

December 6, 2018



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December 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 November 14, 2018 through November 27, 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 results for these zero checks are presented on the following page.



Date	Zero Check Response (ppb)
11/14/2018	-0.5
11/21/2018	-0.4

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 charts. All met parameters have 100% data capture for this report period, with the exception of precipitation. On November 27th TRC personnel were on-site to perform maintenance and cleaning of the tipping bucket, resulting in 15 minutes of invalid precipitation data.

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

Sincerely,

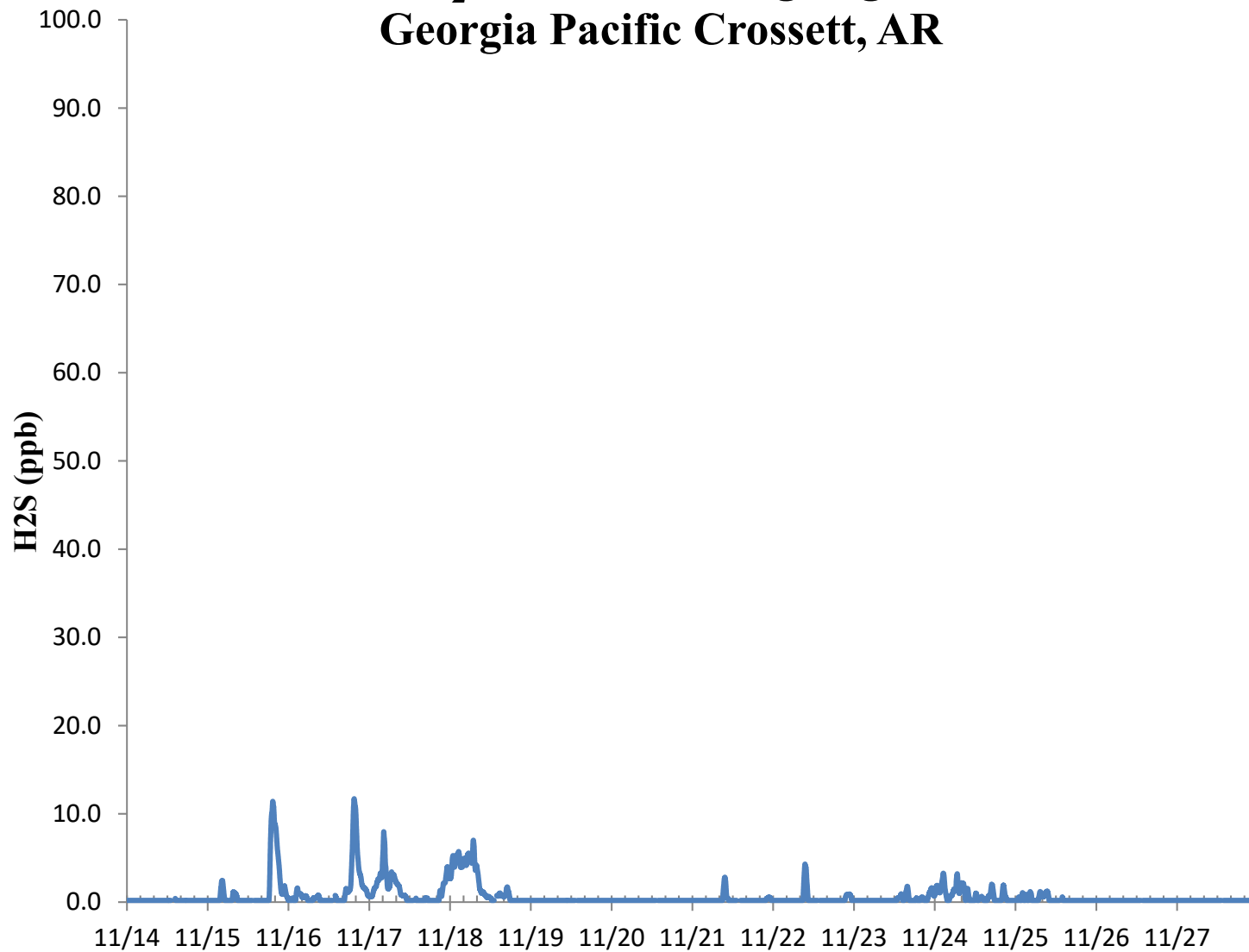


Jonathan Bowser
Manager, Air Quality and Meteorological Monitoring

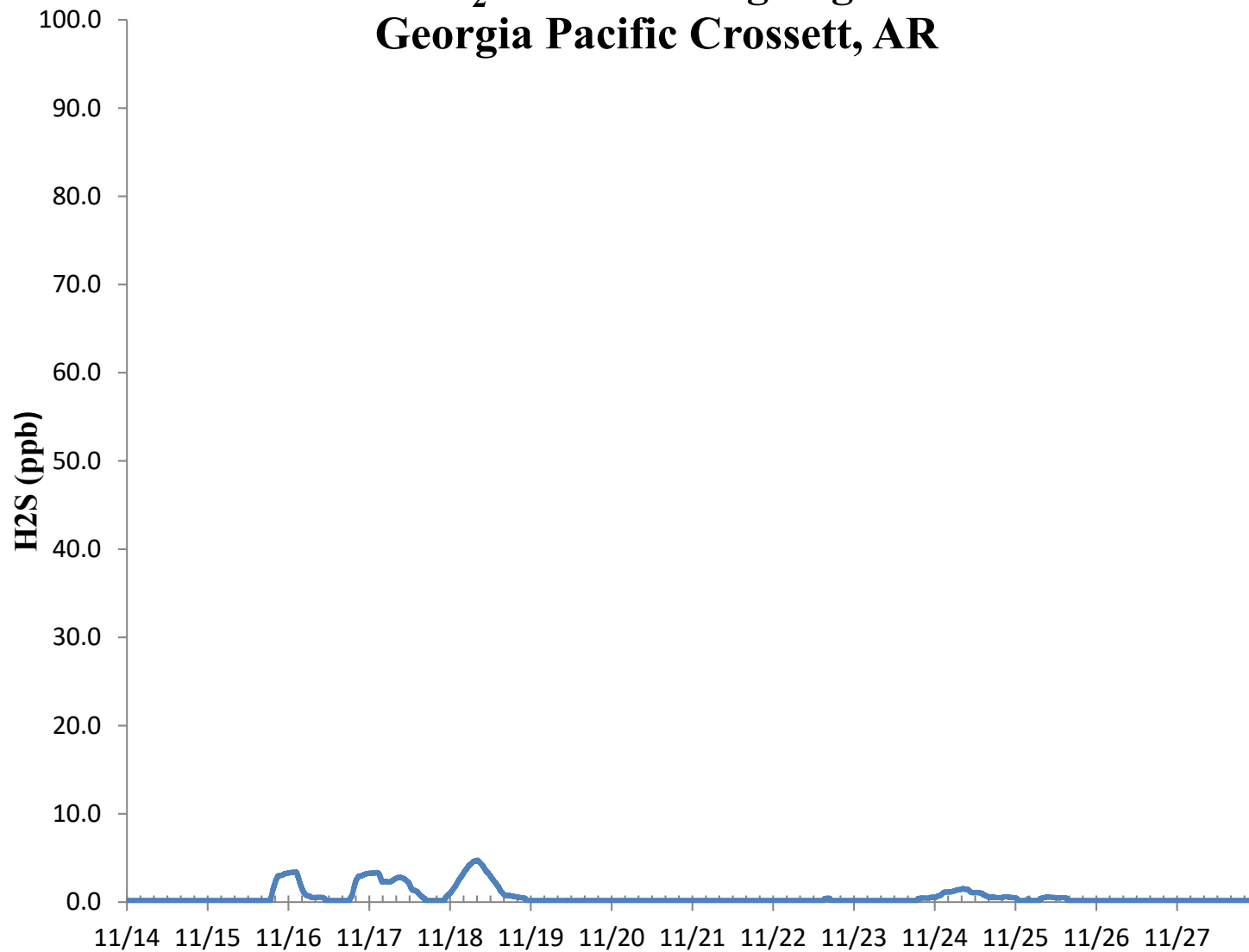
Air Measurements – Gainesville Office
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(352) 260-1162
Email: jbowser@trcsolutions.com

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

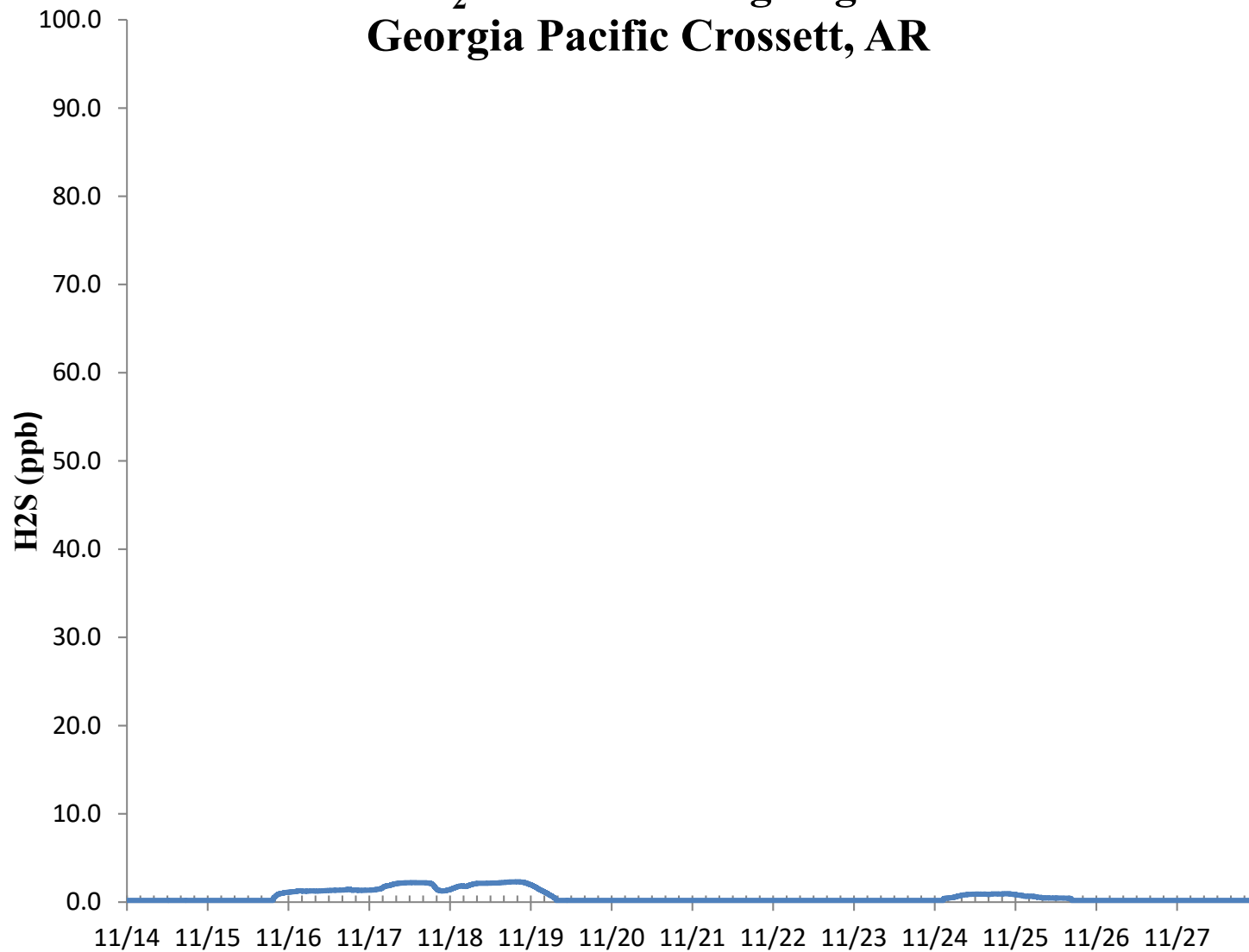
H₂S 30 Min Rolling Avg Georgia Pacific Crossett, AR



H₂S 8 Hr Rolling Avg Georgia Pacific Crossett, AR



H₂S 24 Hr Rolling Avg Georgia Pacific Crossett, AR



H₂S Assessment

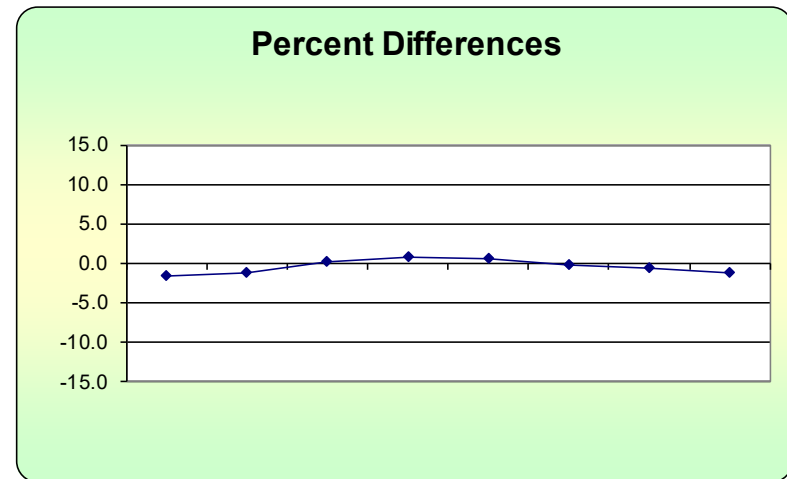
GP - Crossett, AR			Compound of Interest: H ₂ S			CV _{ub} (%)		Bias (%)	
Date	Meas Val (Y)	Input Val (X)	d (Eqn. 1)	25th Percentile	d ²	d	d ²		
11/14/2018 13:00	68.9	70.0	-1.6	-1.036	2.469	1.571	2.469		
11/15/2018 13:00	69.2	70.0	-1.1	75th Percentile	1.306	1.143	1.306		
11/16/2018 13:00	70.1	70.0	0.1	0.571	0.020	0.143	0.020		
11/17/2018 13:00	70.5	70.0	0.7		0.510	0.714	0.510		
11/18/2018 13:00	70.4	70.0	0.6		0.327	0.571	0.327		
11/19/2018 13:00	69.8	70.0	-0.3		0.082	0.286	0.082		
11/20/2018 13:00	69.6	70.0	-0.6		0.327	0.571	0.327		
11/21/2018 13:00	69.2	70.0	-1.1		1.306	1.143	1.306		
11/22/2018 13:00	69.5	70.0	-0.7		0.510	0.714	0.510		
11/23/2018 13:00	70.5	70.0	0.7		0.510	0.714	0.510		
11/24/2018 13:00	70.4	70.0	0.6		0.327	0.571	0.327		
11/25/2018 13:00	70.9	70.0	1.3		1.653	1.286	1.653		
11/26/2018 13:00	69.2	70.0	-1.1		1.306	1.143	1.306		
11/27/2018 13:00	69.5	70.0	-0.7		0.510	0.714	0.510		

n	S_d	S_{d2}	Σ d 	"AB" (Eqn 4)
14	0.894	0.702	11.286	0.806
n-1	Σd	Σd²	Σ d ²	"AS" (Eqn 5)
13	-3.286	11.163	11.163	0.399

Bias (%) (Eqn 3)	Both Signs Positive
0.99	FALSE
Signed Bias (%)	Both Signs Negative
+/-0.99	FALSE

CV (%) (Eqn 2)	1.21
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Upper Probability Limit	Lower Probability Limit
1.52	-1.99



Meteorological Summary

