Sent via e-mail only

Hanson Aggregates Pennsylvania LLC
7660 Imperial Way
Allentown, PA 18195-1040
Tel 610-366-4600
Fax 610-871-5994

November 4, 2022

Richard E. Tallman, P.E.
Pottsville District Mining Office
Pennsylvania Department of Environmental Protection
5 West Laurel Boulevard
Pottsville, PA 17901

Re: Limited Activity Based Sampling Data – October 11, 2022 Events 2 & 5
Rock Hill Quarry
Hanson Aggregates Pennsylvania LLC
SMP No. 7974SM1
East Rockhill Township, Bucks County, PA

Mr. Tallman:

Enclosed are the results of Hanson's limited activity based sampling events 2 & 5 at the Rock Hill Quarry on October 11, 2022, performed in accordance with the Department's February 28, 2022 approval letter, as well as the conditions outlined in the Department's September 1, 2022 letter. The attachments include laboratory analysis of samples collected on October 11, 2022, meteorological data collected from the Quarry weather station from October 8, 2022 through October 11, 2022, and GPS vehicle tracking data logs for equipment used during the limited activity event.

As required by the Department, no precipitation occurred at the Quarry for seventy-two (72) consecutive hours prior to initiating sampling. Note that while the meteorological data indicates that minimal precipitation briefly occurred at the Quarry at approximately 2:11 AM on October 8, 2022, the data also shows that no further precipitation occurred at the Quarry for the subsequent seventy-two (72) hours prior to the beginning of sampling at approximately 7:00 AM on October 11, 2022.

Please note that during the sampling event, the generator at monitoring station 3 (M3) failed. Hanson quickly replaced the generator at M3 with that from monitoring station 8 (M8) and thereafter used a battery operated pump at M8 for the rest of the event. Both M3 and M8 are upwind monitors and, therefore, neither would be likely to detect any naturally occurring asbestos or elongate mineral particles attributed to the site activity. For a more complete explanation, please see Attachment 4 (Memo of Compliance Management International).

Hanson remains committed to working with the Department to allow the removal of the Cessation Order so that quarrying activities can resume at the Rock Hill Quarry.

Regards,

Andrew J. Gutshall, P.G.
Area Environmental Manager

encl: as stated

cc: John Stefanko, PADEP (e-mail only)
Daniel Sammarco, P.E., PADEP (e-mail only)
Randy R. Shustack, PADEP (e-mail only)
Michael P. Kutney, P.G., PADEP (e-mail only)
Amiee Bollinger, PADEP (e-mail only)
Anthony Lutkus, PADEP (e-mail only)
James Rebarchak, PADEP (e-mail only)
Sachin Shankar, P.E., PADEP (e-mail only)
Jillian Gallagher, PADEP (e-mail only)
Ashley Davis, PADEP (e-mail only)
Robert Fogel, PADEP (e-mail only)
Neil Shader, PADEP (e-mail only)
Virginia Nurk, PADEP (e-mail only)
Craig Lambeth, Esq., PADEP (e-mail only)
Marianne Morano, East Rockhill Township (e-mail only)
County of Bucks (e-mail only)
Rockhill Environmental Preservation Alliance (e-mail only)
Julie Goodman, PhD, Gradient Corp. (e-mail only)
Kelly Bailey, CIH, KBC LLC (e-mail only)
Bryan Bandli, PhD, RJ Lee Group (e-mail only)
Matthew Weikel, P.G., EARTHRES (e-mail only)
Joe Kim, P.E., EARTHRES (e-mail only)
Kristian Witt, CMI (e-mail only)
Mark E. Kendrick, Hanson (e-mail only)
Michael C. Lewis, CHMM, Hanson (e-mail only)
Timothy S. Jacobs, P.E., Hanson (e-mail only)
Frank Tedesco, Hanson (e-mail only)
David A. Assalone, Esq., Hanson (e-mail only)
Robert, J. Schena, Esq., Fox Rothschild LLP (e-mail only)
Environmental File

Attachment 1
Laboratory Analysis

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

PRIVILEGED AND CONFIDENTIAL

November 3, 2022,

Robert Schena
Fox Rothschild LLP
2700 Kelly Road, Suite 300
Warrington, PA 18976

RE: Air Sample Analyses
RJ Lee Group Project Number: LLH901997

Mr. Schena,

RJ Lee Group (RJLG) has analyzed eighteen (18) samples, including two (2) blank filter cassettes, collected by Compliance Management International on October 11, 2022. The samples were received in good condition via FedEx on October 14, 2022. The samples were analyzed using ISO method 10312 modified per OSWER Directive #9200.0-68 to include fibers ≥0.5 µm long and ≥3:1 aspect ratio.

Figure 1 shows the location of the sampling sites on a map of the Rock Hill quarry site as well as the wind direction (as recorded by Compliance Management International) during the sampling event.

Of the eighteen samples analyzed, no countable structures (≥0.5 µm long, ≥3:1 aspect ratio) were detected in seventeen of the samples. A single amphibole structure (Figure 2) was observed during the analysis of sample M6L (3181704) collected at site location M6. The structure is 3.7 µm long and 0.4 µm wide (aspect ratio 9.25) and does not have characteristics of asbestiform morphology. The concentration calculated from this analysis is 0.001 fibers/cc and is 10 times lower than the proposed action limit of 0.01 fibers/cc.

No countable structures were observed on either of the analyzed field blanks.

The laboratory analysis report is attached for reference.

Table 1 provides a listing of the total number of grid openings analyzed and grid opening areas for each analyzed sample.

If you have any questions, please do not hesitate to contact me directly.

Sincerely,

Bryan Bandli, Ph.D.
Principal Investigator
bbandli@rjleegroup.com

Table 1. Grid opening areas and grid openings analyzed.

Client Sample Number	RJLG Sample ID	Grid Opening Area (mm^2)	Grid Openings analyzed
M1H	3181689	0.00939566	40
M2H	3181690	0.00939566	40
M3H	3181691	0.00939566	40
M4H	3181692	0.00939566	40
M5H	3181693	0.00939566	40
M6H	3181694	0.00939566	40
M7H	3181695	0.00939566	40
M8H	3181696	0.00939566	80
M1L	3181697	0.00939566	40
FB	3181698	0.00939566	40
LB	3181699	0.00939566	40
M2L	3181700	0.00939566	40
M3L	3181701	0.00939566	40
M4L	3181702	0.00939566	40
M5L	3181703	0.00939566	40
M6L	3181704	0.00939566	40
M7L	3181705	0.00939566	40
M8L	3180706	0.00939566	40

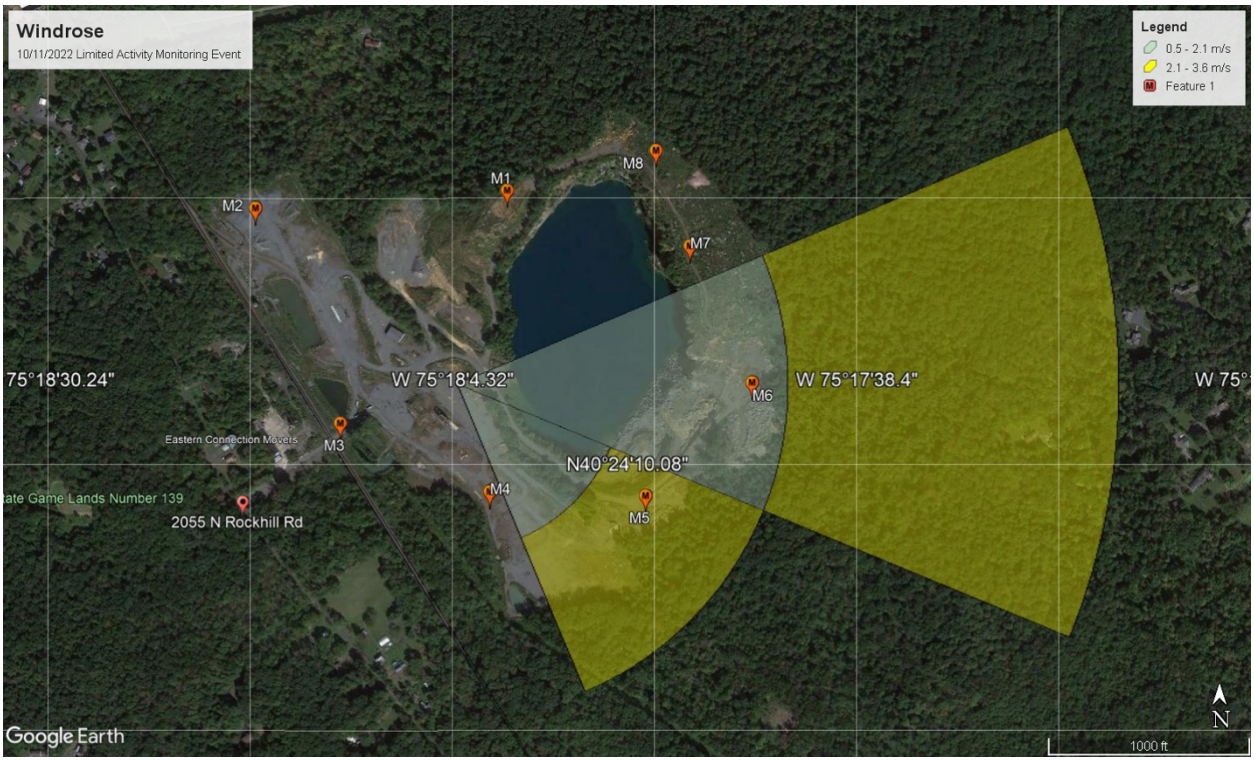

Figure 1. Rock Hill quarry site map with October 11, 2022, windrose diagram and sample collection locations indicated.

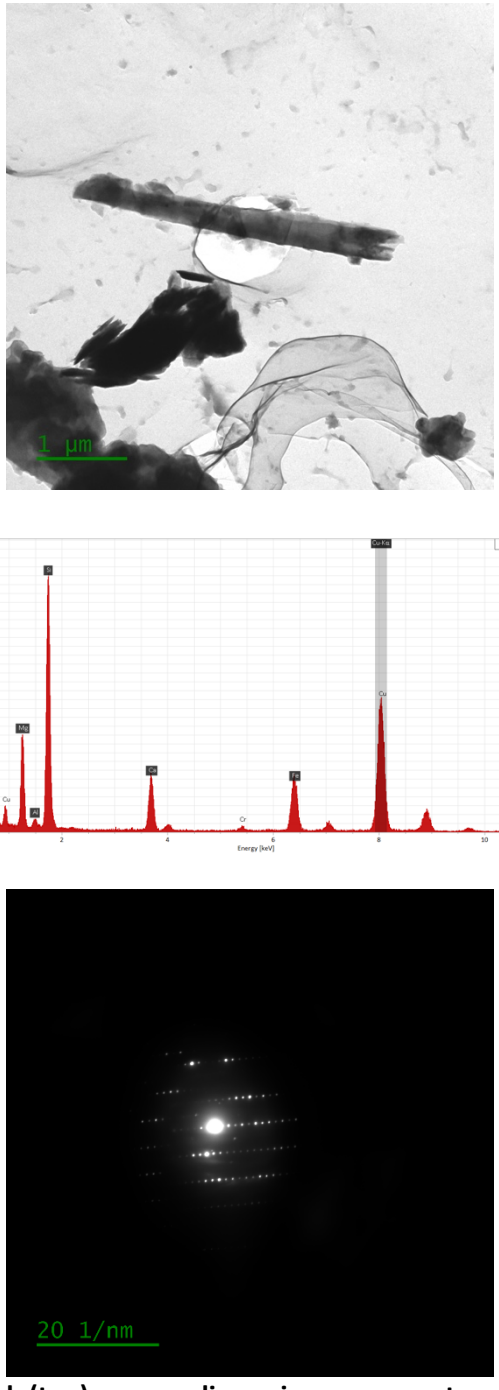

Figure 2. Electron micrograph (top), energy dispersive x-ray spectrum (middle) and selected area electron diffraction pattern (bottom) from actinolite structure observed in sample M6L (3181704) collected at site location M6. The structure measures 3.7 µm long and 0.4 µm wide (aspect ratio 9.25)

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee Group, Inc
800 Presque Isle Dr.
Pittsburgh PA 15239
Tel: (724) 325-1776 | Fax (724) 733-1799

Final Laboratory Report

TEM ISO Analysis

Mr. Robert Schena
Fox Rothschild LLP
747 Constitution Drive
Suite 100
Exton, PA 19341
US

Report Date:	10/25/2022
Sample Receipt Date:	10/14/2022
RJ Lee Group Job No.:	LLH901997-39
Authorization/P.O. No.:	
Samples Received:	18
Client Job No.:	

ISO 10312, 2nd Edition 2019

TABLE 1 – Structures Length ≥0.5µm, Length:Width Aspect Ratio ≥3:1

Client Sample Number	RJLG Sample Number	Sample Description	Filter Area (mm²)	Volume (liter)	Area Analyzed (mm²)	Total Structures Chry	Total Structures Amph	95% Confidence Interval Chry	95% Confidence Interval Amph	Analytical Sensitivity (S/cc)	Total Structures Concentration (S/cc) Chry	Total Structures Concentration (S/cc) Amph	Asbestiform Amphibole No.	Asbestiform Amphibole S/cc
M1H	3181689.HT	0.45m TEM-collected 10/11/22	385	1044	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M2H	3181690.HT	0.45m TEM-collected 10/11/22	385	1016	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M3H	3181691.HT	0.45m TEM-collected 10/11/22	385	1044	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M4H	3181692.HT	0.45m TEM-collected 10/11/22	385	1000	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010

NOTES
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5. Samples will be held for 90 days and then disposed of per Federal regulations.
6. Sample(s) for this project were analyzed at our Pittsburgh, PA (AIHA LAP, LLC #292885, NVLAP #101208-0, NY ELAP #10884) facility.
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TABLE 1 – Structures Length ≥0.5µm, Length:Width Aspect Ratio ≥3:1

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M5H	3181693.HT	0.45m TEM-collected 10/11/22	385	1028	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M6H	3181694.HT	0.45m TEM-collected 10/11/22	385	1028	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M7H	3181695.HT	0.45m TEM-collected 10/11/22	385	1052	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M8H	3181696.HT	0.45m TEM-collected 10/11/22	385	464	0.75165	0	0	0 - 3	0 - 3	0.0011	< 0.0011	< 0.0011	0	< 0.0011
M1L	3181697.HT	0.45m TEM-collected 10/11/22	385	1129.5	0.37583	0	0	0 - 3	0 - 3	0.0009	< 0.0009	< 0.0009	0	< 0.0009
FB	3181698.HT	0.45m TEM-collected 10/11/22	385	0	0.37583	0	0	0 - 3	0 - 3	N/A	N/A	N/A	0	N/A
LB	3181699.HT	0.45m TEM-collected 10/11/22	385	0	0.37583	0	0	0 - 3	0 - 3	N/A	N/A	N/A	0	N/A
M2L	3181700.HT	0.45m TEM-collected 10/11/22	385	1034	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M3L	3181701.HT	0.45m TEM-collected 10/11/22	385	1058	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M4L	3181702.HT	0.45m TEM-collected 10/11/22	385	1000	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010

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TABLE 1 – Structures Length ≥0.5µm, Length:Width Aspect Ratio ≥3:1

Client Sample Number	RJLG Sample Number	Sample Description	Filter Area (mm^2)	Volume (liter)	Area Analyzed (mm^2)	Total Structures Chry	Total Structures Amph	95% Confidence Interval Chry	95% Confidence Interval Amph	Analytical Sensitivity (S/cc)	Total Structures Concentration (S/cc) Chry	Total Structures Concentration (S/cc) Amph	Asbestiform Amphibole No.	Asbestiform Amphibole S/cc
M5L	3181703.HT	0.45m TEM-collected 10/11/22	385	1022	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M6L	3181704.HT	0.45m TEM-collected 10/11/22	385	1018	0.37583	0	1	0 - 3	0 - 5	0.0010	< 0.0010	0.0010	0	< 0.0010
M7L	3181705.HT	0.45m TEM-collected 10/11/22	385	1020	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M8L	3181706.HT	0.45m TEM-collected 10/11/22	385	1014	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010

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TABLE 2 – Structures Length ≥5.0µm, Length:Width Aspect Ratio ≥3:1

Client Sample Number	RJLG Sample Number	Sample Description	Filter Area (mm²)	Volume (liter)	Area Analyzed (mm²)	Total Structures Chry	Total Structures Amph	95% Confidence Interval Chry	95% Confidence Interval Amph	Analytical Sensitivity (S/cc)	Total Structures Concentration (S/cc) Chry	Total Structures Concentration (S/cc) Amph	Asbestiform Amphibole No.	Asbestiform Amphibole S/cc
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M2H	3181690.HT	0.45m TEM-collected 10/11/22	385	1016	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M3H	3181691.HT	0.45m TEM-collected 10/11/22	385	1044	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M4H	3181692.HT	0.45m TEM-collected 10/11/22	385	1000	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M5H	3181693.HT	0.45m TEM-collected 10/11/22	385	1028	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M6H	3181694.HT	0.45m TEM-collected 10/11/22	385	1028	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M7H	3181695.HT	0.45m TEM-collected 10/11/22	385	1052	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M8H	3181696.HT	0.45m TEM-collected 10/11/22	385	464	0.75165	0	0	0 - 3	0 - 3	0.0011	< 0.0011	< 0.0011	0	< 0.0011

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FB	3181698.HT	0.45m TEM-collected 10/11/22	385	0	0.37583	0	0	0 - 3	0 - 3	N/A	N/A	N/A	0	N/A
LB	3181699.HT	0.45m TEM-collected 10/11/22	385	0	0.37583	0	0	0 - 3	0 - 3	N/A	N/A	N/A	0	N/A
M2L	3181700.HT	0.45m TEM-collected 10/11/22	385	1034	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M3L	3181701.HT	0.45m TEM-collected 10/11/22	385	1058	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M4L	3181702.HT	0.45m TEM-collected 10/11/22	385	1000	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M5L	3181703.HT	0.45m TEM-collected 10/11/22	385	1022	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M6L	3181704.HT	0.45m TEM-collected 10/11/22	385	1018	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010

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TABLE 2 – Structures Length ≥5.0µm, Length:Width Aspect Ratio ≥3:1

Client Sample Number	RJLG Sample Number	Sample Description	Filter Area (mm²)	Volume (liter)	Area Analyzed (mm²)	Total Structures Chry	Total Structures Amph	95% Confidence Interval Chry	95% Confidence Interval Amph	Analytical Sensitivity (S/cc)	Total Structures Concentration (S/cc) Chry	Total Structures Concentration (S/cc) Amph	Asbestiform Amphibole No.	Asbestiform Amphibole S/cc
M7L	3181705.HT	0.45m TEM-collected 10/11/22	385	1020	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010
M8L	3181706.HT	0.45m TEM-collected 10/11/22	385	1014	0.37583	0	0	0 - 3	0 - 3	0.0010	< 0.0010	< 0.0010	0	< 0.0010

Authorized Signature:

Ashleigh Sload, Scientist

NOTES

1. Volumes provided by the client listed above were used to calculate analytical results and sensitivities.
2. "<" indicates results less than analytical sensitivity. "---" indicates that sample was not analyzed.
3. If RJ Lee Group, Inc. did not collect the samples analyzed, the verifiability of the laboratory's results are limited to the reported values.
4. Abbreviations: N/A-Not Applicable, O/L-Overloaded, Chry-Chrysotile Asbestos, Amph-Amphibole Asbestos, NAS-Non-Asbestos Structures, f-Asbestos Fibers, F-Total Fibers.
5. Samples will be held for 90 days and then disposed of per Federal regulations.
6. Sample(s) for this project were analyzed at our Pittsburgh, PA (AIHA LAP, LLC #292885, NVLAP #101208-0, NY ELAP #10884) facility.
7. These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which these results are used or interpreted.
8. "Asbestiform Amphibole" section represents number and concentration of asbestiform amphibole structures included in "Total Structures" count and concentration.

DISCLAIMER

RJ Lee Group, Inc. is accredited by the American Industrial Hygiene Association (AIHA LAP, LLC #292885) and the New York Department of Health Environmental Laboratory Program (NY ELAP) for airborne asbestos analysis. This report may not be used to claim product endorsement by AIHA LAP, LLC, NY ELAP, or any other regulatory or laboratory accrediting agency. Any reproduction of this document must be in full in order for the report to be valid. This report is not valid unless it bears the name of a AIHA LAP, LLC approved signatory.

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limiting provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninety (90) days before discarding. A shipping and handling fee will be assessed for the return of any sample.

est for Environmental and IH Laboratory Analytical Services

A. ATION TO: Bryan Bandli

Purchase Order No.: | Client Job No.:

Lab Use Only
Project No.: | Client No:
Date Logged In: | Logged In By:
Temperature Upon Receipt (Chem Only) _____ °C Therm ID No. _____

Date Results Needed

Rush Charges Authorized ? (check one) ☐ YES ☐ NO

Report Results To
Name: Andrew Gutshall
Company: Hanson
Address: 7660 Imperial Way
City, State, Zip: Allentown, PA 18195
Phone: 484-955-2407 Fax:
Email Results To: andrew.gutshall@lehighhanson.com

Drinking Water Sample Only
Sample Purpose: Information ☐ Regulatory ☐ Accreditation (please list below):
System ID #:
DOH Source #:
Multiple Sources #s:
Sample Purpose: A ☐ ☐ Other ☐

Chemistry Analysis Key
Preservation: Unpres, H_2SO_4, 4°C, HCl, HNO_3, NaOH, Other, Na_2SO_4
Matrix: WW=Wastewater, GW=Groundwater, Water, S=Soil/Sludge, E=Extract, SW=Surface Water, DW=Drinking, O=Oil, X=Other
Container: P=Plastic, G=Glass, W=Wipe, A=Air (filter or tube)

Invoice To
Name: Andrew Gutshall
If a hard copy of invoice is needed, check here ☐
Company: Hanson Email: andrew.gutshall@lehighhanson.com
Address: 7660 Imperial Way
City, State, Zip: Allentown, PA 18195
Phone: 484-955-2407 Fax:

Special Instructions: Standard Turn Around Time

Client Sample ID	Sample Description	Sample Collection Date (required)	Sampler (required)	Sample Collection Time	Total Collection Time - min	Wipe Area or Air Volume (specify units)	Analysis Requested: TEM Asbestos	Pres. Upon Receipt (Y/N)	Preservation	Matrix	Container Type	pH	No. Containers
M2L	0.45m TEM	10/11/2022	Schlenker	15:36:00	517	1034 liters	X						
M3L	0.45m TEM	10/11/2022	Schlenker	16:06:00	529	1058 liters	X						
M4L	0.45m TEM	10/11/2022	Schlenker	15:44:00	500	1000 liters	X						
M5L	0.45m TEM	10/11/2022	Schlenker	15:51:00	511	1022 liters	X						
M6L	0.45m TEM	10/11/2022	Schlenker	15:56:00	509	1018 liters	X						
M7L	0.45m TEM	10/11/2022	Schlenker	16:25:00	510	1020 liters	X						
M8L	0.45m TEM	10/11/2022	Schlenker	16:32:00	507	1014 liters	X						

Chain of Custody
Relinquished By (Signature): [signature] Date: 10/11/2022 Time: 18:30
Relinquished By (Print Name): Peter H. Schlenker Relinquished To: FedEx
Company Name: CMI Method of Shipment: FedEx

Chain of Custody
Received By (Signature): [signature] Date: 10/14/22 Time:
Received By (Print Name): Relinquished To:
Company Name: RSLG Method of Shipment:

Chain of Custody
Relinquished By (Signature): Date: Time:
Relinquished By (Print Name): Relinquished To:
Company Name: Method of Shipment:

Chain of Custody
Received By (Signature): Date: Time:
Received By (Print Name): Relinquished To:
Company Name: Method of Shipment:

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

724.325.1776 **Phone**
724.733.1799 **Fax**

Washington
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, WA 99301

509.545.4989 **Phone**
509.544.6010 **Fax**

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTIO

for Environmental and IH Laboratory Analytical Services

TO: Bryan Bandli

Purchase Order No.: | Client Job No.:

Use Only
Project No.: | Client No:
Date Logged In: | Logged In By:
Temperature Upon Receipt (Chem Only) _____ °C Therm ID No. _____

Date Results Needed

Rush Charges Authorized ? (check one) ☐ YES ☐ NO

Report Results To
Name: Andrew Gutshall
Company: Hanson
Address: 7660 Imperial Way
City, State, Zip: Allentown, PA 18195
Phone: 484-955-2407 Fax:
Email Results To: andrew.gutshall@lehighhanson.com

Drinking Water Sample Only
Sample Purpose: Information ☐ Regulatory ☐ Accreditation (please list below):
System ID #:
DOH Source #:
Multiple Sources #s:
Sample Purpose: A ☐ ☐ Other ☐

Chemistry Analysis Key
Preservation: Unpres, H_2SO_4, 4°C, HCl, HNO_3, NaOH, Other, Na_2SO_4
Matrix: WW=Wastewater, GW=Groundwater, Water, S=Soil/Sludge, E=Extract, SW=Surface Water, DW=Drinking, O=Oil, X=Other
Container: P=Plastic, G=Glass, W=Wipe, A=Air (filter or tube)

Invoice To
Name: Andrew Gutshall
Company: Hanson Email:
If a hard copy of invoice is needed, check here
andrew.gutshall@lehighhanson.com
Address: 7660 Imperial Way
City, State, Zip: Allentown, PA 18195
Phone: 484-955-2407 Fax:

Special Instructions: Standard Turn Around Time

Client Sample ID	Sample Description	Sample Collection Date (required)	Sampler (required)	Sample Collection Time	Total Collection Time - min	Wipe Area or Air Volume (specify units)	Analysis Requested: TEM Asbestos	Pres. Upon Receipt (Y/N)	Preservation	Matrix	Container Type	pH	No. Containers
M1H	0.45m TEM	10/11/2022	Schlenker	13:28:00	261	1044 liters	X						
M2H	0.45m TEM	10/11/2022	Schlenker	13:14:00	254	1016 liters	X						
M3H	0.45m TEM	10/11/2022	Schlenker	13:24:00	261	1044 liters	X						
M4H	0.45m TEM	10/11/2022	Schlenker	13:17:00	250	1000 liters	X						
M5H	0.45m TEM	10/11/2022	Schlenker	13:20:00	257	1028 liters	X						
M6H	0.45m TEM	10/11/2022	Schlenker	13:17:00	257	1028 liters	X						
M7H	0.45m TEM	10/11/2022	Schlenker	13:21:00	263	10 52 liters	X						
M8H	0.45m TEM	10/11/2022	Schlenker	10:58:00	116	464 liters	X						
M1L	0.45m TEM	10/11/2022	Schlenker	16:38:00	502	1129.5 liters	X						
FB	0.45m TEM	10/11/2022	Schlenker	Field Blank			X						
LB	0.45m TEM	10/11/2022	Schlenker	Lab Blank			X						

Chain of Custody
Relinquished By (Signature): Peter H. Schlenker Date: 10/11/2022 Time: 18:30
Relinquished By (Print Name): Peter H. Schlenker Relinquished To: FedEx
Company Name: CMI Method of Shipment: FedEx

Chain of Custody
Received By (Signature): Date: 10/14/22 Time:
Received By (Print Name): Relinquished To:
Company Name: RJLG Method of Shipment:

Chain of Custody
Relinquished By (Signature): Date: Time:
Relinquished By (Print Name): Relinquished To:
Company Name: Method of Shipment:

Chain of Custody
Received By (Signature): Date: Time:
Received By (Print Name): Relinquished To:
Company Name: Method of Shipment:

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

724.325.1776 **Phone**

Washington
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, WA 99301

509.545.4989 **Phone**

RJ LEE GROUI
DELIVERING SCIENTIFIC RESOLUTIO

(215) 699-4800

SHIP DATE: 12OCT22
ACTWGT: 1.00 LB
CAD: 10166872/INET4530

BILL SENDER

TO BRYAN BANDLI
RJ LEE GROUP
350 HOCHBERG RD

MONROEVILLE PA 15146

(724) 325-1776

REF: PS/210032-002/SAMPLES

DEPT:

581J1/AC5F/FE2D

FedEx Express

THU - 13 OCT 4:30P
STANDARD OVERNIGHT

TRK# 0201 7701 8059 6142

15146
PIT

UI LBEA

PA-US

Attachment 2
Wind and Precipitation Data
October 8 – October 11, 2022

Hanson Aggregates PA, LLC - Activity Based Sampling
Data from October 8, 2022 to October 11, 2022 at the Rock Hill Quary

Date	Outdoor Temperature (Â°F)	Wind Speed (mph)	Wind Gust (mph)	Wind Direction (Â°)	Hourly Rain (in/hr)	Daily Rain (in)	Outdoor Humidity (%)
10/11/2022 23:56	57.7	0.7	3.8	212	0	0	63
10/11/2022 23:41	57.7	1.6	5.6	177	0	0	63
10/11/2022 23:26	58.1	2.5	6.3	165	0	0	63
10/11/2022 23:11	58.1	2.2	4.7	153	0	0	63
10/11/2022 22:56	58.3	2	5.1	172	0	0	63
10/11/2022 22:41	59	1.6	4	172	0	0	61
10/11/2022 22:26	60.1	0.9	6.7	201	0	0	57
10/11/2022 22:11	60.1	0.9	4.9	187	0	0	57
10/11/2022 21:56	60.1	0.4	4.5	184	0	0	58
10/11/2022 21:41	60.6	1.1	4.7	180	0	0	57
10/11/2022 21:26	60.8	1.1	6.3	187	0	0	58
10/11/2022 21:11	61.2	1.1	5.1	200	0	0	58
10/11/2022 20:56	61.5	1.3	5.8	199	0	0	57
10/11/2022 20:41	61.9	2.2	6	168	0	0	56
10/11/2022 20:26	61.7	1.6	6.3	186	0	0	56
10/11/2022 20:11	60.4	0.4	4.9	193	0	0	59
10/11/2022 19:56	58.1	0.2	2.2	193	0	0	67
10/11/2022 19:41	59.2	0	1.6	193	0	0	65
10/11/2022 19:26	60.6	0	2	193	0	0	61
10/11/2022 19:11	60.4	0	2	193	0	0	62
10/11/2022 18:56	60.8	0	2	193	0	0	63
10/11/2022 18:41	61.7	0	1.3	193	0	0	62
10/11/2022 18:26	62.2	0	1.6	193	0	0	64
10/11/2022 18:11	65.8	0.2	3.1	193	0	0	53
10/11/2022 17:56	67.8	0.2	2.7	193	0	0	48
10/11/2022 17:41	68.9	1.6	6	269	0	0	46
10/11/2022 17:26	69.6	1.3	6.9	277	0	0	45
10/11/2022 17:11	70	2.5	6.7	249	0	0	44
10/11/2022 16:56	70.7	2.9	7.4	289	0	0	43
10/11/2022 16:41	70.7	4.5	12.5	286	0	0	41
10/11/2022 16:26	70.3	5.8	12.1	304	0	0	41
10/11/2022 16:11	71.2	4.7	13.6	272	0	0	41
10/11/2022 15:56	71.2	4.3	10.5	291	0	0	41
10/11/2022 15:41	71.6	5.4	12.1	266	0	0	40
10/11/2022 15:26	71.4	4.3	10.1	290	0	0	41
10/11/2022 15:11	71.2	5.1	16.3	293	0	0	41
10/11/2022 14:56	70.5	6	12.1	292	0	0	42
10/11/2022 14:41	72	6	15.7	275	0	0	41
10/11/2022 14:26	71.6	3.4	9.8	253	0	0	42
10/11/2022 14:11	70.3	5.1	12.1	281	0	0	44
10/11/2022 13:56	70.2	5.4	11.4	304	0	0	44

*The green shaded cells represent the approximate time period (7:00am-4:00pm) during which Hanson collected low-flow sampling data on October 11, 2022, from eight (8) air monitors located around the Quarry perimeter.

**The blue shaded cells represent the approximate time period (9:00am-1:30pm) during which Hanson collected high-flow sampling data during the ABS activity at the Quarry. Note, Hanson collected air sampling data from the same eight (8) air monitoring locations during this time.

Hanson Aggregates PA, LLC - Activity Based Sampling
Data from October 8, 2022 to October 11, 2022 at the Rock Hill Quary

Date	Outdoor Temperature (Â°F)	Wind Speed (mph)	Wind Gust (mph)	Wind Direction (Â°)	Hourly Rain (in/hr)	Daily Rain (in)	Outdoor Humidity (%)
10/11/2022 13:41	70	4.7	12.5	309	0	0	46
10/11/2022 13:26	69.3	6	12.1	293	0	0	47
10/11/2022 13:11	69.1	4.9	13	291	0	0	47
10/11/2022 12:56	68.4	3.4	9.6	261	0	0	48
10/11/2022 12:41	68.5	4.7	10.3	295	0	0	48
10/11/2022 12:26	68.2	3.8	13	303	0	0	49
10/11/2022 12:11	66.7	3.4	10.7	299	0	0	49
10/11/2022 11:56	65.8	4.3	10.7	310	0	0	50
10/11/2022 11:41	65.7	4.5	9.8	296	0	0	51
10/11/2022 11:26	65.3	1.1	5.4	327	0	0	53
10/11/2022 11:11	63.7	2.7	6.3	276	0	0	56
10/11/2022 10:56	61.5	3.4	6	294	0	0	59
10/11/2022 10:41	61.5	3.4	7.4	293	0	0	59
10/11/2022 10:26	59.7	2.2	5.4	283	0	0	61
10/11/2022 10:11	58.8	1.1	3.8	283	0	0	63
10/11/2022 9:56	57.2	0.4	3.6	6	0	0	66
10/11/2022 9:41	55.6	0.2	1.8	30	0	0	68
10/11/2022 9:26	53.2	0	1.6	30	0	0	77
10/11/2022 9:11	50.4	0	1.1	30	0	0	83
10/11/2022 8:56	48.4	0	0.9	30	0	0	88
10/11/2022 8:41	46	0	0	30	0	0	92
10/11/2022 8:26	43.7	0	0	30	0	0	95
10/11/2022 8:11	42.8	0	0	30	0	0	97
10/11/2022 7:56	42.4	0	0	30	0	0	96
10/11/2022 7:41	42.6	0	0	30	0	0	96
10/11/2022 7:26	42.4	0	0	30	0	0	96
10/11/2022 7:11	42.8	0	0	30	0	0	95
10/11/2022 6:56	43.2	0	0	30	0	0	94
10/11/2022 6:41	43.5	0	0	30	0	0	94
10/11/2022 6:26	43.5	0	0	30	0	0	94
10/11/2022 6:11	43	0	1.3	30	0	0	95
10/11/2022 5:56	42.6	0	0	30	0	0	95
10/11/2022 5:41	42.8	0	0	30	0	0	94
10/11/2022 5:26	43	0.2	2	30	0	0	94
10/11/2022 5:11	43.7	0.2	1.8	30	0	0	92
10/11/2022 4:56	44.8	0	2.2	30	0	0	91
10/11/2022 4:41	45.3	0	2	30	0	0	89
10/11/2022 4:26	45.7	0.2	1.8	30	0	0	88
10/11/2022 4:11	46	0.7	2.7	30	0	0	87
10/11/2022 3:56	45.3	0.9	4.5	30	0	0	89
10/11/2022 3:41	45.7	0.7	2.5	30	0	0	89

Hanson Aggregates PA, LLC - Activity Based Sampling
Data from October 8, 2022 to October 11, 2022 at the Rock Hill Quary

Date	Outdoor Temperature (Â°F)	Wind Speed (mph)	Wind Gust (mph)	Wind Direction (Â°)	Hourly Rain (in/hr)	Daily Rain (in)	Outdoor Humidity (%)
10/11/2022 3:26	45.3	0.2	2.7	30	0	0	91
10/11/2022 3:11	46	0	1.1	30	0	0	88
10/11/2022 2:56	47.3	0	2.2	30	0	0	84
10/11/2022 2:41	49.1	1.1	4	30	0	0	79
10/11/2022 2:26	49.5	1.3	4.3	30	0	0	78
10/11/2022 2:11	50.2	1.1	3.4	30	0	0	77
10/11/2022 1:56	50.4	0.9	4	30	0	0	77
10/11/2022 1:41	51.4	0.7	3.1	30	0	0	74
10/11/2022 1:26	51.8	1.3	3.4	30	0	0	72
10/11/2022 1:11	52.2	1.1	3.1	28	0	0	71
10/11/2022 0:56	50.9	0	2	232	0	0	75
10/11/2022 0:41	49.1	0	1.6	232	0	0	82
10/11/2022 0:26	49.6	0	1.6	232	0	0	79
10/11/2022 0:11	50.4	0	1.6	232	0	0	77
10/10/2022 23:56	50.7	0	0	232	0	0	75
10/10/2022 23:41	51.8	0	1.1	232	0	0	73
10/10/2022 23:26	53.4	0	2.5	232	0	0	68
10/10/2022 23:11	54.3	0	2	232	0	0	65
10/10/2022 22:56	54.9	0.4	4.9	223	0	0	64
10/10/2022 22:41	54.9	0.7	5.6	221	0	0	64
10/10/2022 22:26	55.6	0.4	4	207	0	0	62
10/10/2022 22:11	55.9	1.8	9.2	195	0	0	61
10/10/2022 21:56	55.9	1.8	6.9	233	0	0	60
10/10/2022 21:41	56.1	2	8.3	175	0	0	59
10/10/2022 21:26	56.5	2.9	6.5	155	0	0	57
10/10/2022 21:11	57.2	2.5	7.2	181	0	0	55
10/10/2022 20:56	57.2	0.2	2.7	168	0	0	55
10/10/2022 20:41	57.6	0.7	4	266	0	0	54
10/10/2022 20:26	57.4	1.1	4.3	160	0	0	55
10/10/2022 20:11	57.7	1.3	3.6	160	0	0	54
10/10/2022 19:56	58.5	1.6	4.5	144	0	0	53
10/10/2022 19:41	58.6	1.6	4.3	146	0	0	52
10/10/2022 19:26	58.8	1.1	3.6	181	0	0	52
10/10/2022 19:11	58.8	0.7	4.5	194	0	0	53
10/10/2022 18:56	58.8	0.9	4.3	194	0	0	53
10/10/2022 18:41	58.5	0.2	3.6	194	0	0	56
10/10/2022 18:26	60.1	0.2	2.7	194	0	0	52
10/10/2022 18:11	61.7	0.2	2.7	219	0	0	51
10/10/2022 17:56	63.5	1.6	5.4	229	0	0	47
10/10/2022 17:41	64.4	2.5	6.3	287	0	0	44
10/10/2022 17:26	64.8	2.9	7.2	287	0	0	42

Hanson Aggregates PA, LLC - Activity Based Sampling
Data from October 8, 2022 to October 11, 2022 at the Rock Hill Quary

Date	Outdoor Temperature (Â°F)	Wind Speed (mph)	Wind Gust (mph)	Wind Direction (Â°)	Hourly Rain (in/hr)	Daily Rain (in)	Outdoor Humidity (%)
10/10/2022 17:11	66	3.6	8.1	255	0	0	40
10/10/2022 16:56	65.8	4.3	12.5	283	0	0	40
10/10/2022 16:41	65.8	4.7	11.2	280	0	0	39
10/10/2022 16:26	65.8	5.8	11.4	282	0	0	39
10/10/2022 16:11	66.2	6.5	15.4	287	0	0	38
10/10/2022 15:56	66.6	5.8	12.3	278	0	0	38
10/10/2022 15:41	66	6.3	14.1	287	0	0	37
10/10/2022 15:26	66.2	6.5	15.7	271	0	0	36
10/10/2022 15:11	66.2	5.4	13	275	0	0	36
10/10/2022 14:56	66.4	5.4	13.4	261	0	0	36
10/10/2022 14:41	65.8	7.2	15	296	0	0	35
10/10/2022 14:26	65.5	6	15.7	269	0	0	34
10/10/2022 14:11	65.3	6.7	14.3	290	0	0	34
10/10/2022 13:56	65.5	5.1	11.9	303	0	0	36
10/10/2022 13:41	64.4	5.8	14.1	260	0	0	38
10/10/2022 13:26	64.6	7.8	17	296	0	0	37
10/10/2022 13:11	64.2	6.3	13.6	274	0	0	37
10/10/2022 12:56	64.2	6	15.9	303	0	0	40
10/10/2022 12:41	63	5.6	12.5	302	0	0	44
10/10/2022 12:26	62.6	6.7	13.2	294	0	0	46
10/10/2022 12:11	62.2	6.5	14.3	300	0	0	46
10/10/2022 11:56	61.3	6	12.3	292	0	0	48
10/10/2022 11:41	61.2	5.6	11.6	290	0	0	48
10/10/2022 11:26	60.4	3.6	7.8	260	0	0	48
10/10/2022 11:11	59.2	5.6	11.2	307	0	0	50
10/10/2022 10:56	58.1	5.8	10.1	292	0	0	53
10/10/2022 10:41	57.9	3.4	8.7	269	0	0	53
10/10/2022 10:26	56.1	4.5	8.3	311	0	0	57
10/10/2022 10:11	54.7	5.4	9.2	306	0	0	59
10/10/2022 9:56	53.4	4	9.6	312	0	0	61
10/10/2022 9:41	52	3.4	7.4	316	0	0	65
10/10/2022 9:26	50.7	4	6.7	316	0	0	68
10/10/2022 9:11	50.4	3.8	5.8	319	0	0	69
10/10/2022 8:56	48.9	2.7	4.5	319	0	0	71
10/10/2022 8:41	45	2	3.8	319	0	0	82
10/10/2022 8:26	41.9	1.3	2.9	319	0	0	92
10/10/2022 8:11	41.4	1.6	3.6	319	0	0	92
10/10/2022 7:56	39.4	1.3	3.1	319	0	0	96
10/10/2022 7:41	38.8	1.8	3.1	319	0	0	97
10/10/2022 7:26	38.7	0.9	2.2	319	0	0	96
10/10/2022 7:11	38.8	0.2	1.6	319	0	0	96

Hanson Aggregates PA, LLC - Activity Based Sampling
Data from October 8, 2022 to October 11, 2022 at the Rock Hill Quary

Date	Outdoor Temperature (Â°F)	Wind Speed (mph)	Wind Gust (mph)	Wind Direction (Â°)	Hourly Rain (in/hr)	Daily Rain (in)	Outdoor Humidity (%)
10/10/2022 6:56	38.8	1.3	2.7	319	0	0	97
10/10/2022 6:41	39.4	1.3	2.5	319	0	0	95
10/10/2022 6:26	39.4	0	0	319	0	0	95
10/10/2022 6:11	39.4	0.4	2	319	0	0	95
10/10/2022 5:56	39.2	0.9	2	319	0	0	95
10/10/2022 5:41	39.2	1.1	2.7	319	0	0	94
10/10/2022 5:26	40.3	1.6	4.3	305	0	0	92
10/10/2022 5:11	39.2	0.9	4.3	267	0	0	96
10/10/2022 4:56	38.7	0.2	1.6	148	0	0	97
10/10/2022 4:41	39	0	0	148	0	0	96
10/10/2022 4:26	39	0	0	148	0	0	96
10/10/2022 4:11	39.2	0	0	148	0	0	96
10/10/2022 3:56	39.6	0	0	148	0	0	95
10/10/2022 3:41	39.9	0	0	148	0	0	95
10/10/2022 3:26	40.3	0	0	148	0	0	95
10/10/2022 3:11	40.8	0	1.3	148	0	0	94
10/10/2022 2:56	41.4	0	0	148	0	0	93
10/10/2022 2:41	41.9	0	0	148	0	0	92
10/10/2022 2:26	41.7	0	1.3	148	0	0	93
10/10/2022 2:11	42.4	0	0	148	0	0	91
10/10/2022 1:56	42.4	0	0	148	0	0	91
10/10/2022 1:41	43	0.4	2.7	148	0	0	91
10/10/2022 1:26	43.2	0.9	3.1	148	0	0	88
10/10/2022 1:11	43	0	2.2	148	0	0	89
10/10/2022 0:56	43.7	0	0	148	0	0	87
10/10/2022 0:41	45.7	0	1.6	148	0	0	82
10/10/2022 0:26	48.7	0	2.2	146	0	0	67
10/10/2022 0:11	49.1	0.4	3.1	146	0	0	65
10/9/2022 23:56	49.1	2	4.9	146	0	0	66
10/9/2022 23:41	48.9	2.7	4.5	146	0	0	66
10/9/2022 23:26	48.4	0.4	3.1	146	0	0	67
10/9/2022 23:11	48.2	1.3	3.8	146	0	0	68
10/9/2022 22:56	46.8	2.7	5.1	145	0	0	74
10/9/2022 22:41	46.8	0.9	2	325	0	0	76
10/9/2022 22:26	47.7	0	0	325	0	0	71
10/9/2022 22:11	46.4	0.2	1.6	325	0	0	78
10/9/2022 21:56	46.9	0.2	2	325	0	0	76
10/9/2022 21:41	47.5	0	0	325	0	0	73
10/9/2022 21:26	46.6	0	1.6	325	0	0	77
10/9/2022 21:11	47.1	0	1.6	325	0	0	77
10/9/2022 20:56	47.5	0	1.3	325	0	0	76

Hanson Aggregates PA, LLC - Activity Based Sampling
Data from October 8, 2022 to October 11, 2022 at the Rock Hill Quary

Date	Outdoor Temperature (Â°F)	Wind Speed (mph)	Wind Gust (mph)	Wind Direction (Â°)	Hourly Rain (in/hr)	Daily Rain (in)	Outdoor Humidity (%)
10/9/2022 20:41	47.3	0	2	325	0	0	76
10/9/2022 20:26	47.1	0	0	325	0	0	78
10/9/2022 20:11	47.5	0	0	325	0	0	77
10/9/2022 19:56	47.7	0	0	325	0	0	75
10/9/2022 19:41	47.8	0	0	325	0	0	77
10/9/2022 19:26	48.4	0	0	325	0	0	74
10/9/2022 19:11	48.9	0	1.1	325	0	0	74
10/9/2022 18:56	50.2	0	1.3	325	0	0	73
10/9/2022 18:41	51.8	0	1.3	325	0	0	68
10/9/2022 18:26	54.9	0.2	3.4	325	0	0	57
10/9/2022 18:11	56.8	1.8	5.4	323	0	0	48
10/9/2022 17:56	57.9	3.6	10.5	305	0	0	45
10/9/2022 17:41	58.8	4.5	11.2	282	0	0	45
10/9/2022 17:26	58.8	3.6	11.4	258	0	0	44
10/9/2022 17:11	59	6.5	14.5	289	0	0	44
10/9/2022 16:56	59.4	6.5	12.8	289	0	0	43
10/9/2022 16:41	59.4	6.9	15.9	297	0	0	43
10/9/2022 16:26	59.5	7.2	14.3	285	0	0	42
10/9/2022 16:11	59.2	6.9	15.4	280	0	0	41
10/9/2022 15:56	59.5	8.7	18.6	297	0	0	41
10/9/2022 15:41	59.5	9.4	18.8	302	0	0	41
10/9/2022 15:26	59.4	8.5	17.4	291	0	0	41
10/9/2022 15:11	59.2	8.7	17.4	290	0	0	41
10/9/2022 14:56	59	11	21.5	304	0	0	42
10/9/2022 14:41	58.6	9.6	20.4	300	0	0	42
10/9/2022 14:26	58.8	8.1	22.4	287	0	0	42
10/9/2022 14:11	58.8	7.8	17.9	283	0	0	43
10/9/2022 13:56	58.8	8.1	17.7	297	0	0	43
10/9/2022 13:41	58.3	7.4	17.7	298	0	0	44
10/9/2022 13:11	57.6	8.1	18.8	294	0	0	45
10/9/2022 12:56	56.8	8.7	18.6	293	0	0	47
10/9/2022 12:41	56.1	7.6	19.5	285	0	0	48
10/9/2022 12:26	55.8	7.6	18.3	298	0	0	49
10/9/2022 12:11	55	10.7	23	304	0	0	50
10/9/2022 11:56	55	9.8	20.8	303	0	0	50
10/9/2022 11:41	54.7	8.1	14.8	296	0	0	52
10/9/2022 11:26	54.1	7.4	15.9	297	0	0	53
10/9/2022 11:11	53.1	7.8	14.5	295	0	0	54
10/9/2022 10:56	52.5	7.6	16.8	296	0	0	56
10/9/2022 10:41	51.6	6.7	14.5	283	0	0	59
10/9/2022 10:26	50.5	8.9	17.4	299	0	0	62

Hanson Aggregates PA, LLC - Activity Based Sampling
Data from October 8, 2022 to October 11, 2022 at the Rock Hill Quary

Date	Outdoor Temperature (Â°F)	Wind Speed (mph)	Wind Gust (mph)	Wind Direction (Â°)	Hourly Rain (in/hr)	Daily Rain (in)	Outdoor Humidity (%)
10/9/2022 10:11	49.8	7.2	14.8	306	0	0	63
10/9/2022 9:56	49.1	5.8	14.1	299	0	0	66
10/9/2022 9:41	47.5	6.3	14.1	303	0	0	70
10/9/2022 9:26	46	6	10.7	306	0	0	74
10/9/2022 9:11	45	4.5	11.4	304	0	0	77
10/9/2022 8:56	43.5	5.6	9.8	319	0	0	79
10/9/2022 8:41	42.3	4.3	9.6	323	0	0	82
10/9/2022 8:26	41.4	3.1	6.5	345	0	0	83
10/9/2022 8:11	40.3	2	5.4	338	0	0	86
10/9/2022 7:56	39.2	1.6	4	338	0	0	89
10/9/2022 7:41	37.8	0.7	2.5	338	0	0	93
10/9/2022 7:26	37.4	0	1.3	338	0	0	93
10/9/2022 7:11	37.9	0	1.3	338	0	0	92
10/9/2022 6:56	39	0.4	3.4	338	0	0	89
10/9/2022 6:41	39	1.3	4	338	0	0	89
10/9/2022 6:26	38.3	0.7	3.1	338	0	0	92
10/9/2022 6:11	37.9	0.7	2.5	338	0	0	93
10/9/2022 5:56	39.4	1.1	2.7	338	0	0	89
10/9/2022 5:41	40.8	2.2	5.8	339	0	0	84
10/9/2022 5:26	41.4	2.5	5.1	336	0	0	83
10/9/2022 5:11	41.9	2.2	4.9	325	0	0	81
10/9/2022 4:56	42.1	2.9	6.7	315	0	0	81
10/9/2022 4:41	41.7	1.8	6.9	304	0	0	82
10/9/2022 4:26	40.5	0.9	4.9	322	0	0	85
10/9/2022 4:11	40.3	0.7	2.9	323	0	0	86
10/9/2022 3:56	39.9	0.4	2.2	323	0	0	88
10/9/2022 3:41	40.1	0.7	3.1	323	0	0	88
10/9/2022 3:26	39.4	0.9	4.3	323	0	0	90
10/9/2022 3:11	39	0.9	2.9	323	0	0	90
10/9/2022 2:56	38.1	1.8	4	323	0	0	94
10/9/2022 2:41	38.5	1.1	2.7	323	0	0	93
10/9/2022 2:26	39.2	0.7	2.5	323	0	0	91
10/9/2022 2:11	39.4	1.8	4.3	323	0	0	91
10/9/2022 1:56	38.5	1.3	3.1	323	0	0	94
10/9/2022 1:41	38.8	0.9	2.7	323	0	0	93
10/9/2022 1:26	39	0	1.6	323	0	0	91
10/9/2022 1:11	39.9	0	2	323	0	0	89
10/9/2022 0:56	40.3	0	2	323	0	0	88
10/9/2022 0:41	39.6	0.4	3.8	323	0	0	91
10/9/2022 0:26	40.3	0	1.1	323	0	0	89
10/9/2022 0:11	41.4	0.9	4	323	0	0	85

Hanson Aggregates PA, LLC - Activity Based Sampling
Data from October 8, 2022 to October 11, 2022 at the Rock Hill Quary

Date	Outdoor Temperature (Â°F)	Wind Speed (mph)	Wind Gust (mph)	Wind Direction (Â°)	Hourly Rain (in/hr)	Daily Rain (in)	Outdoor Humidity (%)
10/8/2022 23:56	41.4	0.4	3.6	323	0	0.02	85
10/8/2022 23:41	41.5	0	1.8	323	0	0.02	84
10/8/2022 23:26	42.1	0	2	323	0	0.02	82
10/8/2022 23:11	42.8	0.2	2.2	323	0	0.02	81
10/8/2022 22:56	43.3	1.3	4	323	0	0.02	78
10/8/2022 22:41	42.8	1.1	5.1	320	0	0.02	80
10/8/2022 22:26	42.4	0.7	4.3	320	0	0.02	83
10/8/2022 22:11	42.3	0.2	3.1	320	0	0.02	84
10/8/2022 21:56	42.3	0.4	2	320	0	0.02	84
10/8/2022 21:41	42.6	0.7	2.2	320	0	0.02	84
10/8/2022 21:26	42.6	1.1	2.9	320	0	0.02	83
10/8/2022 21:11	42.4	0.9	3.1	320	0	0.02	87
10/8/2022 20:41	41.7	0.4	2.5	320	0	0.02	90
10/8/2022 20:26	41.5	0.2	2.5	320	0	0.02	91
10/8/2022 19:56	41.9	0	0	320	0	0.02	89
10/8/2022 19:41	43	0	0	320	0	0.02	87
10/8/2022 19:26	44.1	0	0	320	0	0.02	82
10/8/2022 19:11	45.3	0	0	320	0	0.02	77
10/8/2022 18:56	47.1	0	0	320	0	0.02	70
10/8/2022 18:41	49.8	1.3	6.9	320	0	0.02	59
10/8/2022 18:26	51.3	6.3	13	310	0	0.02	53
10/8/2022 18:11	52.2	7.8	16.3	303	0	0.02	52
10/8/2022 17:56	53.1	8.3	14.5	306	0	0.02	51
10/8/2022 17:41	53.6	9.4	16.1	306	0	0.02	49
10/8/2022 17:26	53.4	9.8	18.8	307	0	0.02	50
10/8/2022 17:11	53.4	8.5	15.4	302	0	0.02	50
10/8/2022 16:56	54	8.5	15	301	0	0.02	49
10/8/2022 16:41	55	8.9	16.1	295	0	0.02	46
10/8/2022 16:26	55.4	9.4	16.6	304	0	0.02	46
10/8/2022 16:11	55.8	8.9	16.8	300	0	0.02	46
10/8/2022 15:56	55.9	8.9	18.8	308	0	0.02	45
10/8/2022 15:26	56.1	9.2	17.7	304	0	0.02	47
10/8/2022 15:11	55.8	8.3	17.4	297	0	0.02	48
10/8/2022 14:56	55.8	10.1	20.1	304	0	0.02	48
10/8/2022 14:26	55.9	6.7	13.6	305	0	0.02	49
10/8/2022 14:11	54.9	8.1	19	306	0	0.02	51
10/8/2022 13:56	54.7	9.4	18.1	298	0	0.02	51
10/8/2022 13:41	54.1	8.5	15	301	0	0.02	52
10/8/2022 13:26	54.1	7.8	18.8	312	0	0.02	51
10/8/2022 13:11	53.6	8.5	16.8	306	0	0.02	53
10/8/2022 12:56	52.3	8.5	16.1	304	0	0.02	54

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Date	Outdoor Temperature (Â°F)	Wind Speed (mph)	Wind Gust (mph)	Wind Direction (Â°)	Hourly Rain (in/hr)	Daily Rain (in)	Outdoor Humidity (%)
10/8/2022 12:41	52.5	7.8	17.7	307	0	0.02	54
10/8/2022 12:26	52	8.5	17	307	0	0.02	56
10/8/2022 12:11	52.2	8.7	23	308	0	0.02	57
10/8/2022 11:56	51.3	8.5	21.7	312	0	0.02	58
10/8/2022 11:41	51.3	8.5	16.1	310	0	0.02	58
10/8/2022 11:26	50.5	11.2	18.6	306	0	0.02	59
10/8/2022 11:11	50	9.4	19	306	0	0.02	62
10/8/2022 10:56	49.1	10.1	19.9	302	0	0.02	65
10/8/2022 10:41	49.5	10.5	21.5	301	0	0.02	64
10/8/2022 10:26	49.5	7.6	17	308	0	0.02	64
10/8/2022 10:11	48.9	8.5	17.9	314	0	0.02	66
10/8/2022 9:56	48	10.5	19.7	308	0	0.02	67
10/8/2022 9:41	47.8	11	21.5	310	0	0.02	69
10/8/2022 9:26	47.7	9.8	18.3	304	0	0.02	71
10/8/2022 9:11	46.8	7.2	15.2	308	0	0.02	73
10/8/2022 8:56	45.9	7.4	14.5	308	0	0.02	76
10/8/2022 8:41	44.8	5.6	10.7	309	0	0.02	79
10/8/2022 8:26	43.2	0.4	7.4	206	0	0.02	85
10/8/2022 8:11	42.1	0	0	198	0	0.02	88
10/8/2022 7:56	41.4	0.4	2.9	273	0	0.02	90
10/8/2022 7:41	41	1.8	4.5	304	0	0.02	91
10/8/2022 7:26	41.4	1.3	2.9	304	0	0.02	91
10/8/2022 7:11	42.4	0.7	3.1	304	0	0.02	88
10/8/2022 6:56	42.8	3.6	7.8	296	0	0.02	87
10/8/2022 6:41	42.4	2.7	7.6	300	0	0.02	91
10/8/2022 6:26	42.6	0.7	3.6	301	0	0.02	93
10/8/2022 6:11	43.5	0	1.6	301	0	0.02	89
10/8/2022 5:56	43.9	1.1	4	301	0	0.02	89
10/8/2022 5:41	45.1	0.2	2.2	301	0	0.02	87
10/8/2022 5:26	46.6	2.7	6.3	303	0	0.02	78
10/8/2022 5:11	47.1	4	7.4	305	0	0.02	78
10/8/2022 4:56	46.8	2.5	8.9	303	0	0.02	84
10/8/2022 4:41	47.3	1.8	4.5	301	0	0.02	84
10/8/2022 4:26	47.8	1.6	5.1	301	0	0.02	82
10/8/2022 4:11	48	2.5	6.9	301	0	0.02	83
10/8/2022 3:56	47.7	2.2	6.9	322	0	0.02	86
10/8/2022 3:41	47.7	0.4	2	334	0	0.02	87
10/8/2022 3:26	48	0.9	3.6	334	0	0.02	87
10/8/2022 3:11	48.2	0.7	3.6	334	0	0.02	91
10/8/2022 2:56	48	0.2	2.2	334	0	0.02	94
10/8/2022 2:41	48.4	0.2	2.5	334	0	0.02	93

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Date	Outdoor Temperature (Â°F)	Wind Speed (mph)	Wind Gust (mph)	Wind Direction (Â°)	Hourly Rain (in/hr)	Daily Rain (in)	Outdoor Humidity (%)
10/8/2022 2:26	48.9	0	0	334	0	0.02	89
10/8/2022 2:11	49.8	0.4	4.5	334	0.06	0	82
10/8/2022 1:56	51.4	4.5	12.8	319	0	0	74
10/8/2022 1:41	53.2	6	11.9	311	0	0	66
10/8/2022 1:26	53.8	6	12.1	306	0	0	65
10/8/2022 1:11	54.3	6.7	15.2	303	0	0	66
10/8/2022 0:56	54.9	7.4	14.3	306	0	0	69
10/8/2022 0:41	55	7.4	13.2	303	0	0	71
10/8/2022 0:26	55.4	8.5	18.6	305	0	0	70
10/8/2022 0:11	55.8	7.6	13.2	306	0	0	71

Attachment 3
Vehicle Geotracking

9:45 LTE

Oct 11, 2022, 9:09–9:44 AM

Tuesday Morning Walk / Hike

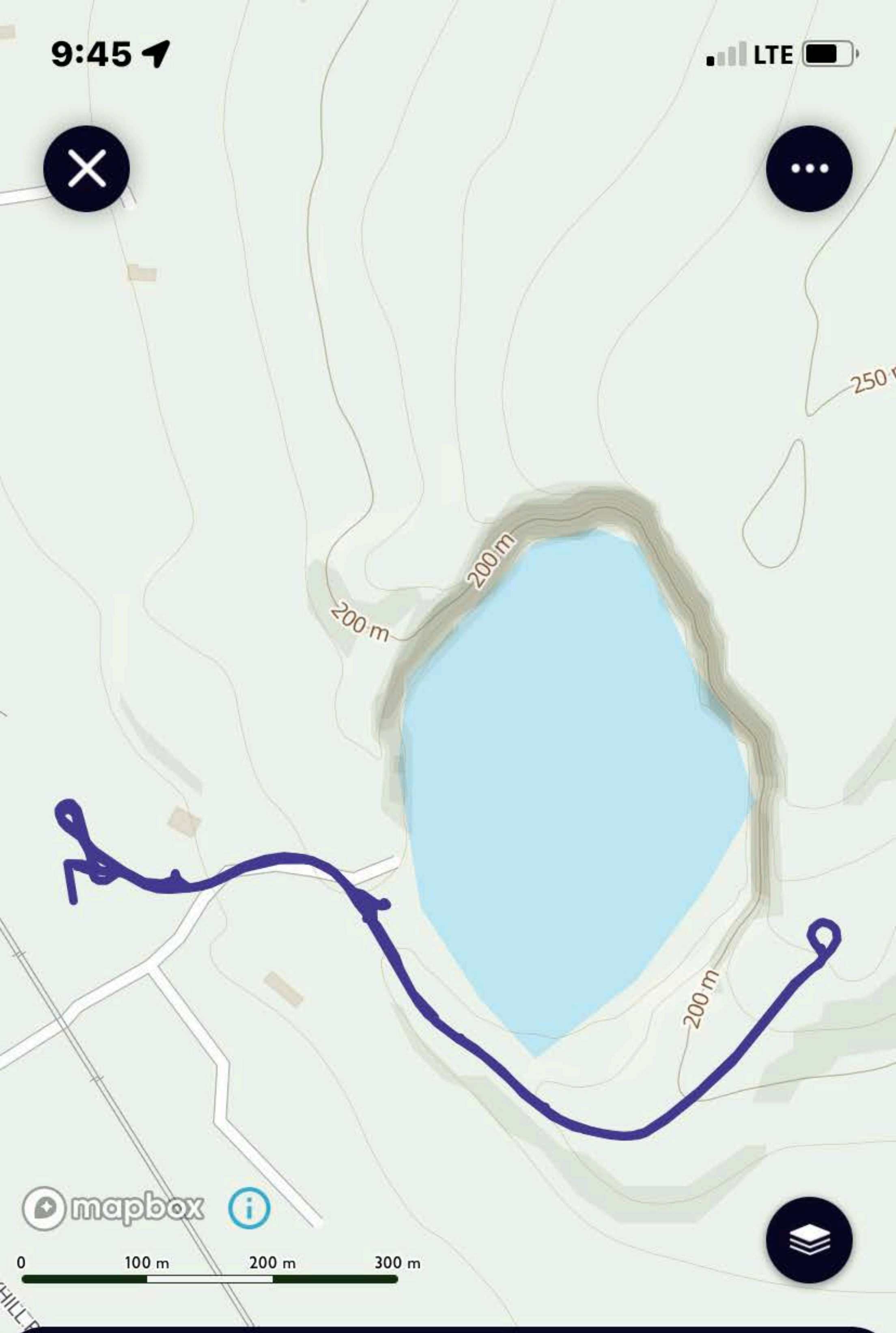
Distance	Total Duration	Moving Time
1.47 mi	34:39	34:39

Avg. Speed	Total Ascent >
2.6 mph	274 ft

Notes

First run with water truck. Will refill and wait till needed again. Ended 9:44am.

Elevation



Oct 11, 2022, 9:09–9:44 AM

Tuesday Morning Walk / Hike

Distance	Total Duration	Moving Time
1.47 mi	34:39	34:39

Avg. Speed	Total Ascent >
2.6 mph	274 ft

Oct 11, 2022, 10:40–10:49 AM

Tuesday Morning Walk / Hike

Distance	Total Duration	Moving Time
0.87 mi	08:54	08:54

Avg. Speed	Total Ascent >
5.9 mph	165 ft

Notes

2nd trip. End 10:49am.

Elevation

Oct 11, 2022, 10:40–10:49 AM

Tuesday Morning Walk / Hike

Distance	Total Duration	Moving Time
0.87 mi	08:54	08:54

Avg. Speed
5.9 mph

Total Ascent >

Oct 11, 2022, 11:05–11:27 AM

Tuesday Morning Walk / Hike

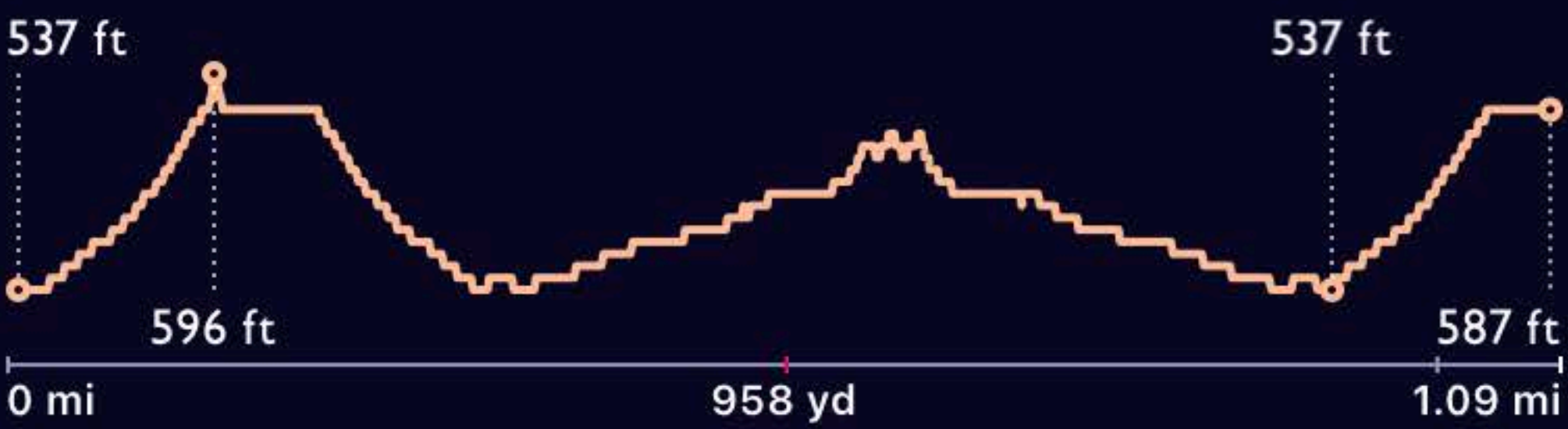
Distance	Total Duration	Moving Time
1.09 mi	21:56	21:56

Avg. Speed	Total Ascent >
3.0 mph	179 ft

Notes

3rd trip. Ended 11:28am.

Elevation



Oct 11, 2022, 11:05–11:27 AM

Tuesday Morning Walk / Hike

Distance	Total Duration	Moving Time
1.09 mi	21:56	21:56

Avg. Speed	Total Ascent >
3.0 mph	179 ft

12:44 LTE

Oct 11, 2022, 12:34–12:43 PM

Tuesday Afternoon Walk / Hike

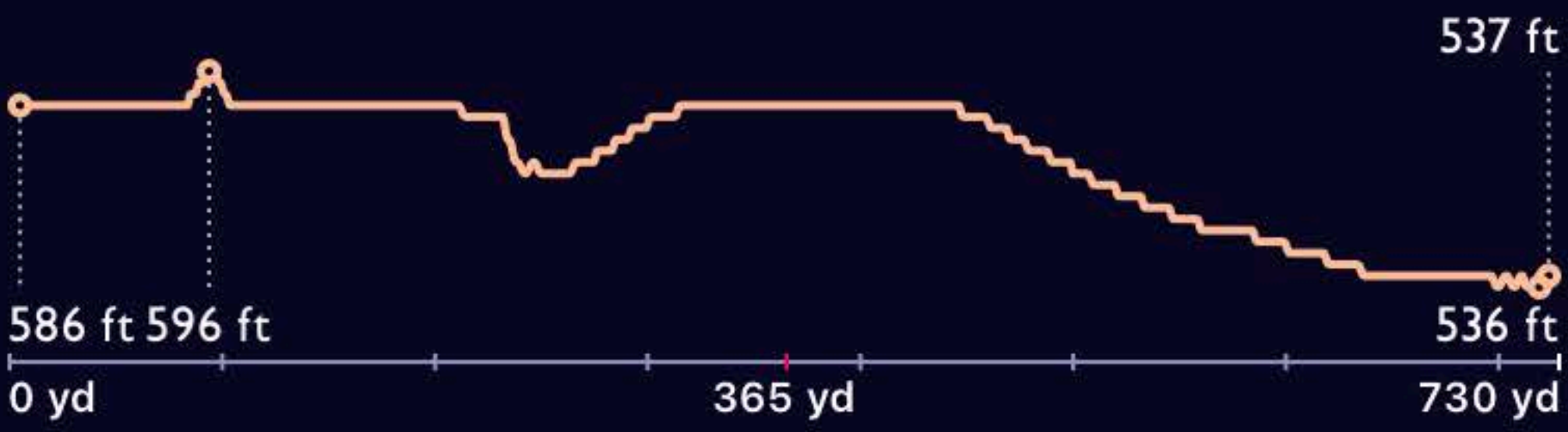
Distance	Total Duration	Moving Time
730 yd	08:39	08:39

Avg. Speed	Total Ascent >
2.9 mph	41 ft

Notes

4th trip. Ended at 12:43. Water truck parked and finished for event.

Elevation



12:44

LTE

200 m

200 m

mapbox

0 100 m 200 m 300 m

Oct 11, 2022, 12:34–12:43 PM

Tuesday Afternoon Walk / Hike

Distance	Total Duration	Moving Time
730 yd	08:39	08:39

Avg. Speed	Total Ascent >
2.9 mph	41 ft

Verizon LTE 1:15 PM 98%

Oct 11, 2022, 9:42 AM–1:13 PM

Tuesday Morning Walk / Hike

Distance	Total Duration	Moving Time
6.02 mi	03:31:38	03:31:38

Avg. Speed	Total Ascent >
1.8 mph	918 ft

Notes

Loader tracking.

Elevation

Verizon LTE 1:15 PM 98%

200 m

200 m

200 m

mapbox

0 100 m 200 m 300 m


SUNBELT RENTALS
SUNBELT
RENTALS
USDOT 500579


JOHN DEERE
544K-II
SUMMIT

Attachment 4
CMI Memorandum Re:
Oct. 11, 2022 Sampling Event

COMPLIANCE MANAGEMENT INTERNATIONAL

1350 Welsh Road, Suite 200
North Wales, PA 19454
Phone: 800.701.9369
www.complianceplace.com

November 1, 2022

Mr. Andrew Gutshall
Environmental Manager
Leigh Hanson, Inc.
7660 Imperial Way
Allentown, PA 18195

RE: Rock Hill Quarry
October 11, 2022 Limited Activity Event Air Sampling
Summary Review

Dear Andrew:

CMI conducted a perimeter asbestos air sampling event on October 11, 2022, at the Rock Hill Quarry. The sampling event monitored the limited activity events No. 2 and 5. CMI arrived on site at 6:30 AM to begin setting up the samplers at each monitoring location.

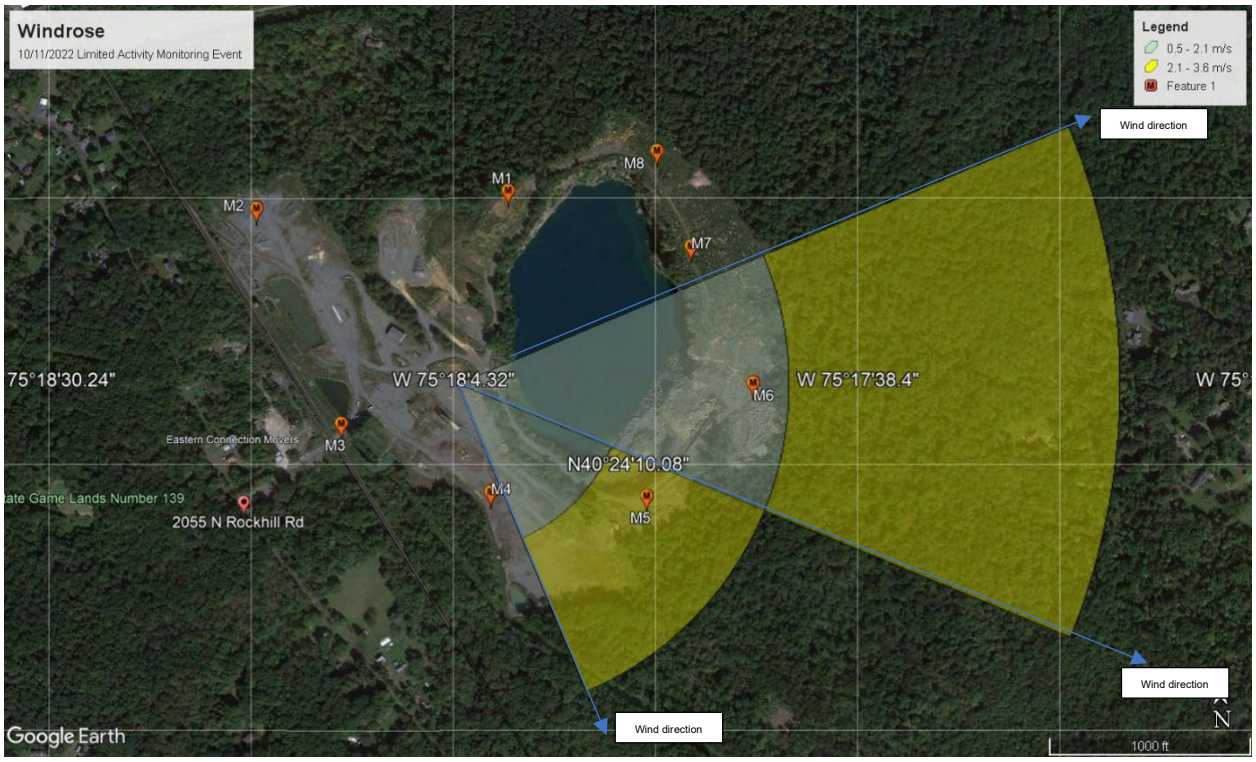
There were two samplers set up at each monitoring location. One was set to monitor the air at 2 liters per minute, and the other to sample the air at 4 liters per minute. Each sampler used an electric rotary vane pump calibrated to the needed flow rate. Since the pumps were electric, gasoline generators were placed at each monitor location to power the rotary vane pumps.

The 2 liters per minute samplers were turned on after the setup of each monitoring location. The 4 liters per min samplers were turned on just before the start of the limited activities. The 2 liters per minute monitors sampled for the entire day, consistent with previous monitoring events. The 4 liters per minute monitors were operated during the limited activity. Each monitor's flow rate was set to capture approximately 1000 liters of air to ensure compliance with the 0.001 fibers per cubic centimeters detection limit.

The monitoring at each location went as planned except at approximately 10:35 AM, the generator at Monitoring location 3 (M3) shut off. Kristian Witt noted the generator shut-off, as he was parked nearby, and heard the engine stop. After several unsuccessful attempts to start the engine, it was decided to move the generator from Monitor location 8 (M8) to M3 due to the general wind direction and proximity to the limited activity. The M3 monitor and M8 monitoring locations were upwind monitors to the activities conducted, as shown by the wind rose diagram

below. The wind rose shows the average wind speed and direction during the monitoring event. The diagram shows the wind direction that the wind was blowing. Thus, the wind was coming from the northwest and the southwest during the monitoring event and activity. Since M3 and M8 were upwind monitors, they would not have captured any naturally occurring asbestos and/or elongate mineral particles from the quarry activity.

Andrew Gutshall used an All-Terrain Vehicle to move the engine from M8 to M3. M3 was restarted at approximately 11:03 AM. A battery-operated Apex 2 pump was placed at M8 to continue monitoring using the 2 liters per minute sampler. The 4 liters per minute sampler at M8 was stopped. To compensate for the reduced volume, the laboratory analysis indicates that more filter area was analyzed on M8H (high-flow).



Sincerely,

Kristian Witt
Vice President, Environmental Services

Attachment 5
CMI Memorandum Re:
Sept. 30, 2022 Sampling Event

COMPLIANCE MANAGEMENT INTERNATIONAL

1350 Welsh Road, Suite 200
North Wales, PA 19454
Phone: 800.701.9369
www.complianceplace.com

October 19, 2022

Mr. Andrew Gutshall
Environmental Manager
Leigh Hanson, Inc.
7660 Imperial Way
Allentown, PA 18195

RE: Rock Hill Quarry
September 30, 2022 Limited Event Air Sampling
Summary Review

Dear Andrew:

CMI had mobilized to the Rock Hill Quarry site on September 30, 2022 to conduct the limited activity air sampling for equipment delivery and site maintenance. However, the event was postponed because the higher volume pumps set at four (4) liters per minute did not work in the field. CMI reviewed the field conditions and pump specifications to determine what caused the pump failure in the field since CMI had bench tested the pumps before the event.

The pumps used for previous monitoring events at the Rock Hill Quarry have been Casella APEX2 Air Sampling Pumps.

CMI arrived on site at 6:30 AM to set up two (2) samplers at each of the eight (8) monitoring locations. At each monitoring location, one (1) of the samplers was set to run at a flow of two (2) liters per minute as in the previous sampling events. The second sampler was set up to run at four (4) liters per minute for the limited activity duration. The lower flow samplers were started after set up. The higher flow setups were to be turned on just before the scheduled limited activities started. At approximately 9:00 AM, the CMI team fanned out to turn on the high-flow pumps; however, shortly after the pumps were started, they shut off and displayed a “Blocked Retry” error. This error is shown if the pump cannot maintain the target flow rate within 5% for more than 20 seconds (examples: due to a kinked tube or inlet blockage). The pump will automatically stop sampling and show the “Blocked Retry” error message. After several restarts, the same error occurred every time the high volume pump was restarted. Since the higher volume pumps did not work, the limited activity event and sampling were canceled.

CMI reviewed the pump specifications and the meteorological conditions during the sampling event and concluded that the high humidity and ambient temperature was the most likely cause for the pump error. CMI believes that water condensed on the sample filters, creating a higher pressure drop across the filter. The high pressure drop did not

allow the battery-powered pump to reach the set flow rate of four (4) liters per minute. CMI tried some methods to reduce the pressure drop, such as shortening the sampling tubing to maintain the desired sample flow rate. However, an error still occurred.

The ambient temperature at setup time was about 45 degrees Fahrenheit, and the relative humidity ranged from 93-96 percent. At the start of the higher flow sampling, the temperature was approximately 50 degrees Fahrenheit with a relative humidity of 83-88 percent. At those conditions, the dew point is calculated to be 43-45 degrees Fahrenheit. The dew point is the temperature the air needs to be cooled to (at constant pressure) to achieve a relative humidity (RH) of 100%.

The filters used to meet the proposed method are submicron filters. At high humidity level the submicron filter can become blocked or the water can condense on the filter. Therefore, we believe that humidity or water on the filter created a significant pressure drop or back pressure on the pump. Based on the user manual, the pump has different back pressure tolerances based on the set flow rate, as shown in the table below. Since the back pressure was too great for the pump to reach the desired flow rate, the pump computer logic interpreted that there was a blockage and shut off, displaying the Error Code “Blocked Retry”.

Apex2 **CASELLA**

Flow performance table

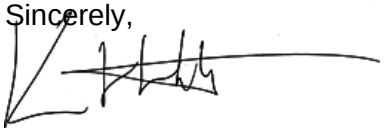
Flow rate	Back pressure
5.0 l/min	10" (25 cm) H_20 for 8 hours
	4" (10 cm) H_20 for 18 hours
4.0 l/min	28" (70 cm) H_20 for 8 hours
	16" (40 cm) H_20 for 15 hours
3.0 l/min	39" (100 cm) H_20 for 10 hours
	20" (50 cm) H_20 for 15 hours
2.0 l/min	59" (150 cm) H_20 for 10 hours
	39" (100 cm) H_20 for 15 hours
	20" (50 cm) H_20 for 25 hours
1.0 l/min	79" (200 cm) H_20 for 12 hours
	20" (50 cm) H_20 for 35 hours

It appears that the back pressure created by the moisture on the filter media was greater than 28 inches water but less than 59 inches water since the lower flow pumps at two (2) liters/minute worked well.

The high volume pumps appeared to operate correctly within a controlled, indoor environment. However, the outdoor conditions caused unforeseen issues with the higher volume pumps.

To help resolve this during future sampling events, CMI will use more robust electric pumps powered by portable generators that can handle a higher pressure drop at higher flow rates than the battery operated pumps.

Sincerely,



Kristian Witt
Vice President, Environmental Services

Attachment 6
Visible Emissions Logs from
Oct. 11, 2022 Sampling Event

EPA METHOD 22 - FUGITIVE EMISSIONS OBSERVATION FORM

Company: Hanson Aggregates Location: Rockhill Quarry	Observer: Hemal Trivedi HT Affiliation: CMI Date: ~~September 30,~~ October 11 2022
Sky Conditions ~~Cloudy, Overcast~~ Clear Skies, Sunny Precipitation 0%	Wind Coming from NE Direction At sampling start, wind direction was shown to NE at 0 mph. The wind direction changed between 9:55am and 10:10am. Throughout the remainder of the sampling, wind primarily came from the NW. -HT
Industry: Mining	Process Unit: Plant Road Repair and Maintenance

Sketch process unit: indicate observer position relative to source; indicate potential emission points and/or actual emission points.

See Attached picture

HT

OBSERVATIONS

To complete this form, record the following:

- the initial clock time
- the total time of the
- observation (from Stop Watch 1)
- the total time of emissions (from Stop Watch 2), and
- the final clock time.

	Clock Time	Observation Period Duration (minutes:seconds)	Accumulated emission time (minutes:seconds)
Begin Observation	9:27	00:00	00:00
Break	9:42	15:26	00:00
Start	9:47	15:26	00:00
Break	10:03	31:19	00:00
Start	10:04	31:19	00:00
Break	10:25	48:24	00:00
Start	10:30	48:24	00:00
Dust kick up /Stop	10:39	58:05	00:10
Re wet	10:42	58:05	00:10
Start	10:43	58:05	00:10
Break	10:53	1:09:23	00:10
Start	11:01	1:09:23	00:10
Break	11:21	1:29:31	00:10
Start	11:29	1:29:31	00:10
Break	11:49	1:50:00	00:10
Start	11:54	1:50:00	00:10
Break	12:16	2:12:08	00:10
Start	12:24	2:12:08	00:10
Break	12:48	2:35:46	00:10
Start	12:51	2:35:46	00:10
End Observation 1	1:02	2.46:14	00:10