SGS GALSON

Mr. Dan Bigbee
EA Engineering
225 Schilling Circle
Suite 400
Hunt Valley, MD 21031

August 05, 2021

Account# 14881

Login# L542704

Dear Mr. Bigbee:

Enclosed are the analytical results for the samples received by our laboratory on July 29, 2021. All samples on the chain of custody were received in good condition unless otherwise noted. Any additional observations will be noted on the chain of custody.

Please contact client services at (888) 432-5227 if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson

Lisa Swab

Lisa Swab
Laboratory Director

Enclosure(s)

ED_006145_00000096-00001

Terms and Conditions & General Disclaimers

- This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

- Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Analytical Disclaimers

- Unless otherwise noted within the report, all quality control results associated with the samples were within established control limits or did not impact reported results.

- Note: The findings recorded within this report were drawn from analysis of the sample(s) provided to the laboratory by the Client (or a third party acting at the Client's direction). The laboratory does not have control over the sampling process, including but not limited to the use of field equipment and collection media, as well as the sampling duration, collection volume or any other collection parameter used by the Client. The findings herein constitute no warranty of the sample's representativeness of any sampled environment, and strictly relate to the samples as they were presented to the laboratory. For recommended sampling collection parameters, please refer to the Sampling and Analysis Guide at www.sgsgalson.com.

- Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

- The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).

- Unless otherwise noted within the report, results have not been blank corrected for any field blank or method blank data.

Accreditations SGS Galson holds a variety of accreditations and recognitions. Our quality management system conforms with the requirements of ISO/IEC 17025. Where applicable, samples may also be analyzed in accordance with the requirements of ELAP, NELAC, or LELAP under one of the state accrediting bodies listed below. Current Scopes of Accreditation can be viewed at http://www.sgsgalson.com in the accreditations section of the "About" page. To determine if the analyte tested falls under our scope of accreditation, please visit our website or call Client Services at (888) 432-5227.

National/International	Accreditation/Recognition	Lab ID#	Program/Sector
AIHA-LAP, LLC - IHLAP, ELLAP, EMLAP	ISO/IEC 17025 and USEPA NLLAP	Lab ID 100324	Industrial Hygiene, Environmental Lead, Environmental Microbiology

State	Accreditation/Recognition	Lab ID#	Program/Sector
New York (NYSDOH)	ELAP and NELAC (TNI)	Lab ID: 11626	Air Analysis, Solid and Hazardous Waste
New Jersey (NJDEP)	NELAC (TNI)	Lab ID: NY024	Air Analysis
Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials
Texas	Texas Dept. of Licensing and Regulation	Lab ID: 1042	Mold Analysis Laboratory license

Legend

< - Less than	mg - Milligrams	MDL - Method Detection Limit	ppb - Parts per Billion
> - Greater than	ug - Micrograms	NA - Not Applicable	ppm - Parts per Million
l - Liters	m3 - Cubic Meters	NS - Not Specified	ppbv - ppb Volume
LOQ - Limit of Quantitation	kg - Kilograms	ND - Not Detected	ppmv - ppm Volume
ft2 - Square Feet	cm2 - Square Centimeters	in2 - Square Inches	ng - Nanograms

LABORATORY ANALYSIS REPORT

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client : EA Engineering
Site : NS
Project No. : ALTEN ETHANOL PLANT FAST-TRACK AIR MONITORING
Date Sampled : 24-JUL-21 - 27-JUL-21
Date Received : 29-JUL-21

Account No.: 14881
Login No. : L542704
Date Analyzed : 03-AUG-21
Report ID : 1258143

Hydrogen Sulfide

Sample ID	Lab ID	Time minutes	Total ug	ppm
1 7/24/2021	L542704-25	1435	1.7	0.011
2 7/24/2021	L542704-26	1439	11	0.068
3 7/24/2021	L542704-27	1440	9.8	0.069
4 7/24/2021	L542704-28	1440	6.1	0.043
5 7/24/2021	L542704-29	1438	4.8	0.034
6 7/24/2021	L542704-30	1439	<1.2	<0.0077
1 7/25/2021	L542704-31	1409	<1.2	<0.0091
2 7/25/2021	L542704-32	1415	1.3	0.0097
3 7/25/2021	L542704-33	1429	6.7	0.050
4 7/25/2021	L542704-34	1432	14	0.10
5 7/25/2021	L542704-35	1435	3.8	0.028
6 7/25/2021	L542704-36	1435	<1.2	<0.0089
1 7/26/2021	L542704-37	1399	2.2	0.017
2 7/26/2021	L542704-38	1386	11	0.086
3 7/26/2021	L542704-39	1380	3.6	0.028
4 7/26/2021	L542704-40	1380	6.9	0.053

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 1.2 ug
Analytical Method : In-house: WET-SOP-13; Colorimetric
Collection Media : Radiello 170

Submitted by: BMS
Date : 05-AUG-21
Supervisor : JGC

Approved by: DMM

LABORATORY ANALYSIS REPORT

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Account No.: 14881
Login No. : L542704
Date Analyzed : 03-AUG-21
Report ID : 1258143

Hydrogen Sulfide

Sample ID	Lab ID	Time minutes	Total ug	ppm
5 7/26/2021	L542704-41	1373	11	0.088
6 7/26/2021	L542704-42	1370	1.8	0.014
1 7/27/2021	L542704-43	1450	2.5	0.017
2 7/27/2021	L542704-44	1450	13	0.086
3 7/27/2021	L542704-45	1451	5.0	0.034
4 7/27/2021	L542704-46	1453	2.3	0.016
5 7/27/2021	L542704-47	1452	5.5	0.038
6 7/27/2021	L542704-48	1450	<1.2	<0.0082

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 1.2 ug
Analytical Method : In-house: WET-SOP-13; Colorimetric
Collection Media : Radiello 170

Submitted by: BMS
Date : 05-AUG-21
Supervisor : JGC

Approved by: DMM

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Client : EA Engineering
Site : NS
Project No. : ALTEN ETHANOL PLANT FAST-TRACK AIR MONITORING
Date Sampled : 24-JUL-21 - 27-JUL-21
Date Received : 29-JUL-21

Account No.: 14881
Login No. : L542704
Date Analyzed : 05-AUG-21
Report ID : 1258652

Ammonia

Sample ID	Lab ID	Time minutes	Total ug	Conc mg/m3	ppm
1 7/24/2021	L542704-1	1435	<4.7	<0.11	<0.16
2 7/24/2021	L542704-2	1439	<4.7	<0.11	<0.16
3 7/24/2021	L542704-3	1440	7.5	0.18	0.26
4 7/24/2021	L542704-4	1440	19	0.47	0.68
5 7/24/2021	L542704-5	1438	17	0.41	0.59
6 7/24/2021	L542704-6	1439	12	0.30	0.42
1 7/25/2021	L542704-7	1409	9.8	0.24	0.35
2 7/25/2021	L542704-8	1415	5.1	0.12	0.18
3 7/25/2021	L542704-9	1429	<4.7	<0.11	<0.16
4 7/25/2021	L542704-10	1432	27	0.65	0.94
5 7/25/2021	L542704-11	1435	9.4	0.23	0.33
6 7/25/2021	L542704-12	1435	7.3	0.18	0.25
1 7/26/2021	L542704-13	1399	6.6	0.16	0.24
2 7/26/2021	L542704-14	1386	5.4	0.14	0.20
3 7/26/2021	L542704-15	1380	5.3	0.13	0.19
4 7/26/2021	L542704-16	1380	23	0.57	0.82

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 5.0 ug
Analytical Method : mod. OSHA ID-188/ID-164; ISE
Collection Media : Assay 584

Submitted by: BMS
Date : 05-AUG-21
Supervisor : JGC

Approved by: DMM

LABORATORY ANALYSIS REPORT

6601 Kirkville Road
East Syracuse, NY 13057
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FAX: (315) 437-0571
www.sgsgalson.com

Client : EA Engineering
Site : NS
Project No. : ALTEN ETHANOL PLANT FAST-TRACK AIR MONITORING
Date Sampled : 24-JUL-21 - 27-JUL-21
Date Received : 29-JUL-21

Account No.: 14881
Login No. : L542704
Date Analyzed : 05-AUG-21
Report ID : 1258652

Ammonia

Sample ID	Lab ID	Time minutes	Total ug	Conc mg/m3	ppm
5 7/26/2021	L542704-17	1373	16	0.42	0.60
6 7/26/2021	L542704-18	1370	11	0.29	0.42
1 7/27/2021	L542704-19	1450	9.0	0.22	0.31
2 7/27/2021	L542704-20	1450	12	0.28	0.40
3 7/27/2021	L542704-21	1451	8.9	0.21	0.30
4 7/27/2021	L542704-22	1453	6.7	0.16	0.23
5 7/27/2021	L542704-23	1452	7.4	0.18	0.25
6 7/27/2021	L542704-24	1450	9.4	0.22	0.32

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 5.0 ug
Analytical Method : mod. OSHA ID-188/ID-164; ISE
Collection Media : Assay 584

Submitted by: BMS
Date : 05-AUG-21
Supervisor : JGC

Approved by: DMM

LABORATORY FOOTNOTE REPORT

GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client Name : EA Engineering
Site :
Project No. : ALTEN ETHANOL PLANT FAST-TRACK AIR MONITORING

Date Sampled : 24-JUL-21 - 27-JUL-21 Account No.: 14881
Date Received: 29-JUL-21 Login No. : L542704
Date Analyzed: 03-AUG-21 - 05-AUG-21

L542704 (Report ID: 1258143):
SOPs: WET-SOP-13(8)
The sampling rates used in the concentration calculations are based upon the temperatures provided with the samples.

L542704 (Report ID: 1258143):
Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Hydrogen Sulfide	+/-4.6%	112%

L542704 (Report ID: 1258652):
SOPs: ic-assay(22)
Total ug corrected for a desorption efficiency of 106%.

L542704 (Report ID: 1258652):
Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Ammonia	+/-19.7%	98.3%

L542704

SGS GALSON

CHAIN OF CUSTODY

57-61

1Z6358040197167013
Date:07/29/21
Shipper:UPS
Initials:BGF
Prep:UNKNOWN

Client Account No: 14881

CS Rep: BHONEYCUTT

Invoice To: Mr. Dan Bigbee
Company Name: EA Engineering
Address 1: 225 Schilling Circle
Address 2: Suite 400
City, State Zip: Hunt Valley, MD 20131
Phone No.: 410-584-7000
Email Address: dbigbee@eaest.com, lincolnap@eaest.com

☑ Samples submitted using the FreeSamplingBadges™ Program

Project: AltEn Ethanol Plant Fast-Track Air Monitoring

Sample ID	Date Sampled	Collection Medium	Sample Duration	Sample Unit	Analysis Requested	Method Reference
1	7/24/2021	Assay N584 Ammonia Badge	1435	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
2	7/24/2021	Assay N584 Ammonia Badge	1439	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
3	7/24/2021	Assay N584 Ammonia Badge	1440	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
4	7/24/2021	Assay N584 Ammonia Badge	1440	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
5	7/24/2021	Assay N584 Ammonia Badge	1438	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
6	7/24/2021	Assay N584 Ammonia Badge	1439	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
1	7/25/2021	Assay N584 Ammonia Badge	1409	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
2	7/25/2021	Assay N584 Ammonia Badge	1415	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
3	7/25/2021	Assay N584 Ammonia Badge	1429	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
4	7/25/2021	Assay N584 Ammonia Badge	1432	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
5	7/25/2021	Assay N584 Ammonia Badge	1435	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
6	7/25/2021	Assay N584 Ammonia Badge	1435	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
1	7/26/2021	Assay N584 Ammonia Badge	1399	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
2	7/26/2021	Assay N584 Ammonia Badge	1386	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
3	7/26/2021	Assay N584 Ammonia Badge	1380	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
4	7/26/2021	Assay N584 Ammonia Badge	1380	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
5	7/26/2021	Assay N584 Ammonia Badge	1373	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
6	7/26/2021	Assay N584 Ammonia Badge	1370	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE

Chain of Custody	Name and Signature	Date and Time
Relinquished By:	Kent Dixon / EA	28 Jul 21 / 1630
Received By:	Brett Grenert-Fischer	7/29/21 1032

SGS GALSON

CHAIN OF CUSTODY

Sample ID	Date Sampled	Collection Medium	Sample Duration	Sample Unit	Analysis Requested	Method Reference
1	7/27/2021	Assay N584 Ammonia Badge	1450	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
2	7/27/2021	Assay N584 Ammonia Badge	1450	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
3	7/27/2021	Assay N584 Ammonia Badge	1451	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
4	7/27/2021	Assay N584 Ammonia Badge	1453	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
5	7/27/2021	Assay N584 Ammonia Badge	1452	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE
6	7/27/2021	Assay N584 Ammonia Badge	1450	minutes	Ammonia	mod. OSHA ID-188/ID-164; ISE

Chain of Custody **Name and Signature** **Date and Time**

Relinquished By: Kent Dixon/FA Kent Dix 28Jul21/1630

Received By: Brett Grenert-Fischer Brett Grenert-Fischer 7/29/21 1032

SGS GALSON

CHAIN OF CUSTODY

Client Account No:
14881

CS Rep:
BHONEYCUTT

Invoice To: Mr. Dan Bigbee
Company Nam EA Engineering
Address 1: 225 Schilling Circle
Address 2: Suite 400
City, State Zip Hunt Valley, MD 20131
Phone No.: 410-584-7000
Email Address dbigbee@eaest.com
lincolnap@eaest.com

☑ Samples submitted using the FreeSamplingBadges™ Program

Project: AltEn Ethanol Plant Fast-Track Air Monitoring

Sample ID	Date Sampled	Collection Medium	Sample Duration	Sample Unit	Avg - Temperature	Unit	Analysis Requested	Method Reference
1	7/24/2021	Radiello Supelco RAD170	1435	minutes	81	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
2	7/24/2021	Radiello Supelco RAD170	1439	minutes	81	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
3	7/24/2021	Radiello Supelco RAD170	1440	minutes	81	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
4	7/24/2021	Radiello Supelco RAD170	1440	minutes	81	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
5	7/24/2021	Radiello Supelco RAD170	1438	minutes	81	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
6	7/24/2021	Radiello Supelco RAD170	1439	minutes	81	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
1	7/25/2021	Radiello Supelco RAD170	1409	minutes	73	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
2	7/25/2021	Radiello Supelco RAD170	1415	minutes	73	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
3	7/25/2021	Radiello Supelco RAD170	1429	minutes	73	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
4	7/25/2021	Radiello Supelco RAD170	1432	minutes	73	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
5	7/25/2021	Radiello Supelco RAD170	1435	minutes	73	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
6	7/25/2021	Radiello Supelco RAD170	1435	minutes	73	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
1	7/26/2021	Radiello Supelco RAD170	1399	minutes	73	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
2	7/26/2021	Radiello Supelco RAD170	1386	minutes	73	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
3	7/26/2021	Radiello Supelco RAD170	1380	minutes	73	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
4	7/26/2021	Radiello Supelco RAD170	1380	minutes	73	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
5	7/26/2021	Radiello Supelco RAD170	1373	minutes	73	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
6	7/26/2021	Radiello Supelco RAD170	1370	minutes	73	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric

Chain of Custody	Name and Signature	Date and Time
Relinquished By:	Kent Dixon/EA	28Jul21/1630
Received By:	Brett Grenert-Fischer	7/29/21 1032

SGS GALSON

CHAIN OF CUSTODY

Sample ID	Date Sampled	Collection Medium	Sample Time	Sample Unit	Sample Time		Analysis Requested	Method Reference
1	7/27/2021	Radiello Supelco RAD170	1450	minutes	83	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
2	7/27/2021	Radiello Supelco RAD170	1450	minutes	83	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
3	7/27/2021	Radiello Supelco RAD170	1451	minutes	83	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
4	7/27/2021	Radiello Supelco RAD170	1453	minutes	83	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
5	7/27/2021	Radiello Supelco RAD170	1452	minutes	83	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric
6	7/27/2021	Radiello Supelco RAD170	1450	minutes	83	F	Hydrogen Sulfide	In-house: WET-SOP-13; Colorimetric

Chain of Custody	Name and Signature	Date and Time
Relinquished By: Kent Dixon	Kent Dixon	28 Jul 21 1630
Received By: Brett Grenert-Fischer	Brett Grenert-Fischer	7/29/21 1032