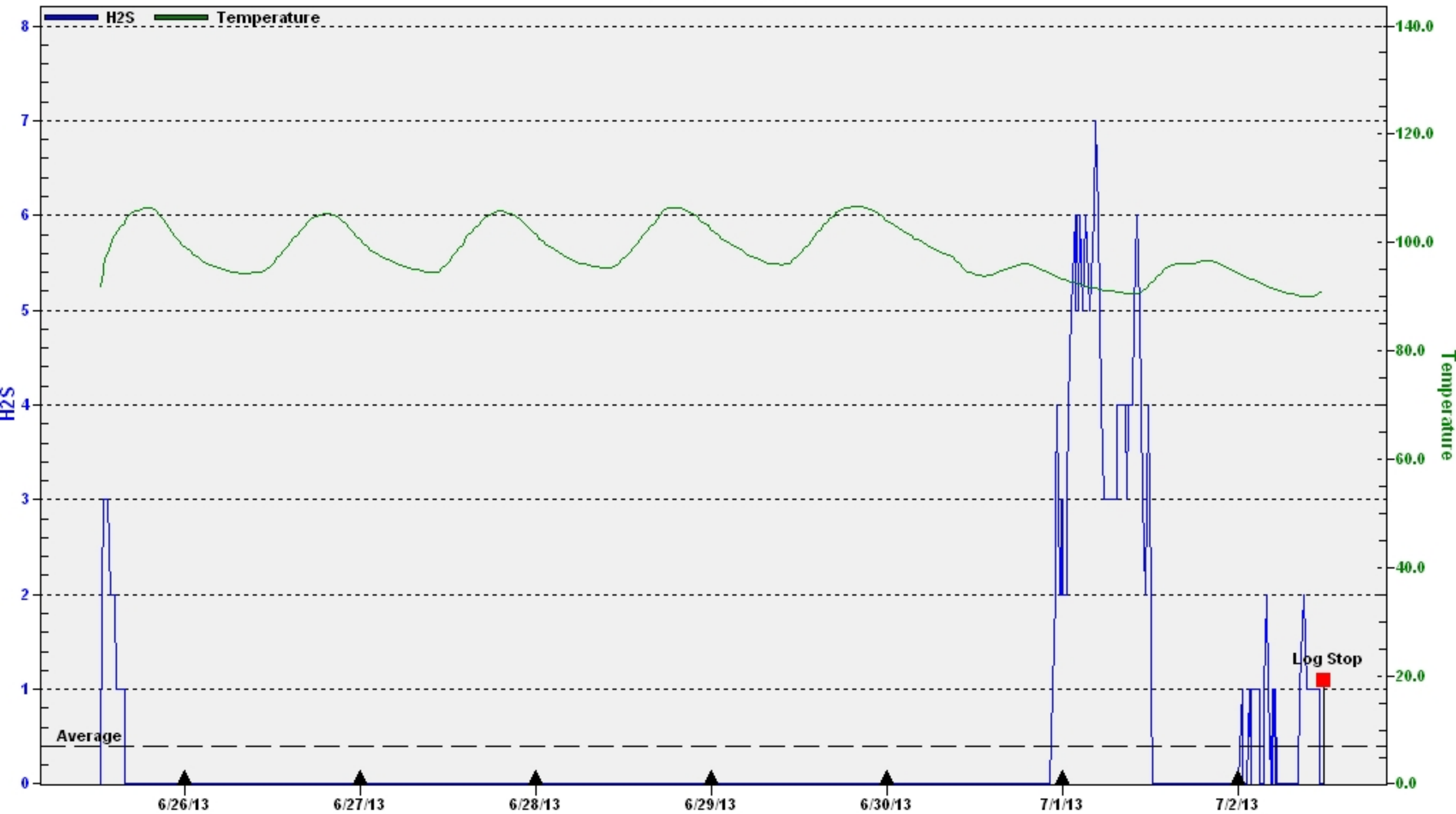
Response: As this is a request for proposal, it is up to the responding vendors to provide their Cost Proposal. The RFP provides some breakdowns, page 7, that are required, however, beyond that it is up to the vendor to propose the price structure.

Current Price of Chemicals

SAWS current price of Ferrous Sulfate is \$0.484 / gallon.

SAWS current price of Hydrogen Peroxide is \$2.98/ gallon

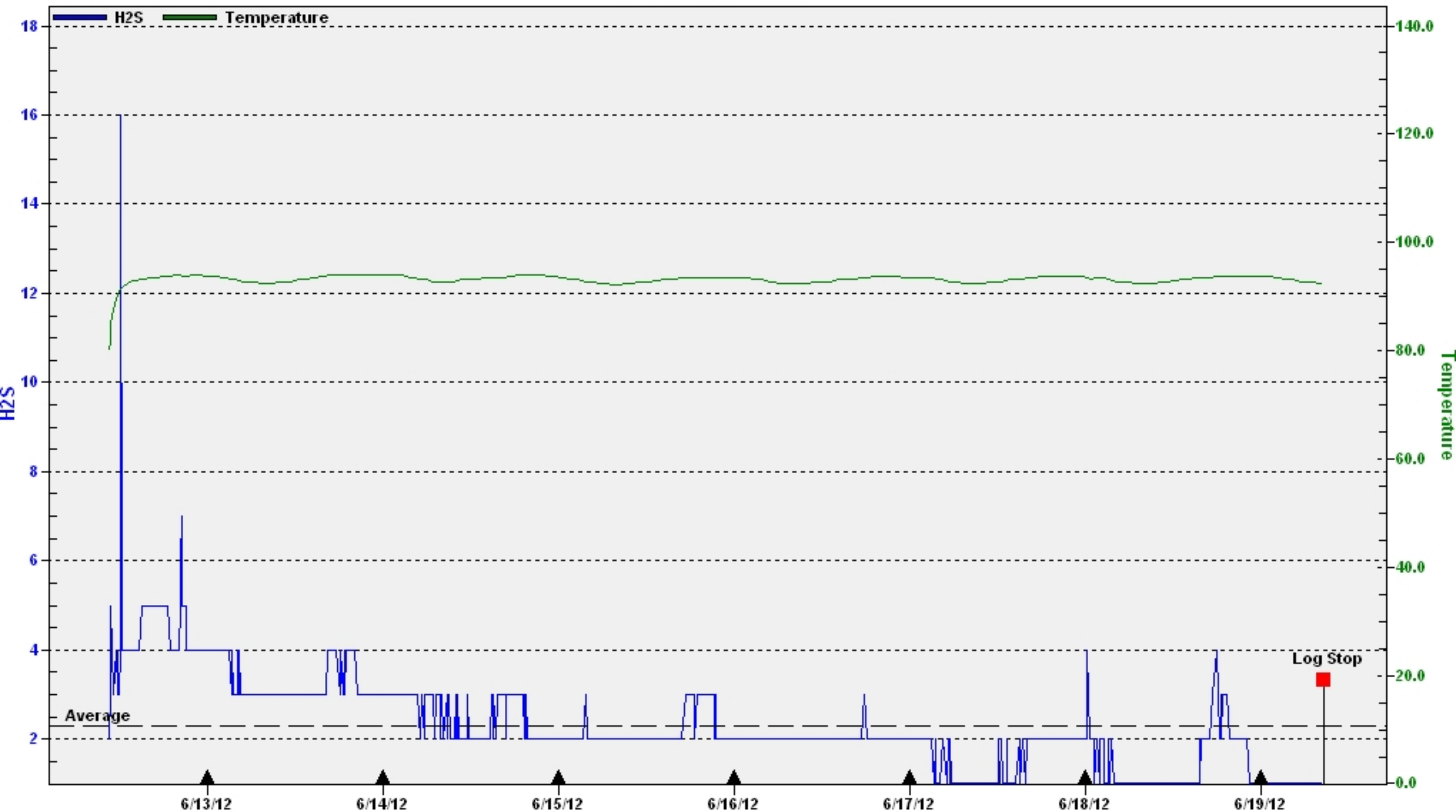
QuintardW062413: Session 1



Period Displayed: 6/25/13 - 7/2/13 (Oda File: QuintardW062413.oda -- Serial Number: OL45095436)

Average
Average
OPPM
▲
Month Transition
Min
OPPM
Max
7PPM
(Use Screen Data Only)

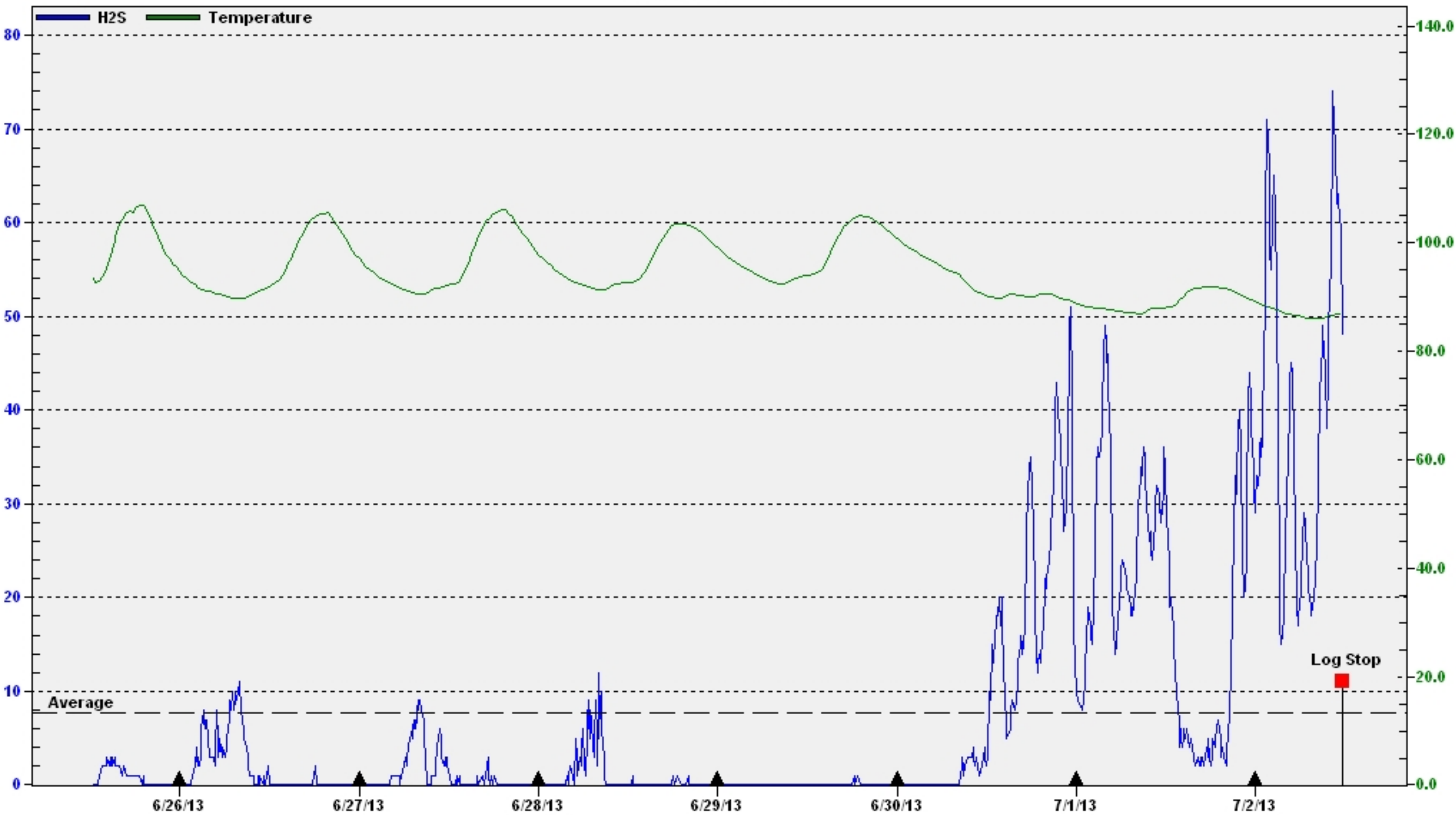
QuintardW061212: Session 1



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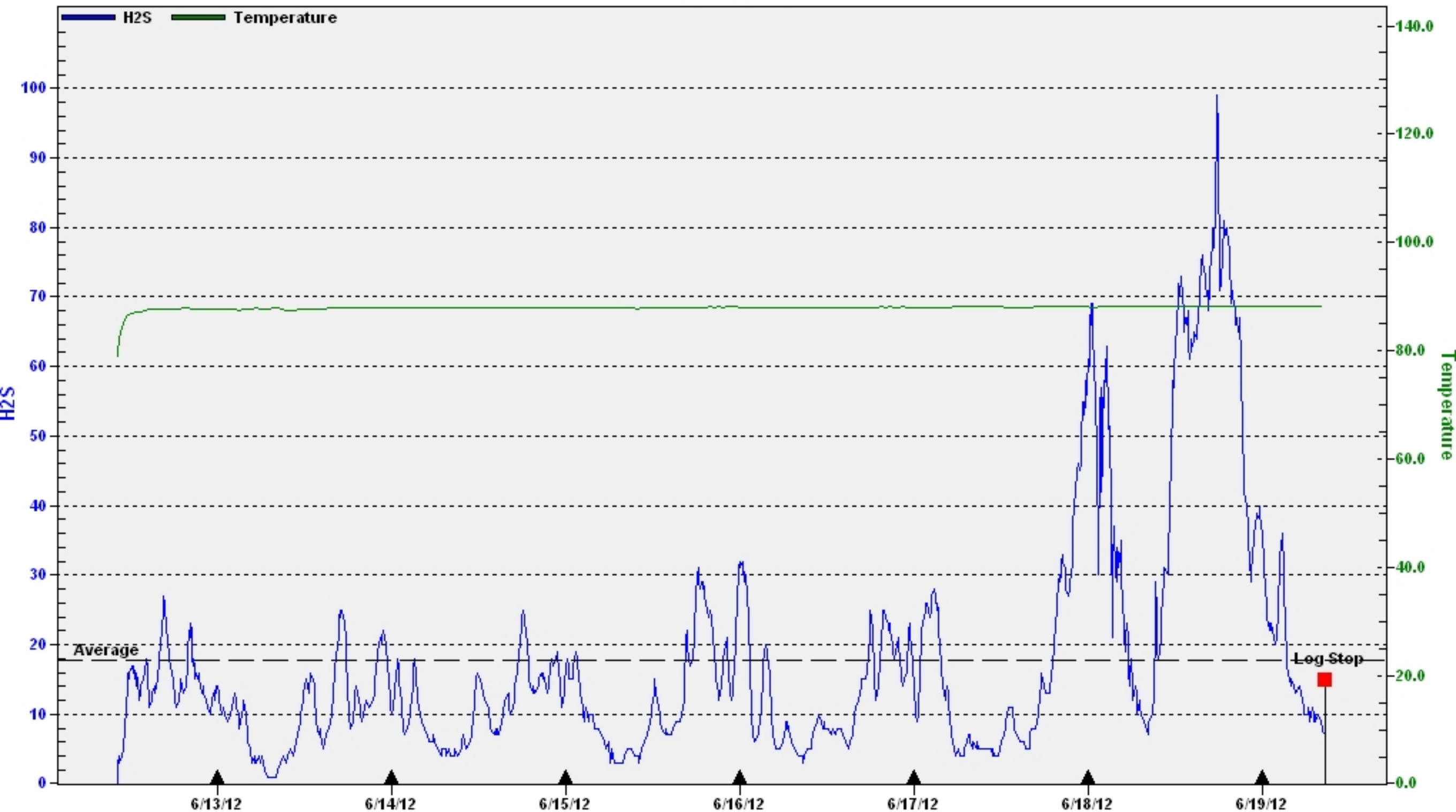
QuintardE062413: Session 1



Period Displayed: 6/25/13 - 7/2/13 (Oda File: QuintardE062413.oda -- Serial Number: OL45095444)

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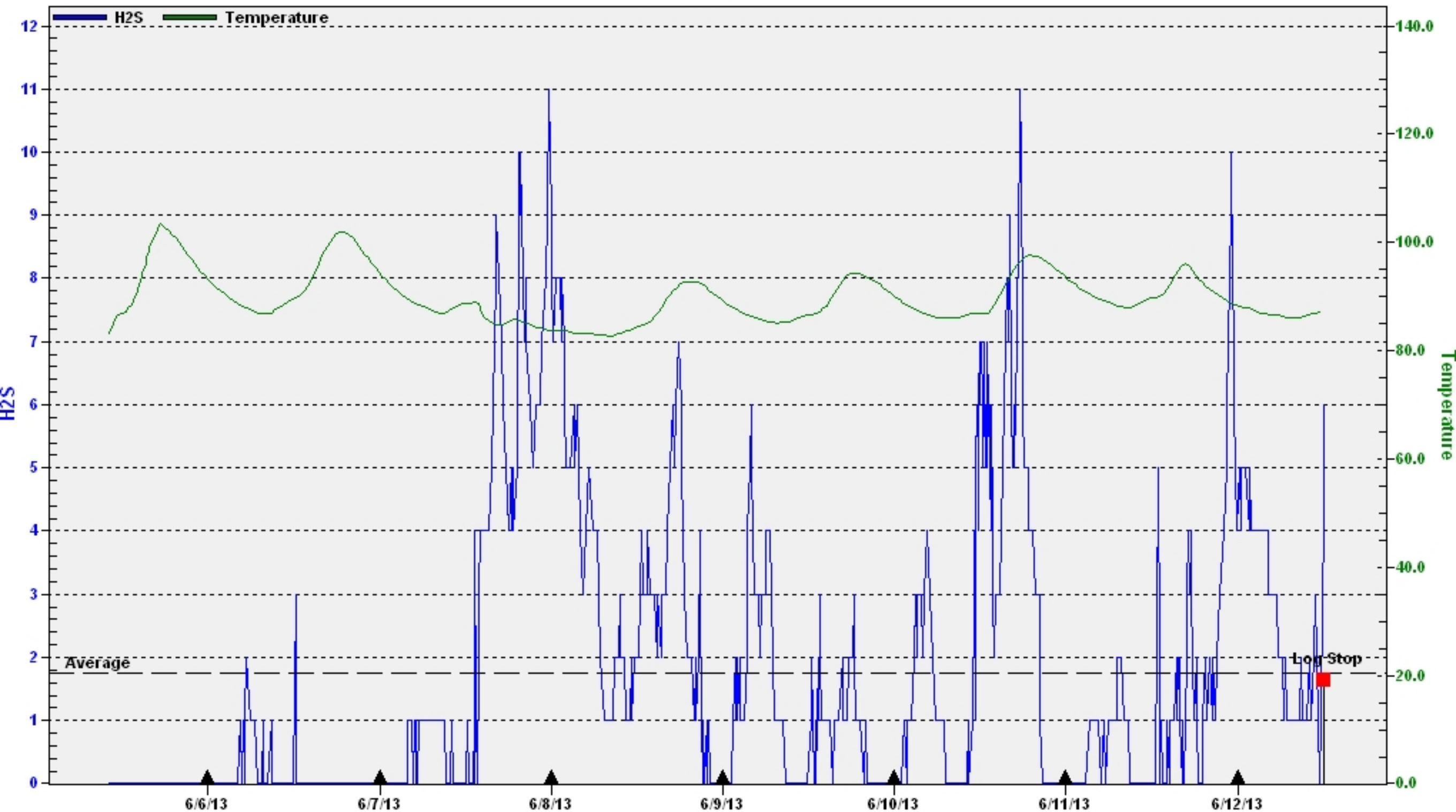
QuintardE061212: Session 1



Period Displayed: 6/12/12 - 6/19/12 (Oda File: QuintardE061212.oda -- Serial Number: OL45074250)

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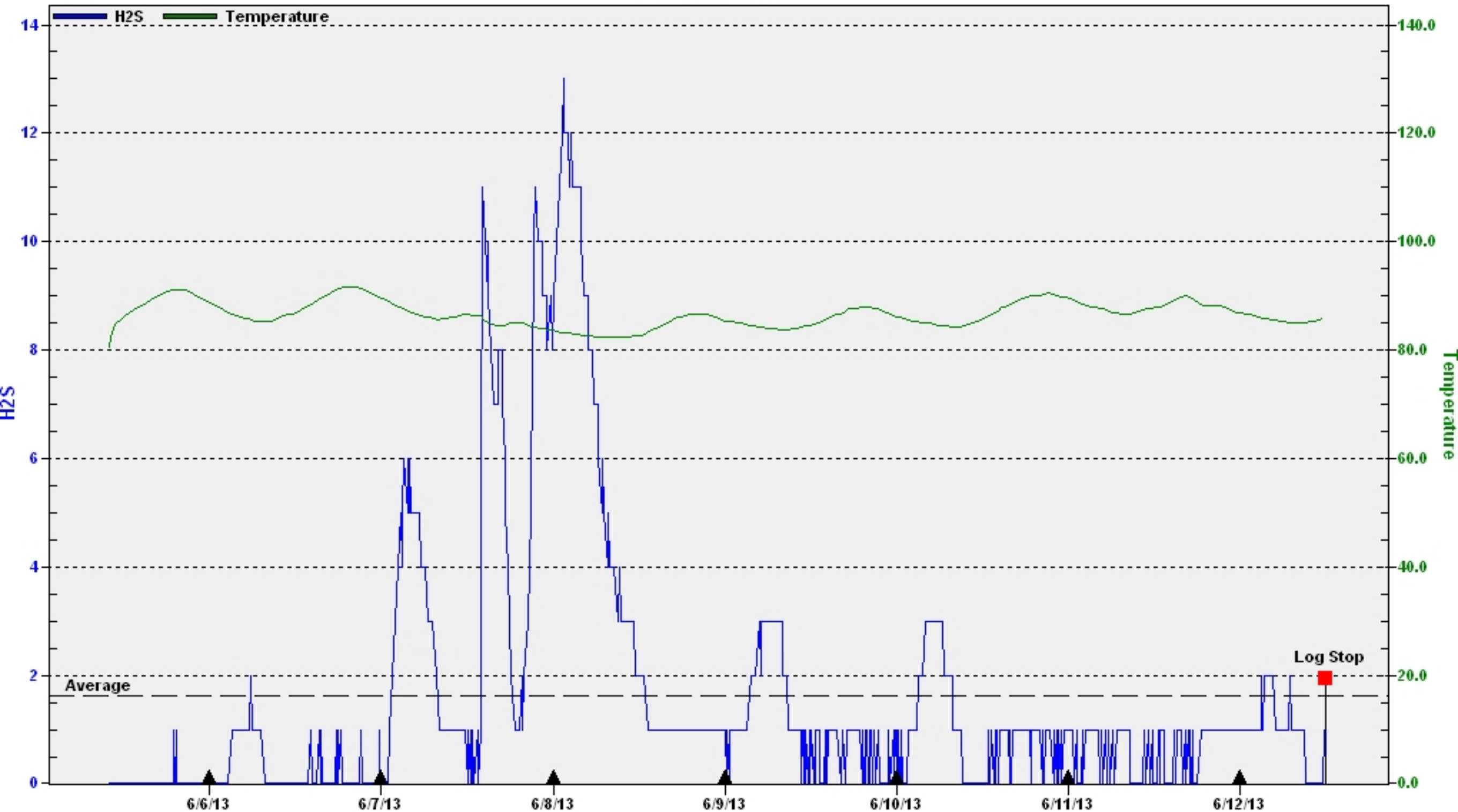
E-Quintard: Session 1



Period Displayed: 6/5/13 - 6/12/13 (Oda File: E-Quintard.oda -- Serial Number: OL45095444)

— Average 2PPM ▲ Month Transition Min 0PPM Max 11PPM (Use Screen Data Only)

Appollo&91st: Session 1



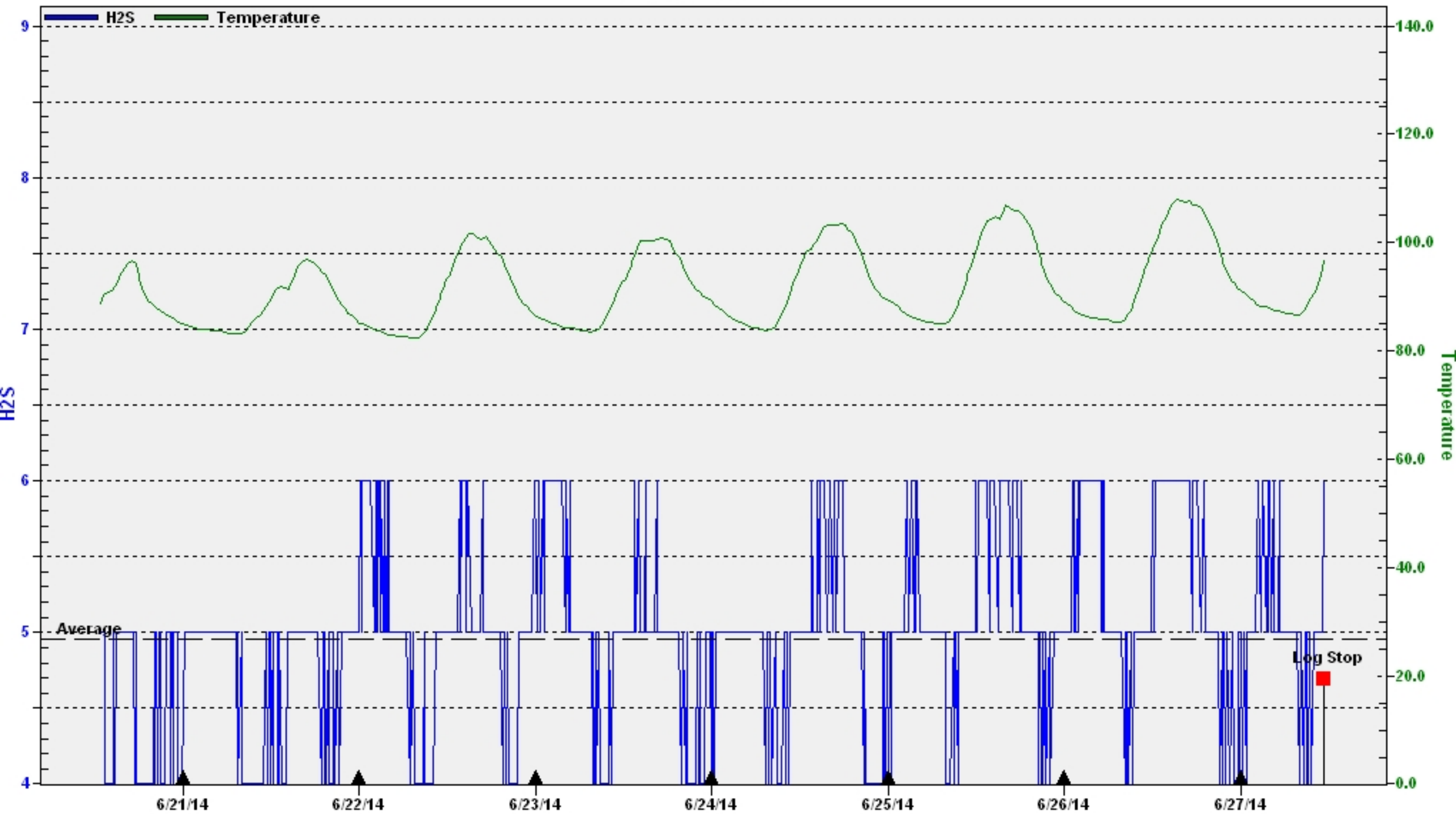
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Average 2PPM

 Month Transition Min

OPPM Max 13PPM (Use Screen Data Only)

APOLLOand91st: Session 1



Period Displayed: 6/20/14 - 6/27/14 (Oda File: APOLLOand91st.oda -- Serial Number: OL45105515)

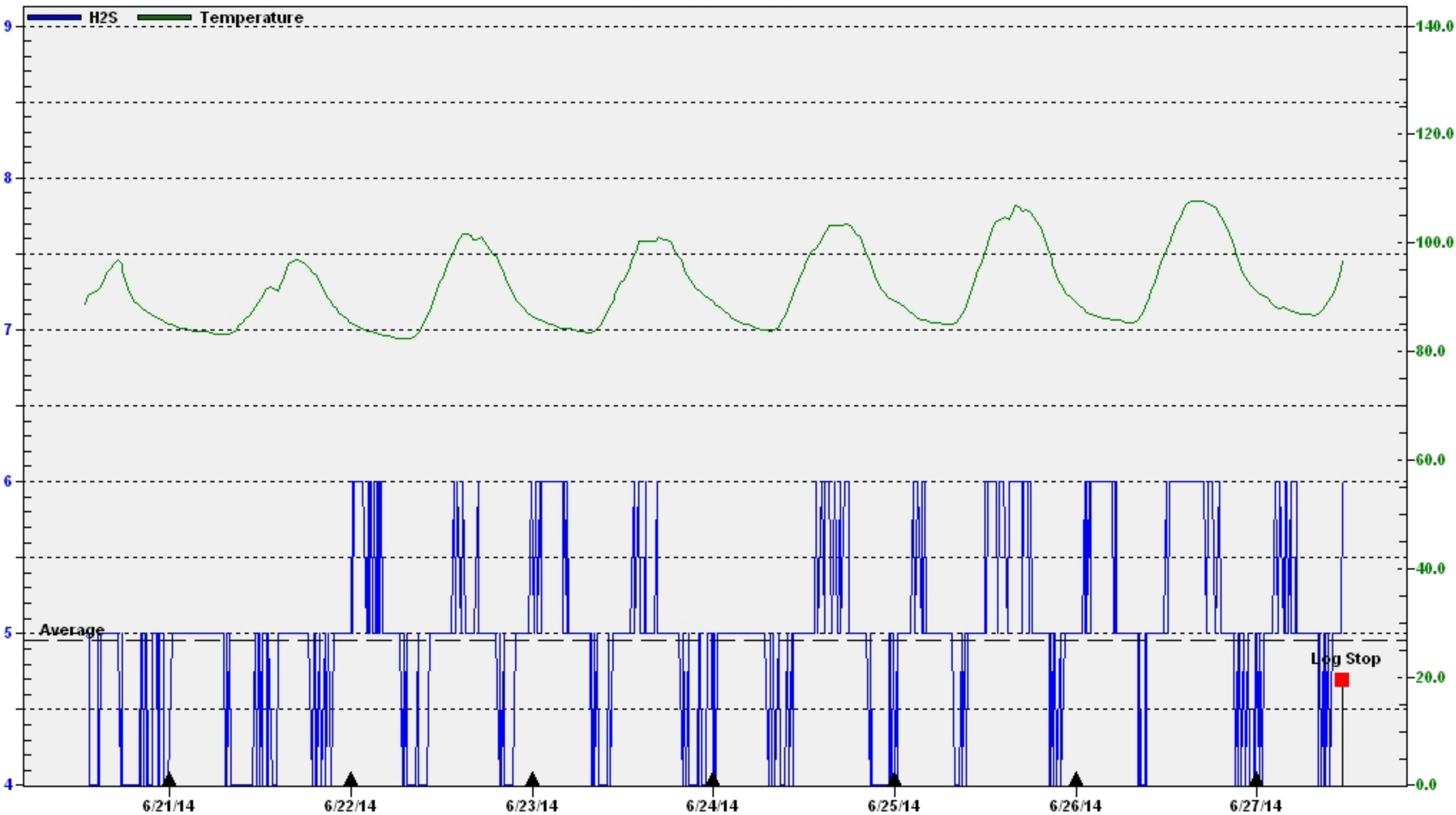
Average 5PPM

 Month Transition

 Min 4PPM

 Max 6PPM
 (Use Screen Data Only)

91stAPOLLO: Session 1



Period Displayed: 6/20/14 - 6/27/14 (Oda File: 91stAPOLLO.oda -- Serial Number: OL45105515)

Average 5PPM
▲ Month Transition Min 4PPM Max 6PPM (Use Screen Data Only)

