

July 6, 2018



6312 NW 18th Drive
Suite 100
Gainesville, FL 32653

352.378.0332 PHONE
352.378.0354 FAX

www.TRCSolutions.com

July 6, 2018

Ms. Lori Simmons
Arkansas Department of Health
4815 West Markham Street
Little Rock, Arkansas 72205
Via email Lori.Simmons@arkansas.gov

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

Dear Ms. Simmons,

Please find the following biweekly report for the Georgia-Pacific (GP) Crossett Mill hydrogen sulfide (H₂S) and meteorological monitoring program covering the calendar period of May 30, 2018 through June 12, 2018.

Summary of Results

Included in this report are three plots presenting H₂S concentrations across different rolling average periods (30-minute, 8-hour, and 24-hour), daily 1-point quality control (QC) checks with precision and bias estimates and time series plots for all recorded meteorological (met) parameters for the two week period.

Data Quality

The Quality Assurance Project Plan (QAPP) establishes measurement quality objectives (MQOs) for H₂S regarding precision and bias expressed 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. Precision and bias calculations are presented on page six of this report.

Results for available automated daily 1-point QC checks were within the accuracy objective, ± 10%, indicating the H₂S monitor was operating in accordance with MQOs as stated in the QAPP.

During this reporting period two automated zero checks were performed. The result for these zero checks are presented below.



Date	Zero Check Response (ppb)
6/1/2018	0.7
6/8/2018	0.6

Data Capture

There were no occurrences of H₂S data loss this monitoring period, other than those resulting from automated daily 1-point QC and weekly calibration checks.

Fourteen-day time series plots for all recorded meteorological (met) parameters are presented in the final table. A communication failure on June 12th was responsible for approximately 3 hours of met data loss during this report period. Additionally, solar radiation data is not available for the entire monitoring period on account of weather damage. TRC has plans to assess damage and repair/replace the solar radiation sensor as soon as possible.

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

Sincerely,

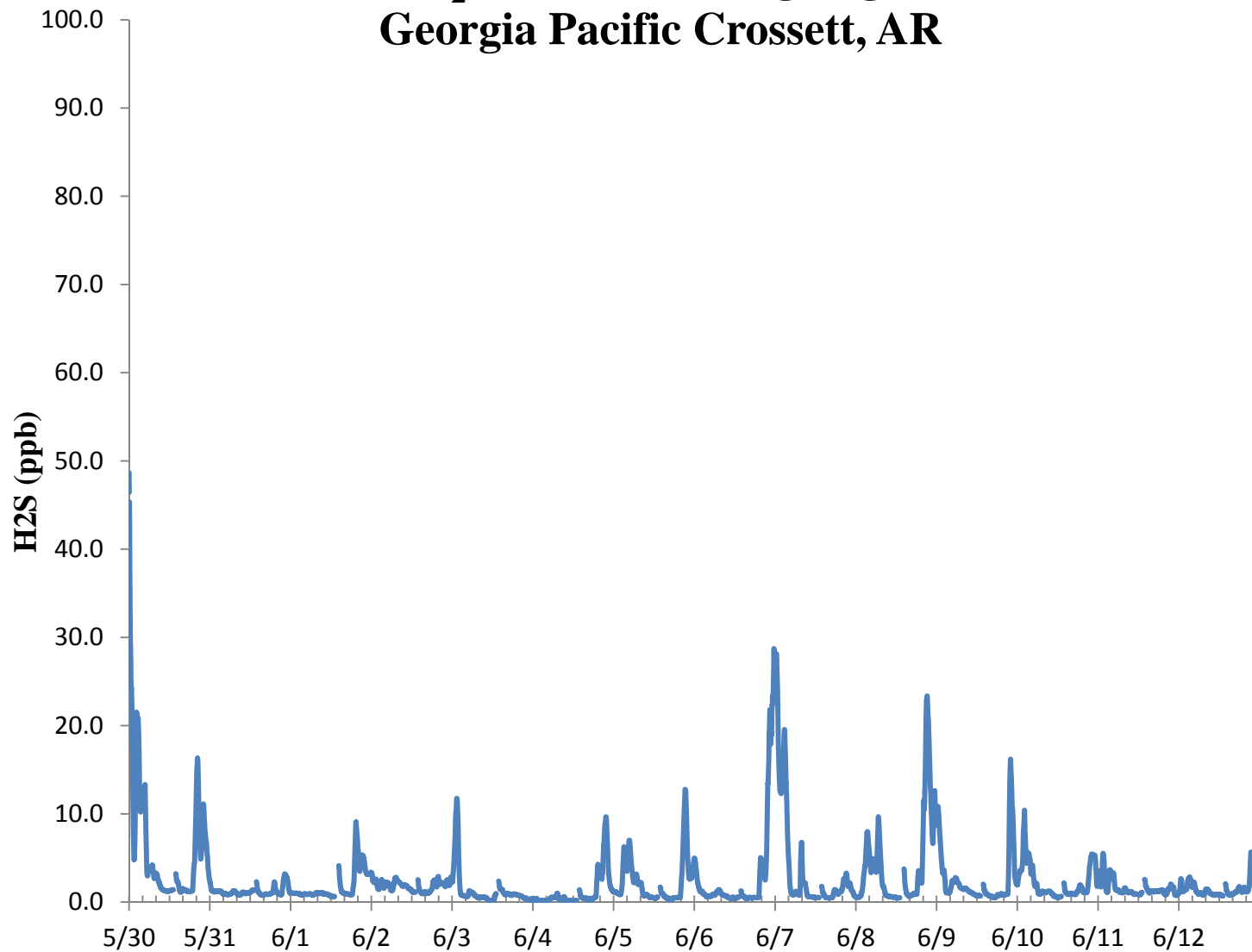


Jonathan Bowser
Manager, Air Quality and Meteorological Monitoring

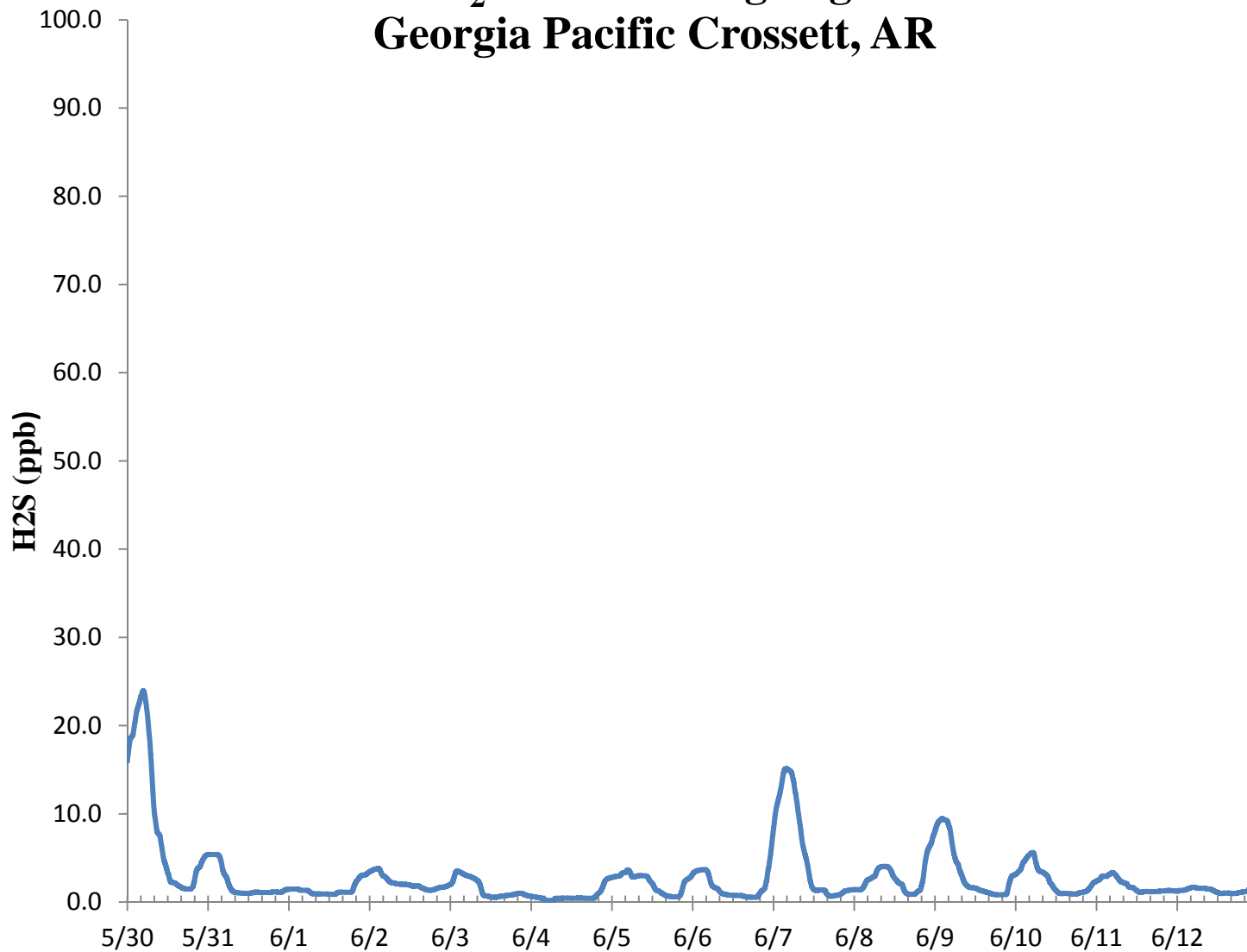
Air Measurements – Gainesville Office
6312 NW 18th Drive, Suite 100
Gainesville, Florida 32653
(352) 260-1162
Email: jbowser@trcsolutions.com

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

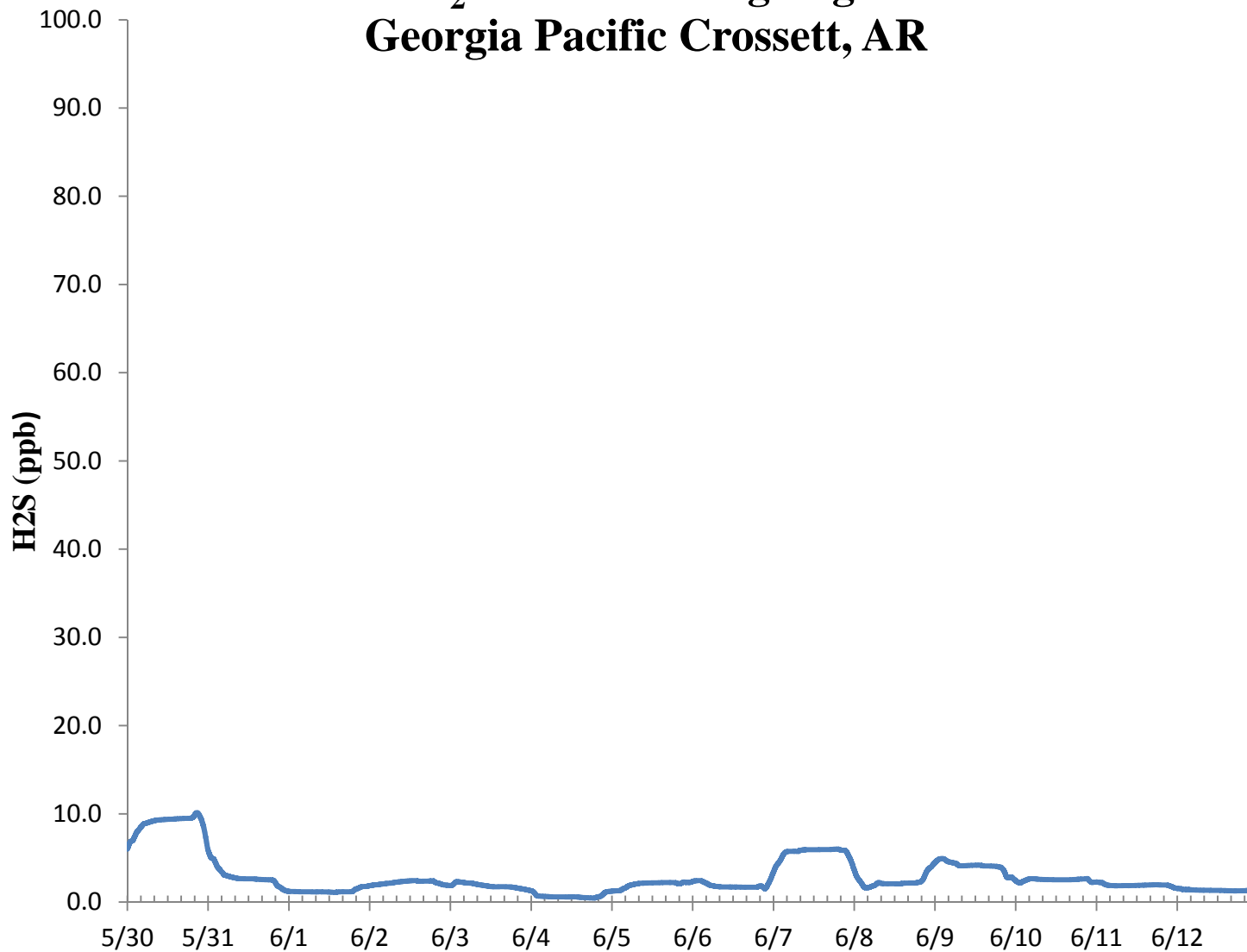
H₂S 30 Min Rolling Avg Georgia Pacific Crossett, AR



H₂S 8 Hr Rolling Avg Georgia Pacific Crossett, AR



H₂S 24 Hr Rolling Avg Georgia Pacific Crossett, AR



H₂S Assessment

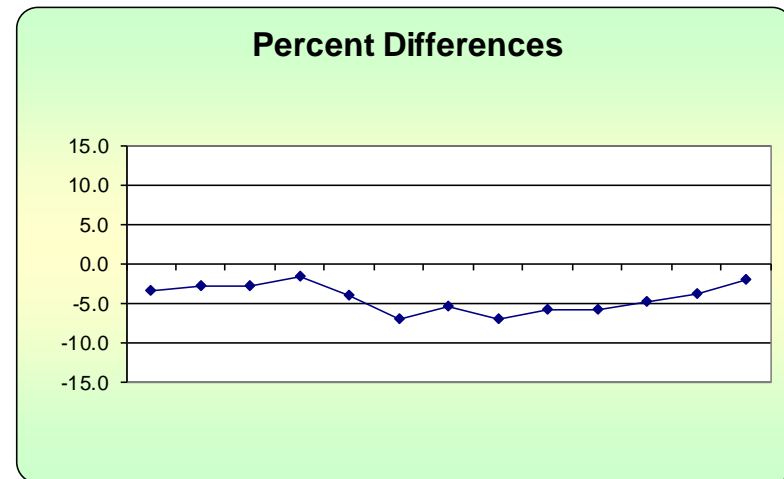
GP - Crossett, AR			Compound of Interest: H ₂ S			CV _{ub} (%)	Bias (%)	
Date	Meas Val (Y)	Input Val (X)	d (Eqn. 1)	25th Percentile	d ²	d	d ²	
5/30/2018 13:00	67.6	70.0	-3.4	-5.607	11.755	3.429	11.755	
5/31/2018 13:00	68.0	70.0	-2.9	75th Percentile	8.163	2.857	8.163	
6/1/2018 13:00	68.1	70.0	-2.7	-3.000	7.367	2.714	7.367	
6/2/2018 13:00	68.9	70.0	-1.6		2.469	1.571	2.469	
6/3/2018 13:00	67.2	70.0	-4.0		16.000	4.000	16.000	
6/4/2018 13:00	65.1	70.0	-7.0		49.000	7.000	49.000	
6/5/2018 13:00	66.3	70.0	-5.3		27.939	5.286	27.939	
6/6/2018 13:00	65.1	70.0	-7.0		49.000	7.000	49.000	
6/7/2018 13:00	66.0	70.0	-5.7		32.653	5.714	32.653	
6/8/2018 13:00	66.0	70.0	-5.7		32.653	5.714	32.653	
6/9/2018 13:00	66.6	70.0	-4.9		23.592	4.857	23.592	
6/10/2018 13:00	67.4	70.0	-3.7		13.796	3.714	13.796	
6/11/2018 13:00	68.6	70.0	-2.0		4.000	2.000	4.000	
6/12/2018 13:00	67.3	70.0	-3.9		14.878	3.857	14.878	

n	S_d	S_{d2}	Σ d 	"AB" (Eqn 4)
14	1.722	15.386	59.714	4.265
n-1	Σd	Σd²	Σ d ²	"AS" (Eqn 5)
13	-59.714	293.265	293.265	1.722

Bias (%) (Eqn 3)	Both Signs Positive
5.08	FALSE
Signed Bias (%)	Both Signs Negative
-5.08	TRUE

CV (%) (Eqn 2)	2.34
-----------------------	------

Upper Probability Limit	Lower Probability Limit
-0.89	-7.64



Meteorological Summary

