TRC
Results you can rely on

6312 NW 18th Drive
Suite 100
Gainesville, FL 32653

352.378.0332 PHONE
352.378.0354 FAX

www.TRCsolutions.com

September 30, 2015

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,

Following is the biweekly data summary for the Georgia-Pacific (GP) hydrogen sulfide (H_2S) and meteorological monitoring program, at the GP Crossett mill, covering the calendar period of September 9th through September 22nd.

Summary of Results

Included in this report are three plots presenting H_2S 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.

Fourteen-day time series plots for all recorded meteorological (met) parameters are presented in the final table. All met parameters have 100% data capture for this report period.

There was a single occurrence of data loss during this two week period, in addition to those resulting from automated daily 1-point QC and weekly calibration checks. Annual maintenance and a thermocouple failure were responsible for an extended period of data loss of approximately 37 hours. Along with the replacement of the thermocouple, the sample pump was rebuilt and the SO_2 scrubber was replaced. The SO_2 scrubber takes approximately 24 hours to be conditioned, and a complete calibration was performed following the repairs and necessary conditioning. Results for all available automated daily 1-point QC checks fall within the acceptable range, indicating the H_2S monitor was operating in accordance with the QAPP.

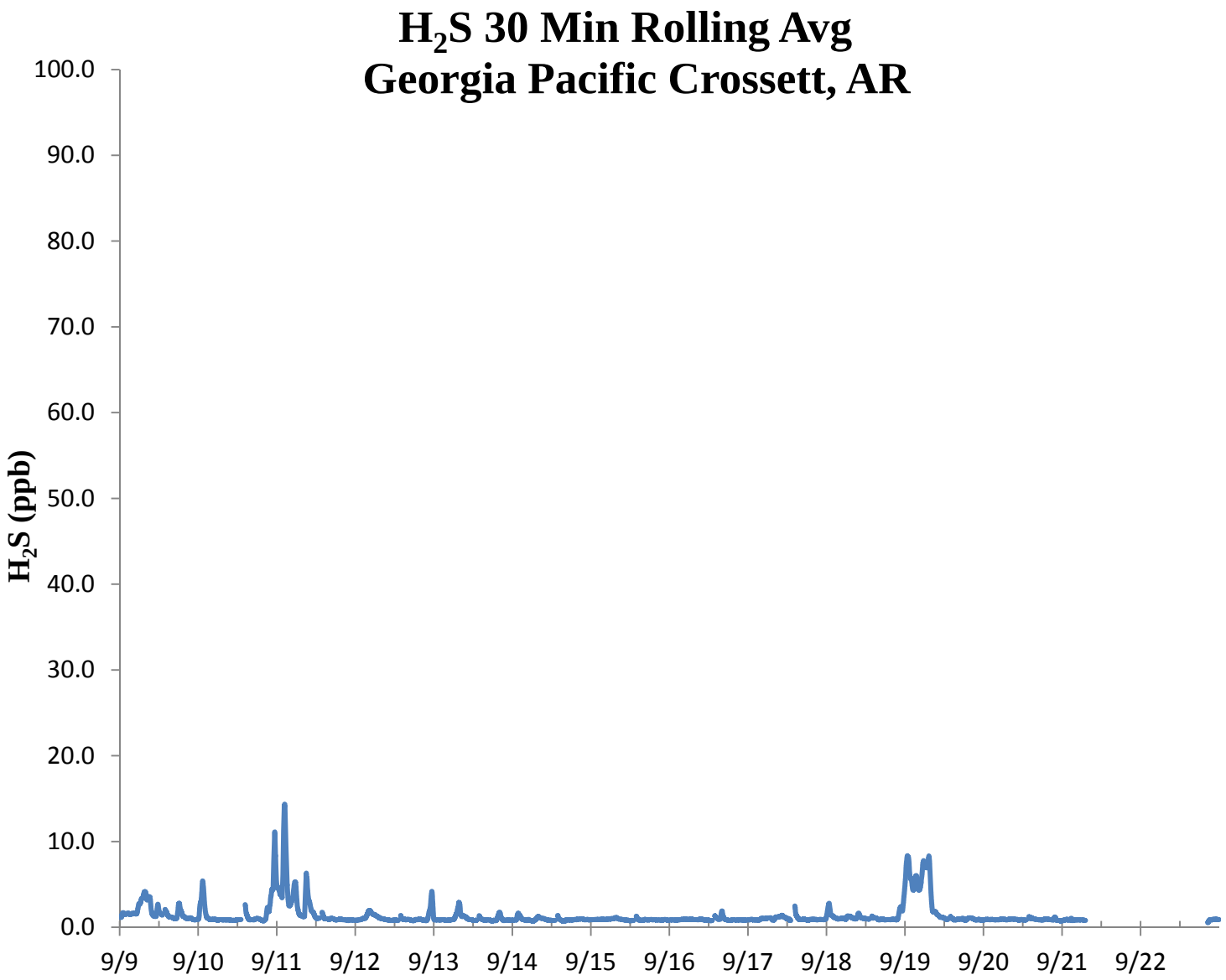
Please feel free to contact me if you have any questions or need any additional data.

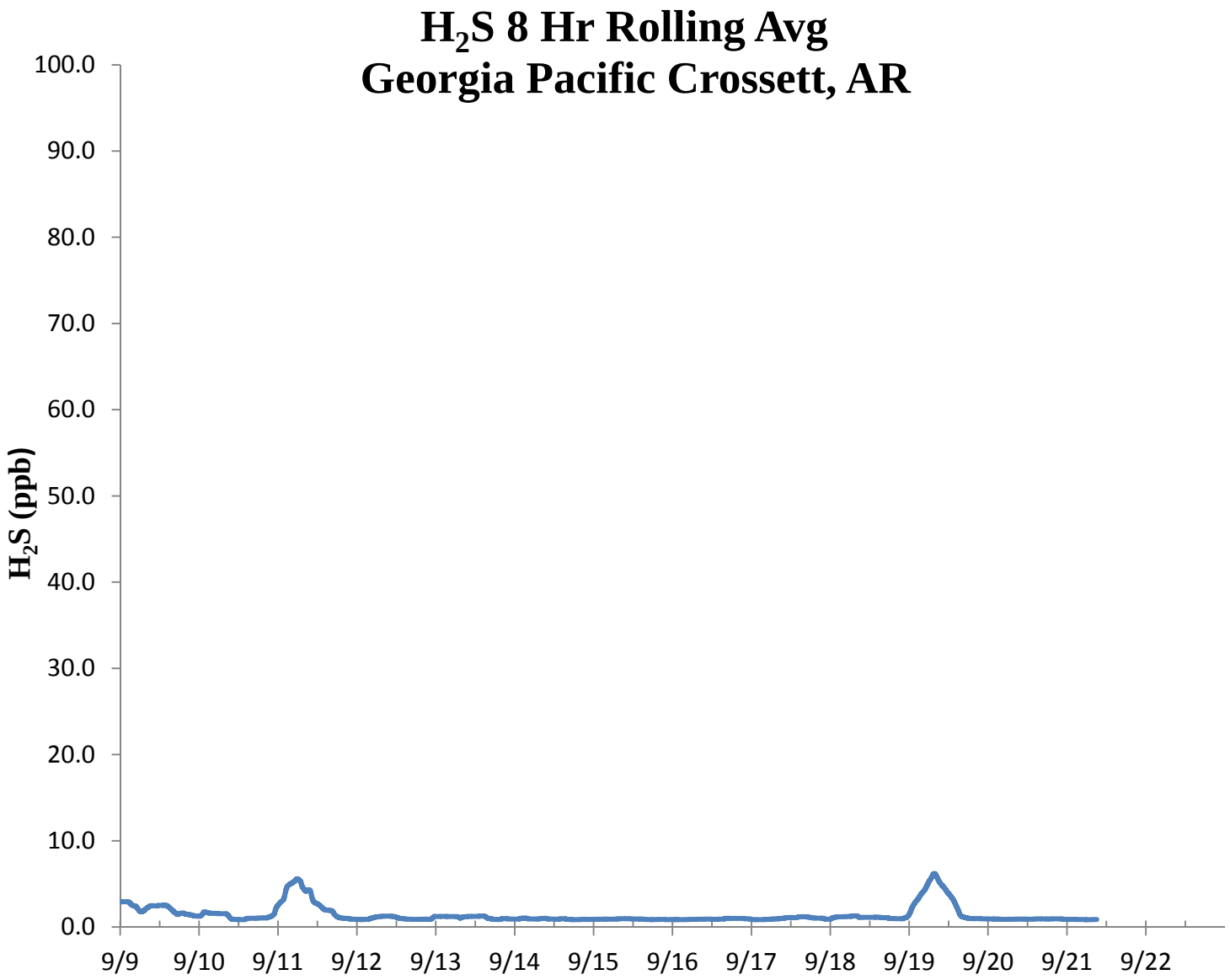
Sincerely,

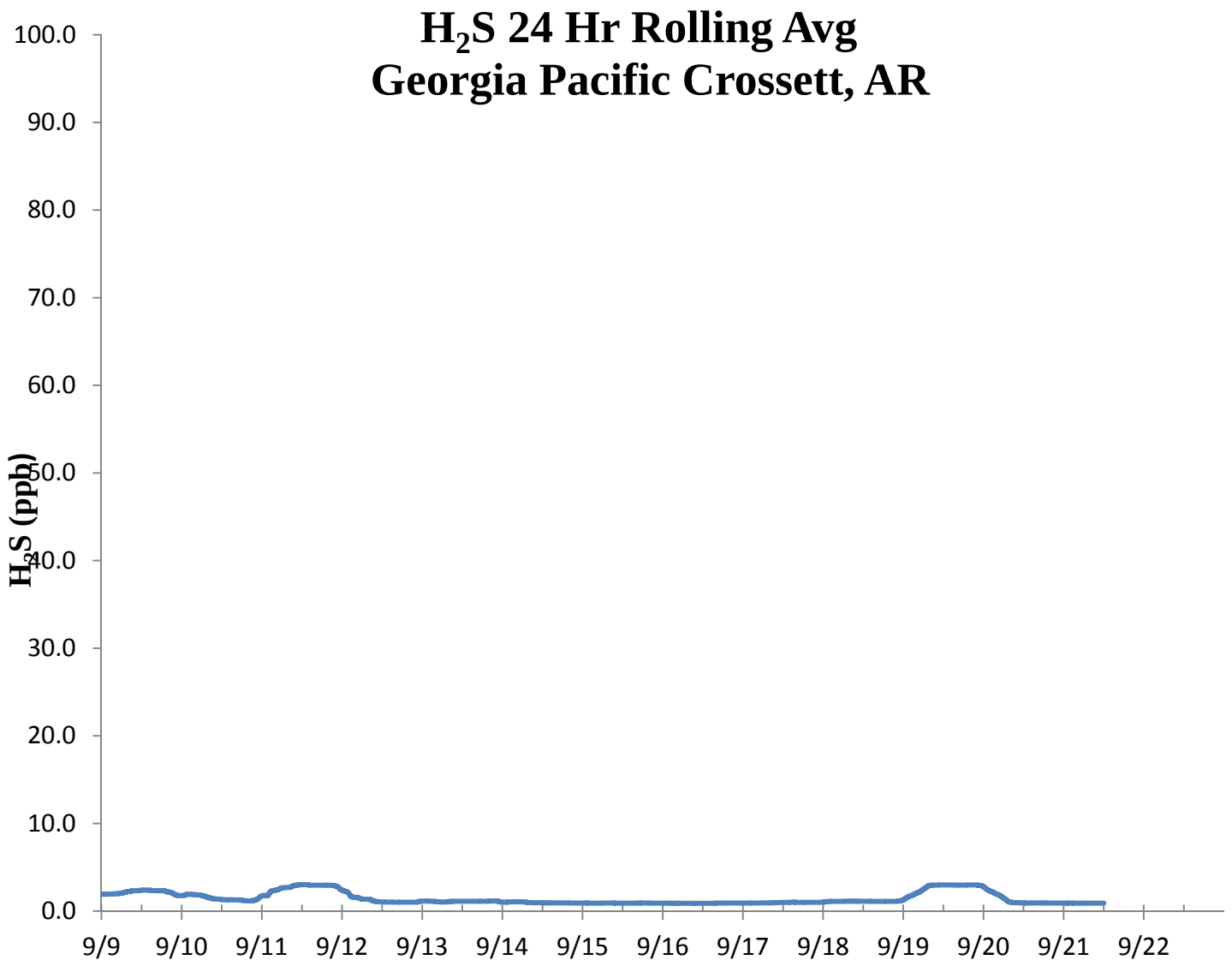
Jonathan Bowser
Manager, Air Quality and Meteorological Monitoring

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

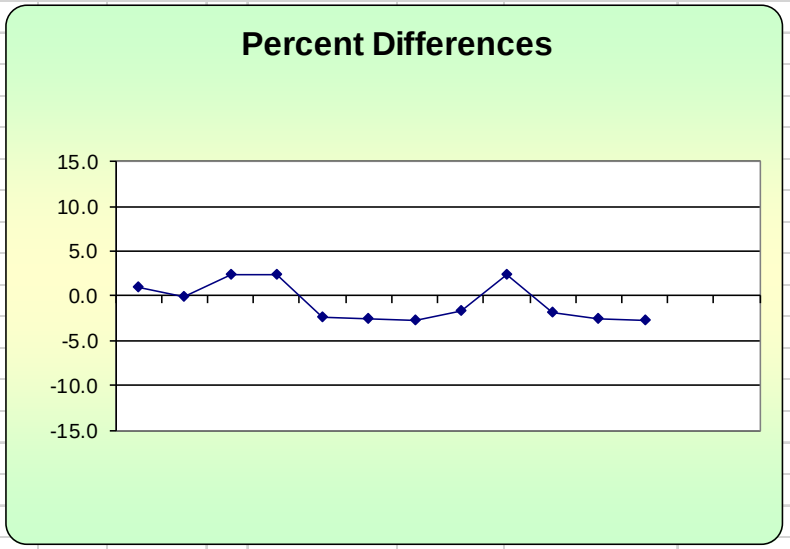

H2S 30 Min Rolling Avg
Georgia Pacific Crossett, AR
H2S (ppb)
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
9/9
9/10
9/11
9/12
9/13
9/14
9/15
9/16
9/17
9/18
9/19
9/20
9/21
9/22


H2S 8 Hr Rolling Avg
Georgia Pacific Crossett, AR
H2S (ppb)
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
9/9
9/10
9/11
9/12
9/13
9/14
9/15
9/16
9/17
9/18
9/19
9/20
9/21
9/22

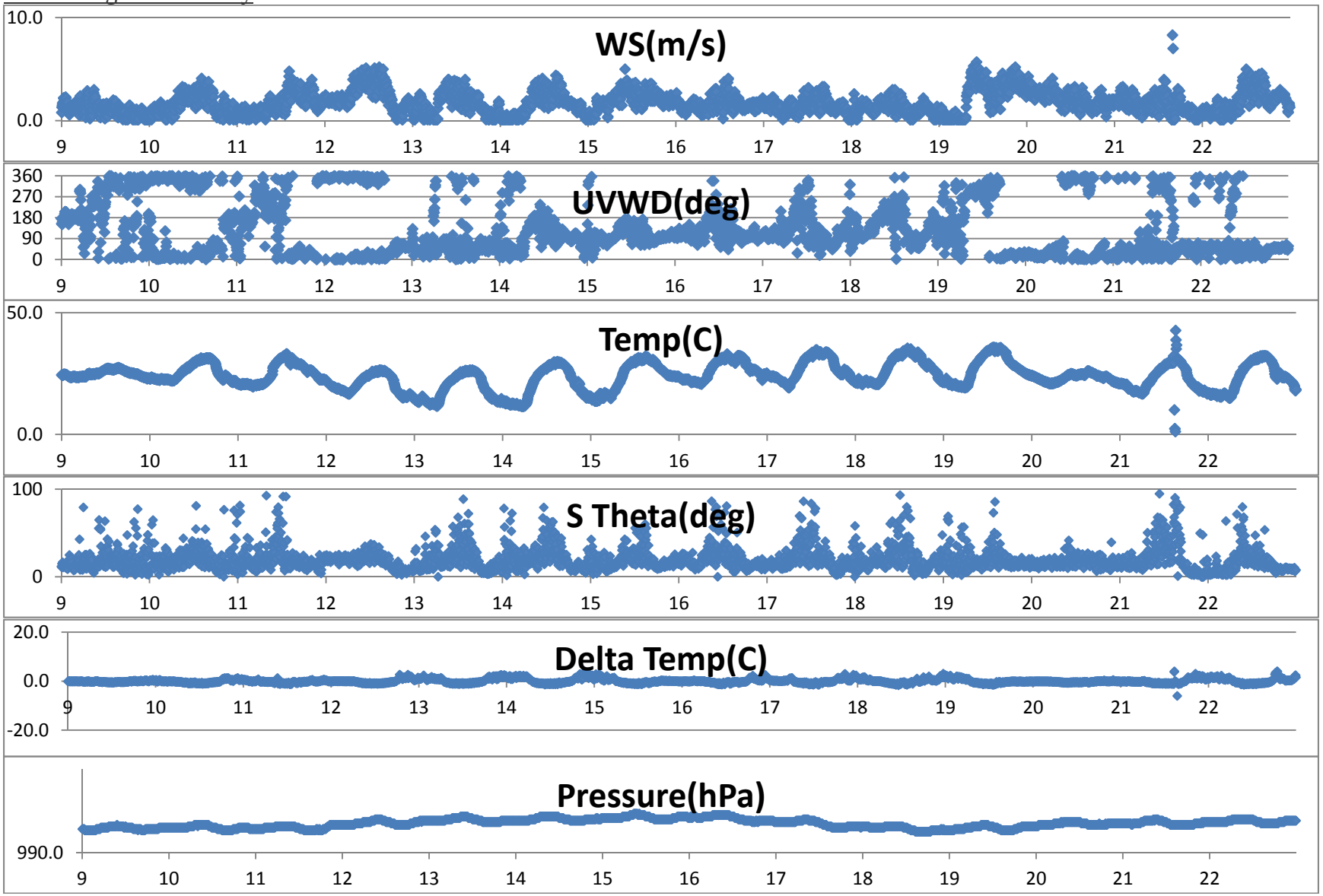

H2S 24 Hr Rolling Avg
Georgia Pacific Crossett, AR
H2S (ppb)
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
9/9
9/10
9/11
9/12
9/13
9/14
9/15
9/16
9/17
9/18
9/19
9/20
9/21
9/22

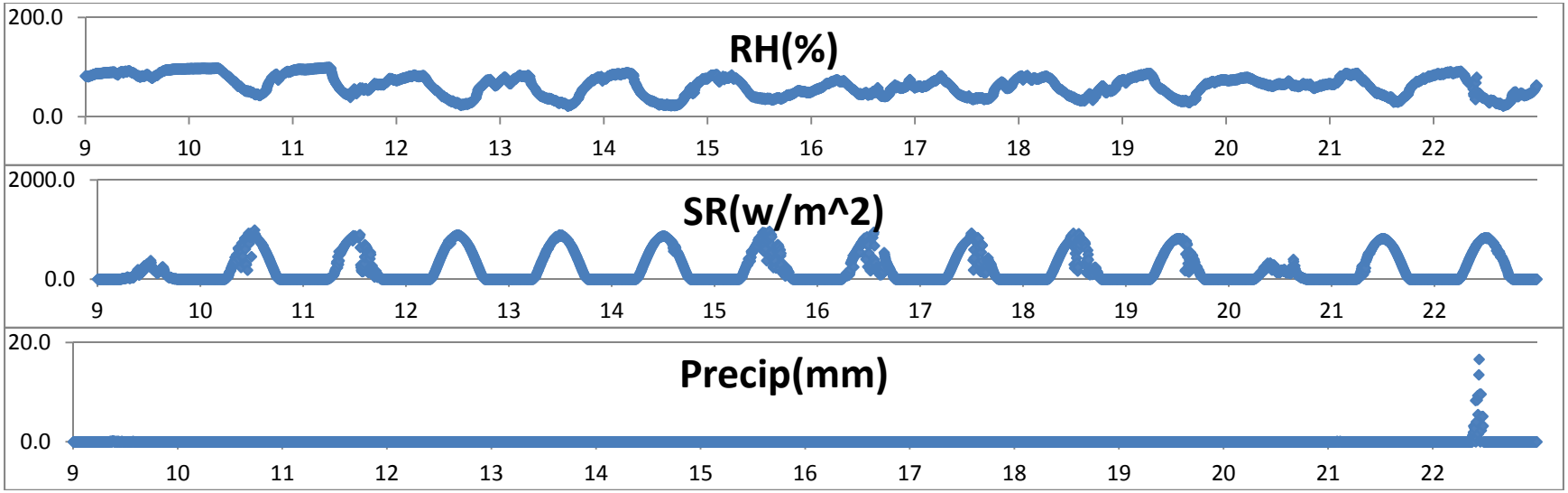
H_2S Assessment

GP - Crossett, AR			Constituent type: H_2S						CV_{ub} (%)			Bias (%)	
Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	25th Percentile	d^2	|d|	$\|d\|^2$						
9/9/2015 13:00	70.7	70.0	1.0	-2.571	1.000	1.000	1.000						
9/10/2015 13:00	69.9	70.0	-0.1	75th Percentile	0.020	0.143	0.020		n	S_d	S_{d2}	$\sum\|d\|$	"AB" (Eqn 4)
9/11/2015 13:00	71.7	70.0	2.4	1.321	5.898	2.429	5.898		12	2.178	2.451	24.857	2.071
9/12/2015 13:00	71.6	70.0	2.3		5.224	2.286	5.224		n-1	$\sum d$	$\sum d^2$	$\sum\|d\|^2$	"AS" (Eqn 5)
9/13/2015 13:00	68.3	70.0	-2.4		5.898	2.429	5.898		11	-8.571	58.286	58.286	0.786
9/14/2015 13:00	68.2	70.0	-2.6		6.612	2.571	6.612						
9/15/2015 13:00	68.1	70.0	-2.7		7.367	2.714	7.367					Bias (%) (Eqn 3)	Both Signs Positive
9/16/2015 13:00	68.8	70.0	-1.7		2.939	1.714	2.939					2.48	FALSE
9/17/2015 13:00	71.7	70.0	2.4		5.898	2.429	5.898		CV (%) (Eqn 2)			Signed Bias (%)	Both Signs Negative
9/18/2015 13:00	68.7	70.0	-1.9		3.449	1.857	3.449		3.06			+/-2.48	FALSE
9/19/2015 13:00	68.2	70.0	-2.6		6.612	2.571	6.612						
9/20/2015 13:00	68.1	70.0	-2.7		7.367	2.714	7.367		Upper Probability Limit			Lower Probability Limit	
									3.55			-4.98	



Meteorological Summary




200.0
RH(%)
0.0
9 10 11 12 13 14 15 16 17 18 19 20 21 22
2000.0
SR(w/m^2)
0.0
9 10 11 12 13 14 15 16 17 18 19 20 21 22
20.0
Precip(mm)
0.0
9 10 11 12 13 14 15 16 17 18 19 20 21 22