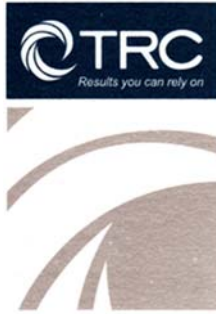


May 26, 2017



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May 26, 2017

Ms. Lori Simmons  
Arkansas Department of Health  
4815 West Markham Street  
Little Rock, Arkansas 72205  
Via email [Lori.Simmons@arkansas.gov](mailto:Lori.Simmons@arkansas.gov)

**Re: Georgia-Pacific, Crossett Mill - Biweekly Air Monitoring Report for Hydrogen Sulfide**

Dear Ms. Simmons,

Following is the biweekly data summary for the Georgia-Pacific (GP) hydrogen sulfide (H<sub>2</sub>S) and meteorological monitoring program, at the GP Crossett mill, covering the calendar period of May 3, 2017 through May 16, 2017.

Summary of Results

Included in this report are three plots presenting H<sub>2</sub>S concentrations calculated with varied rolling average periods (30-minute, 8-hour, and 24-hour).

Also included in this report is a summary of results from the daily 1-point QC checks performed during this biweekly period. The QAPP establishes goals for precision and bias as a coefficient of variation (CV) <10% and ± 10%, respectively. Precision and bias are calculated in accordance with 40 CFR Part 58 Appendix A, Section 4.1.

Additionally, weekly automated zero adjustments have been put in place beginning February 1, 2017, so as to limit the effect of the analyzer's zero drift. There were a total of two zero checks performed during this biweekly report period; both within the acceptable range of ± 1.5 ppb, as defined in the QAPP. Results for these zero checks are presented below.

Date	Zero Check
5/4/2017	0.4
5/11/2017	0.3

There were two occurrences of data loss during this monitoring period, in addition to those resulting from automated daily 1-point QC and weekly calibration checks. TRC personnel were on site to perform routine calibrations and preventative maintenance on May 3<sup>rd</sup>. As a result approximately 11



May 26, 2017

hours of H<sub>2</sub>S data were invalid on May 3<sup>rd</sup>. Following the calibrations and maintenance, a 3-point calibration check was performed the afternoon of May 3<sup>rd</sup> with acceptable results. Results for daily 1-point QC checks fall within the acceptable range, with the exception of May 4 – 6, indicating the H<sub>2</sub>S monitor was operating in accordance with the QAPP. A manual calibration check was performed on May 6<sup>th</sup>, following three days of low recoveries for the daily calibration checks. The manual calibration check was within the acceptable range, but was responsible for an hour of invalid H<sub>2</sub>S data. The overall CV for this biweekly period was still within the goal of  $\pm 10\%$ .

Fourteen-day time series plots for all recorded meteorological (met) parameters are presented in the final table. An audit of the meteorological monitoring sensors was performed on May 3<sup>rd</sup>, resulting in approximately three hours of lost meteorological data.

Please feel free to contact me if you have any questions or need any additional data.

Sincerely,



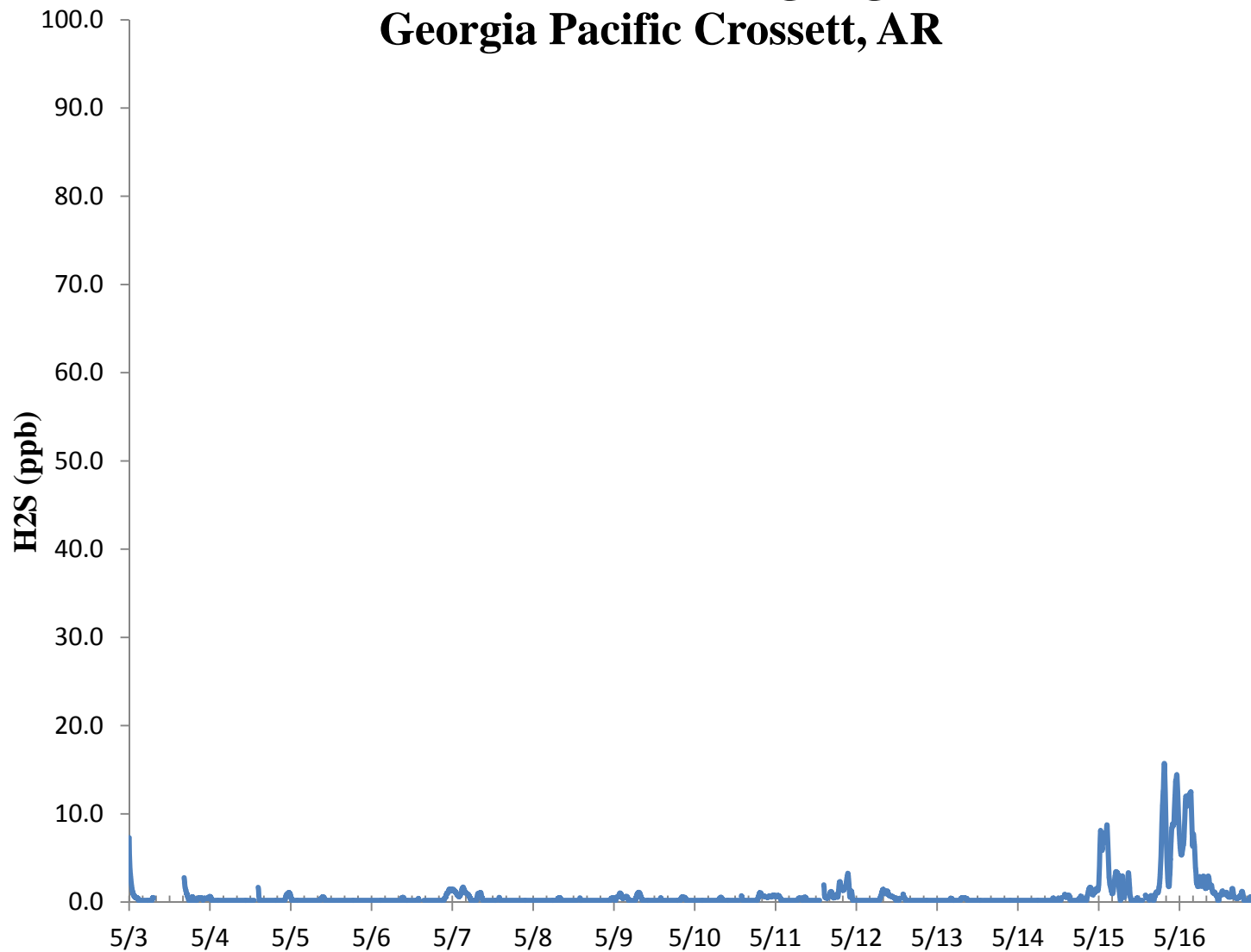
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Jonathan Bowser  
Manager, Air Quality and Meteorological Monitoring

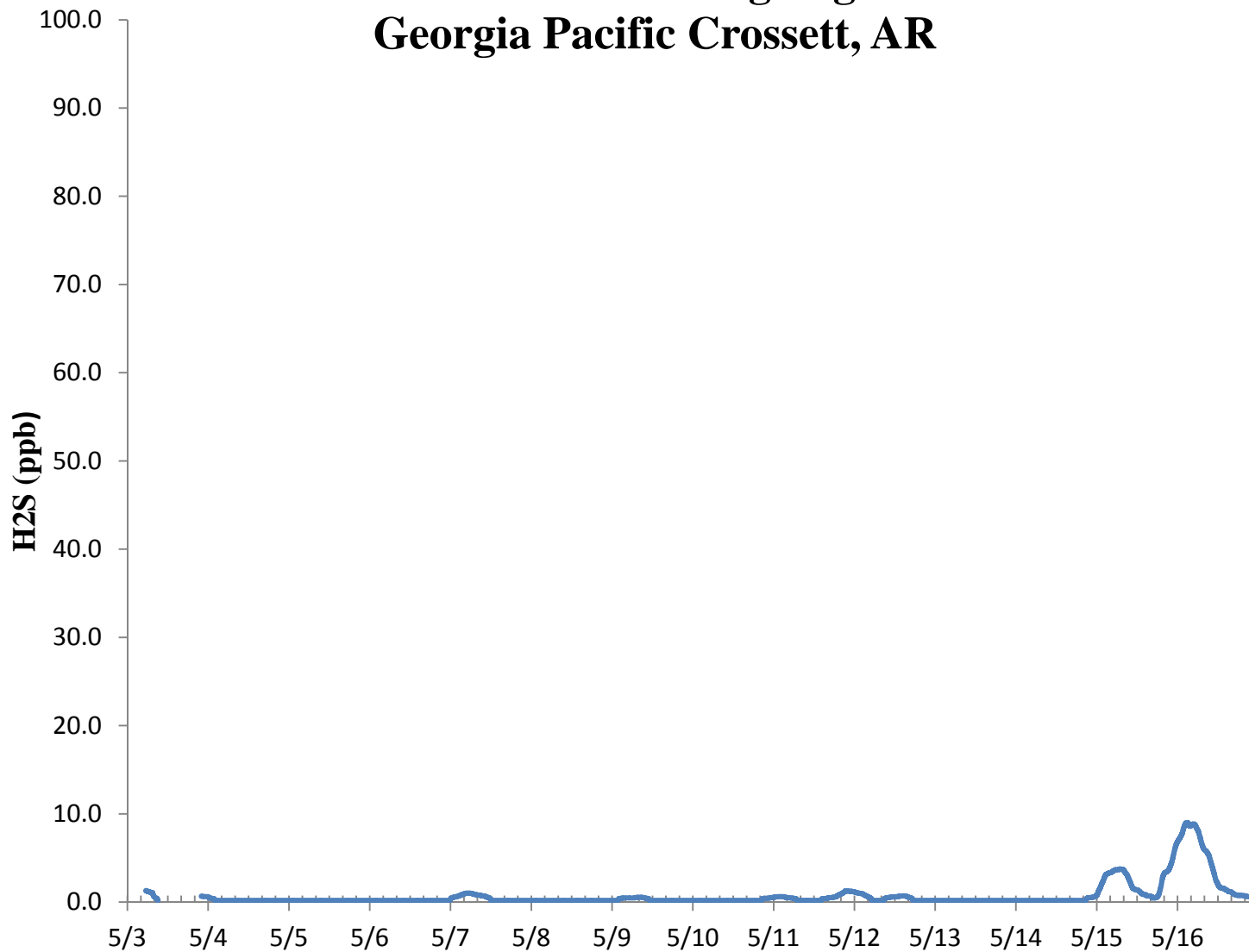
Air Measurements – Gainesville Office  
6312 NW 18th Drive, Suite 100  
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Email: [jbowser@trcsolutions.com](mailto:jbowser@trcsolutions.com)

CC: Becky Keough, ADEQ Director via email: [keogh@adeq.state.ar.us](mailto:keogh@adeq.state.ar.us)  
Kara Allen, Environmental Engineer, USEPA Region 6 via email [Allen.Kara@epa.gov](mailto:Allen.Kara@epa.gov)

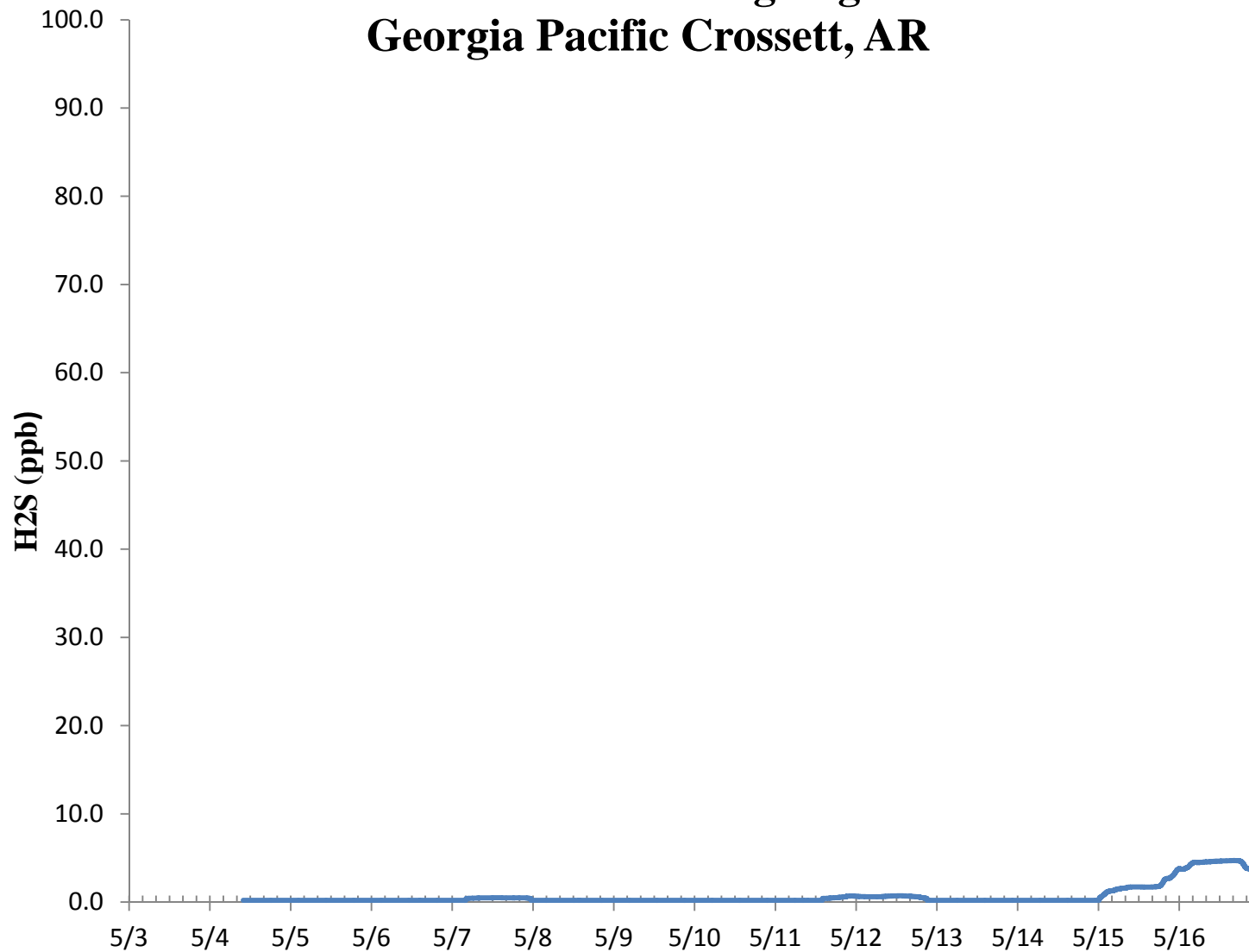
## H2S 30 Min Rolling Avg Georgia Pacific Crossett, AR



## H2S 8 Hr Rolling Avg Georgia Pacific Crossett, AR



## H2S 24 Hr Rolling Avg Georgia Pacific Crossett, AR



### H<sub>2</sub>S Assessment

GP - Crossett, AR			Compound of Interest: H <sub>2</sub> S				CV <sub>ub</sub> (%)	Bias (%)
Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	25th Percentile	d <sup>2</sup>	d	d  <sup>2</sup>	
5/3/2017 13:00	74.6	71.0	5.1	-5.786	25.709	5.070	25.709	
5/4/2017 13:00	59.2	70.0	-15.4	75th Percentile	238.041	15.429	238.041	
5/5/2017 13:00	59.9	70.0	-14.4	-3.214	208.184	14.429	208.184	
5/6/2017 13:00	61.8	70.0	-11.7		137.224	11.714	137.224	
5/7/2017 13:00	66.4	70.0	-5.1		26.449	5.143	26.449	
5/8/2017 13:00	67.1	70.0	-4.1		17.163	4.143	17.163	
5/9/2017 13:00	67.2	70.0	-4.0		16.000	4.000	16.000	
5/10/2017 13:00	67.6	70.0	-3.4		11.755	3.429	11.755	
5/11/2017 13:00	67.0	70.0	-4.3		18.367	4.286	18.367	
5/12/2017 13:00	68.3	70.0	-2.4		5.898	2.429	5.898	
5/13/2017 13:00	65.8	70.0	-6.0		36.000	6.000	36.000	
5/14/2017 13:00	67.6	70.0	-3.4		11.755	3.429	11.755	
5/15/2017 13:00	67.8	70.0	-3.1		9.878	3.143	9.878	
5/16/2017 13:00	67.8	70.0	-3.1		9.878	3.143	9.878	

<b>n</b>	<b>S<sub>d</sub></b>	<b>S<sub>d2</sub></b>	<b>Σ d </b>	<b>"AB" (Eqn 4)</b>
14	5.289	78.584	85.785	6.127
<b>n-1</b>	<b>Σd</b>	<b>Σd<sup>2</sup></b>	<b>Σ d <sup>2</sup></b>	<b>"AS" (Eqn 5)</b>
13	-75.644	772.301	772.301	4.356

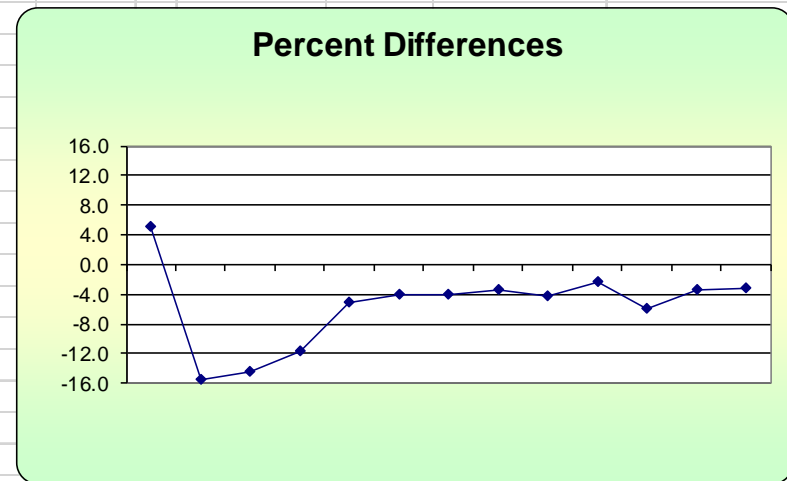
<b>Bias (%) (Eqn 3)</b>	Both Signs Positive
8.19	FALSE
<b>Signed Bias (%)</b>	Both Signs Negative
-8.19	TRUE

<b>CV (%) (Eqn 2)</b>	7.19
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<b>Upper Probability Limit</b>	4.96	<b>Lower Probability Limit</b>	-15.77
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Meteorological Summary

