

DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health
Fremont District Office
39141 Civic Center Drive, Suite 310
Fremont, CA 94538
Tel. # (510) 794-2521 Fax # (510) 794-3889



December 23, 2016

Apple Project
Attn: Allen Martin, Holder Sr. Safety Coordinator
10590 N. Tantau Ave.
Cupertino, CA 95014

Dear Employer:

The Division of Occupational Safety and Health has received a complaint (Complaint No. 1166799) alleging the following condition(s) at your workplace at 92111 Pruneridge Ave., Cupertino, which may be a violation of the Safety Orders found in Title 8 of the California Code of Regulations:

Code Section(s) and Alleged Condition(s):

1. **The employer (Holder Construction) has not performed clean-up for airborne dust/dirt at the lower basement areas (#1 and #2). The dust is causing congestion for workers in the area. The dust is being tracked in from the outside by workers and industrial trucks. This is on-going for weeks.**
Please refer to Title 8 of CCR Sections 1530.1, 1513, and 1530

To review Title 8, California Code of Regulations, go to www.dir.ca.gov, click on "Title 8 Regulations" then click on "Cal/OSHA" and enter the code section number mentioned above. Or you can go directly to www.dir.ca.gov/samples/search/query.htm.

The Division has not determined whether the hazard(s), as alleged, exist(s) at your workplace and, at this time, the Division does not intend to conduct an inspection of your workplace.

However, you are required to investigate the alleged condition(s) and notify this office in writing no later than fourteen (14) calendar days after receipt of this letter whether the alleged condition(s) exist and, if so, specify the corrective action(s) you have taken and the estimated date when the corrections will be completed. If possible, please fax or e-mail your response to Kelly Tatum, district manager, at fax number (510) 794-3889 or e-mail at DIRDOSHFREMONT@DIR.ca.gov.

Please include any written documentation, e.g., equipment purchase orders or contracts for corrective work, and photographs, if appropriate, in your response. If you do not respond in a timely and satisfactory manner, an unannounced inspection of your workplace will be scheduled, which may result in citation(s) and monetary penalties. Also, every tenth satisfactory letter response from employers is subject to verification by an inspection.

You are required to post a copy of this letter in a prominent location in their workplace where it is readily accessible for employee review for at least three (3) working days or until the hazard is corrected, whichever is longer.

This letter is not a citation or a notification of a proposed penalty. Citations and penalties can only be issued after an inspection of your workplace. If the Division does not receive a satisfactory response from you within

fourteen (14) calendar days after receipt of this letter, an on-site inspection will be conducted as appropriate.

If the identity of the complainant is known to the Division, a copy of this letter will be sent to the complainant. Also, the complainant will be notified that California law protects any person who makes a complaint about workplace safety or health hazards from being treated differently, discharged or discriminated against in any manner by their employer. If a complainant believes they have been discriminated against, it is their right to file a complaint with the Division of Labor Standards Enforcement within six (6) months of the discriminatory action.

If you have any questions concerning this matter, please contact me at the address in the letterhead.

Your interest in the safety and health of your employees is appreciated.

Sincerely,



Kelly Tatum
District Manager

KT / ca

reference: Complaint No. 1166799 - Ltr D

DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health
Fremont District Office
39141 Civic Center Drive, Suite 310
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Tel. # (510) 794-2521 Fax # (510) 794-3889



December 23, 2016

Apple Project
Attn: Bryan Fink, Rudolph & Sletten Regional Manager
10590 N. Tantau Ave.
Cupertino, CA 95014

Dear Employer:

The Division of Occupational Safety and Health has received a complaint (Complaint No. 1166799) alleging the following condition(s) at your workplace at 92111 Pruneridge Ave., Cupertino, which may be a violation of the Safety Orders found in Title 8 of the California Code of Regulations:

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Your interest in the safety and health of your employees is appreciated.

Sincerely,



Kelly Tatum
District Manager

KT / ca

reference: Complaint No. 1166799 - Ltr D

DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health
Fremont District Office
39141 Civic Center Drive, Suite 310
Fremont, CA 94538
Tel. # (510) 794-2521 Fax # (510) 794-3889



December 23, 2016

Apple Project
Attn: Brian Bellucci, Apple Safety Representative
10590 N. Tantau Ave.
Cupertino, CA 95014

Dear Employer:

The Division of Occupational Safety and Health has received a complaint (Complaint No. 1166799) alleging the following condition(s) at your workplace at 92111 Pruneridge Ave., Cupertino, which may be a violation of the Safety Orders found in Title 8 of the California Code of Regulations:

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If you have any questions concerning this matter, please contact me at the address in the letterhead.

Your interest in the safety and health of your employees is appreciated.

Sincerely,



Kelly Tatum
District Manager

KT / ca

reference: Complaint No. 1166799 - Ltr D



Via Facsimile (501) 794-3889

January 5th, 2017

Ms. Kelly Tatum
Acting District Manager
State of California Department of Industrial Relations
Division of Occupational Safety and Health
39141 Civic Center Drive, Suite 310
Fremont, CA 94538

Re: Complaint Number: 1166799 – Ltr D

Dear Ms. Tatum:

We received the referenced Complaint via mail on December 23rd, 2016. Holder Construction Company is proactively implementing our policies and procedures to ensure a safe project site. Below is our response to the alleged conditions:

1. The employer (Holder Construction) has not performed clean-up for airborne dust/dirt at the lower basement areas (#1 and #2). The dust is causing congestion for workers in the area. The dust is being tracked in from the outside by workers and industrial trucks. This is on-going for weeks. (Reference T8CCR 1530.1, 1513, and 1530)

Response:

§1530.1 Control of Employee Exposures from Dust-Generating Operations Conducted on Concrete or Masonry Materials – Over 99% of the Main Building concrete operations have been completed in the below grade levels. Please also be advised that the remaining concrete masonry work is under the control of another General Contractor, which is also 99% complete. Although we do not have supervision or control of masonry work, it has been communicated to Holder that the following engineering controls are in place for the masonry operations:

- Fans are used to direct non-captured dust to negative air machines with Hepa Filters.
- Water is sprayed onto the grout as it is dumped from the bag and into the mixing hopper.
- All mixing crews have been trained in proper engineering dust control

It has also been communicated to Holder that multiple dust and silica IH assessments were performed on the employees with the highest potential exposure which involved mixing operations over an 8-hour shift in the basement levels. The assessment results indicated that exposure to dust and silica levels were below the established permissible exposure limits established by Cal/OSHA and Fed OSHA. The highest concentration detected for respirable dust was identified at 1.9 mg/m³ and 0.035 mg/m³ for silica concentration.

Additionally, Holder Construction has taken a proactive approach by performing additional IH sampling for Respirable Dust and Crystalline Silica throughout the basement levels which were either non-detect, or below the applicable Cal/OSHA PEL, Fed OSHA PEL, Fed OSHA Action Level, and the ACGIH TLV (see attached report). Furthermore, several trade contractors working full time in the basement levels voluntarily wore personal monitors. The personal monitoring also produced samples that were well below the applicable levels. The results of the IH and personal samples have been shared and communicated. Please see attached email from one of the volunteers who participated in the personal sampling.

§1530 General Requirements of Mechanical Ventilation Systems – The Basement levels currently contain two separate ventilation systems provided by both permanent garage exhaust and temporary air systems. Both temporary and permanent systems contain media filters to aid in filtration. In order to promote continuous air movement throughout the basement levels, additional box fans are strategically placed throughout. Our vendor is routinely onsite to help manage the ongoing process of repositioning the temporary fans, perform routine maintenance and replace filters as needed.

§1513 Housekeeping- Housekeeping efforts have been continuous and effective. A crew of 18 laborers as well as Subcontractor labor crews are performing general housekeeping in the below grade levels utilizing vacuums, Zamboni's and a water buffalo to assist with dust mitigation. Additionally, the General Contractors are partnering together to ensure that any dust that has the potential of being tracked into building is mitigated by use of sweeper/vacuum trucks. Daily logs are being shared by all GC's to ensure the ongoing maintenance is occurring. (See attached daily cleaning log)

We trust that the information outlined above satisfactorily addresses the aforementioned Complaint. Please let us know if you have any questions.

Sincerely,



Todd Turner
General Superintendent

Enclosure

cc: Dave O'Haren, Gavin Kalley, Shawn Belin, Allen Martin – Holder Construction Company

Friday 12/9/2016			Saturday 12/10/2016			Monday 12/12/2016						
	<u>Driver</u>	<u>In</u>	<u>Out</u>		<u>Driver</u>	<u>In</u>	<u>Out</u>		<u>Driver</u>	<u>In</u>	<u>Out</u>	
AM	Juan	8:00	8:21	AM	Jose	8:16	8:29	AM	Juan	7:15	7:45	
	Omar	8:00	8:30		Jose	9:23	9:41		Omar	8:00	8:30	
	Jose	8:20	8:40		Jose	10:31	10:45		Juan	8:10	8:40	
	Jose	9:14	9:27		Jose	11:10	11:26		Jose	8:16	8:27	
	Juan	9:30	9:39		Demetrio	3:22	3:30		Juan	9:06	9:23	
	Omar	10:00	10:30		Demetrio	3:32	3:45		Jose	9:21	9:40	
	Juan	10:10	10:19						Omar	10:00	10:30	
	Jose	10:31	10:46						Juan	10:10	10:15	
	Omar	11:00	11:15						Jose	10:30	10:47	
	Juan	11:10	11:30						Juan	10:45	11:27	
PM	Jose	11:16	11:27						Omar	11:00	11:30	
	Jose	12:28	12:42						Jose	11:17	11:28	
	Juan	2:00	2:13						PM	Jose	12:34	12:52
	Omar	2:00	2:15						Omar	2:00	2:30	
	Jose	2:18	2:41						Jose	2:19	2:42	
	Omar	3:00	3:30						Juan	3:00	3:28	
	Juan	3:09	3:15						Omar	3:00	3:45	
	Jose	3:28	3:48						Jose	3:16	3:30	
	Jose											
Tuesday 12/13/2016			Wednesday 12/14/2016			Thursday 12/15/2016						
	<u>Driver</u>	<u>In</u>	<u>Out</u>		<u>Driver</u>	<u>In</u>	<u>Out</u>		<u>Driver</u>	<u>In</u>	<u>Out</u>	
AM	Juan	7:15	7:45	AM	Juan	7:15	7:37	AM	Juan	7:10	7:35	
	Omar	8:00	8:30		Juan	8:10	8:30		Omar	8:00	8:30	
	Jose	8:20	8:40		Jose	8:18	8:39		Jose	8:17	8:34	
	Juan	9:06	9:23		Omar	9:00	9:30		Juan	8:15	8:23	
	Jose	9:16	9:29		Jose	9:22	9:40		Jose	9:25	9:43	
	Omar	9:30	10:00		Juan	10:10	10:36		Juan	9:10	9:17	
	Juan	10:10	10:19		Jose	10:14	10:28		Omar	10:00	10:15	
	Jose	10:25	10:42		Omar	10:30	11:00		Juan	10:10	11:00	
	Omar	11:00	11:30		Jose	10:14	10:28		Jose	10:31	10:50	
	Juan	11:40	11:55		Jose	11:31	11:49		PM	Jose	12:16	12:30
PM	Jose	12:24	12:43	PM	Jose	1:29	1:49		Jose	1:23	1:42	
	Omar	1:00	1:30		Omar	2:00	2:30		Omar	2:00	2:30	
	Jose	1:18	1:40		Juan	2:10	3:00		Juan	2:30	3:30	
	Omar	2:00	2:30		Jose	2:25	2:44		Jose	2:32	2:52	
	Jose	2:32	2:51		Omar	3:00	3:30		Jose	3:17	3:37	
	Omar	3:30	4:00		Juan	3:10	3:15		Omar	3:30	4:00	
	Jose	3:39	3:55		Jose	3:32	3:51					

Allen Martin

From: Robert Godinez [REDACTED]
Sent: Tuesday, October 4, 2016 7:37 AM
To: Allen Martin; Dave Kivi Rosendin Sfty; Ivan Camacho
Subject: Yesterday's environmental test

Good morning, thought I let you know that my men and I appreciate being included in the testing.
I will also be able to report favorably at the next local safety committee and this month at the NSC conference.
It is good to see the men in the field and safety working together in a positive manner.
In solidarity Robert Godinez IBEW 332 Safety committee member



EHS Services and Solutions
4 North 2nd Street
Suite 1270
San Jose, CA 95113
800.790.6236
bsigroup.com

October 17, 2016

Allen Martin
Senior Safety Coordinator
Holder Construction
1905 Pruneridge Avenue
Cupertino, CA 95014

Re: Industrial Hygiene Air Sampling for Respirable Dust and Respirable Crystalline Silica at AC2 Construction Site, Cupertino, California – BSI Project No. 16-2001

Dear Mr. Martin:

Pursuant to your request, BSI EHS Services and Solutions (BSI) performed industrial hygiene air sampling to evaluate potential and representative employee exposures to respirable dust and respirable crystalline silica to select workers at the AC2 construction site (the site) located in Cupertino, California. BSI Associate Consultant Vraj Derodra performed the air monitoring event at the site on October 3, 2016. This report was written by Mr. Derodra with quality review provided by BSI Principal Consultant Xavier Alcaraz, MSPH, CIH, CSP. This report describes the sampling methodology and analysis employed, presents the findings as compared to regulatory and other occupational exposure limits, and discusses conclusions and recommendations, where applicable.

Background and Purpose

Mr. Allen Martin, Senior Safety Coordinator with Holder Construction (Holder) retained BSI's services to perform an industrial hygiene assessment of respirable dust and respirable crystalline silica in common work areas and for select construction personnel at the AC2 construction site.

BSI performed personal sampling of respirable dust and silica on workers chosen by Holder Construction's safety coordinators. The objective of the personal air sampling was to evaluate the levels of respirable dust and respirable crystalline silica to personnel working select tasks at the site. BSI understands that the monitoring was being performed following concerns of potential exposures to respirable dust and respirable silica associated with on-going construction activities at the AC2-construction site. The objective of the area sampling was to evaluate potential exposures and levels of respirable dust and crystalline silica in common areas frequented by general trades such as walkways, drive aisles, and hallways within the building construction site. Area sampling locations were identified by Mr. Ivan Camacho of Holder Construction based on his knowledge of the AC2 construction site. Mr. Camacho also served as BSI's site contact on the day of sampling.

During the walkthrough, BSI was informed that a Holder Construction representative was tasked with spraying the areas of high vehicle and foot traffic inside the AC2 site with water on an hourly basis to reduce the amount of construction-related dust suspended in the air (Photo 1, Attachment 4). There were also multiple workers performing sweeping and vacuuming activities on a regular basis. Visible dust was observed in some areas including E4, B2 tunnel area (Photo 2, Attachment 4). Some areas had accumulated notable dust which became suspended in the air when a vehicle drove by. Dust control methods also included use of high volume fans and industrial dust exhaust systems (>3500 cubic feet per minute). Some of the overhead dust exhaust systems were not operational on the day of sampling including those at A5, B1 tunnel and A6, B1 tunnels (Photo 3, Attachment 4). Some workers were observed wearing N95 masks (Photo 4, Attachment 4), which were provided by Holder for use on a voluntary basis. Other personal protective equipment (PPE) worn by the construction workers included safety glasses, hard hats and steel-toed shoes.

Sampling Methods

Sampling media for the respirable dust and respirable crystalline silica air samples were fitted to an aluminum cyclone (with particle cut point of 4 microns) attached by plastic tubing to an air sampling pump calibrated to the method-specified flow rate in liters of air per minute (lpm). The sampling pumps were calibrated with a BIOS DryCal calibrator prior to and following sampling to verify the sample flow rate (BIOS DryCal calibration Certificate in Attachment 3). After sampling, the media were labeled, sealed, and submitted for analysis by an independent, American Industrial Hygiene Association (AIHA)-accredited laboratory, SGS –Galson Laboratories in East Syracuse, New York.

The air samples were collected and analyzed according to the following NIOSH and OSHA Analytical Methods:

- Respirable Crystalline Silica: modified NIOSH 7500/OSHA ID –142, 3-piece, 37 mm, polyvinyl chloride (PVC) filters with SKC aluminum cyclones at ~2.5 lpm
- Respirable Dust: NIOSH 0600, 3 piece, 37 mm, polyvinyl chloride (PVC) filters with SKC aluminum cyclones at ~2.5 lpm

Note that SGS-Galson Laboratories may utilize "modified" analytical techniques to improve analytical results.

Regulatory Standards

California Occupational Safety and Health Administration (Cal/OSHA) has established Permissible Exposure Limits (PELs) for airborne contaminants in Title 8, California Code of Regulations (CCR), Section 5155, Table AC-1, which represent average airborne contaminant levels that nearly all workers may be exposed to repeatedly without adverse health effects. The PEL is the maximum 8-hour Time-Weighted Average (TWA) concentration allowed for an airborne contaminant, and it is typically expressed as a PEL-TWA. Cal/OSHA has also established Short-Term Exposure Limits (STELs) and Ceiling Limits (CLs) for some substances which have fast-acting and immediate effects such as irritation. A STEL is a 15-minute TWA exposure level which is not to be exceeded at any time during the workday, even if the 8-hour TWA is below the PEL-TWA.

The Ceiling Limit is the maximum concentration of an airborne contaminant to which an employee may be exposed at any time. If exposures exceed the PEL, STEL or Ceiling Limit, then the employer is required by Cal/OSHA to implement control measures to reduce the exposures.

On March 24, 2016, the Federal OSHA enacted the final rule on silica dust for General Industry and Maritime (CFR 1910.1053) and Construction (CFR 1926.1153). Both standards became effective on June 23, 2016. Cal/OSHA has six months to enact its own silica dust standard or adopt the Federal OSHA standard.

The American Conference of Governmental Industrial Hygienists (ACGIH) establishes Threshold Limit Values (TLV) to assist in the evaluation of airborne contaminants. TLVs are typically expressed as eight-hour, time-weighted averages (TLV-TWAs). ACGIH also publishes STELs for 15-minute time-weighted short term exposures for some substances. A Short Term Exposure Limit (STEL) is a 15-minute time-weighted average exposure which is not to be exceeded at any time during the workday, even if the 8-hour time-weighted average is below the TLV. It should be noted that ACGIH TLVs and STELs are not a regulatory requirement, but represent a scientific opinion based on an objective peer-review of scientific literature by committees of experts in public health and related sciences.

Crystalline silica comes in various forms that are of occupational health concern which include cristobalite, quartz, and tridymite. The regulatory occupational exposure limits for the constituents assessed in this survey are summarized in Table 1.

Table 1: Summary of Current 2016 Cal/OSHA, New 2016 Fed/OSHA, and 2016 ACGIH Occupational Exposure Limits (OELs)

Airborne Contaminant	Cal/OSHA PEL 8-hr. TWA (mg/m ³)	Federal/OSHA PEL and Action Level 8-hr. TWA (mg/m ³)	ACGIH TLV 8-hr. TWA (mg/m ³)
Respirable Dust	5	5	3
Respirable Crystalline Silica			
Cristobalite	0.05	PEL = 0.05*	0.025
Quartz	0.1	Action Level = 0.025*	0.025
Tridymite	0.05	(all 3 forms)	NE

mg/m³ = milligrams per cubic meter

ppm = parts per million

Cal/OSHA PEL = California Occupational Safety and Health Administration Permissible Exposure Limit

Fed/OSHA PEL = Federal Occupational Safety and Health Administration

Permissible Exposure Limit

*Fed/OSHA Final Rule for Respirable Crystalline Silica promulgated on 3/24/16

NE = None Established

Results and Discussion

The results from the air sampling performed for respirable dust and respirable crystalline silica at the AC2 construction site for the sampling event on October 3, 2016 are summarized in Table 2. The analytical laboratory report and the chain-of-custody (COC) forms for all sampling events are provided in Attachment 1. The BSI field sampling data sheets are provided in Attachment 2. Calibration record for the primary calibrator used for field calibration of air sampling pumps is provided in Attachment 3.

Personal and area air sampling results for respirable dust and respirable crystalline silica (cristobalite, quartz, and trydmite) at the AC2 construction site on October 3, 2016 were below the respective Cal/OSHA PEL and Fed/OSHA PEL for each of the workers and locations sampled. Respirable quartz was detected in all areas; however, the levels were below the Cal/OSHA PEL and Fed/OSHA PEL. The exposure limits are summarized in Table 2. Lab results are attached.

Table 2: Summary of Personal and Area Air Sampling Results for Respirable Crystalline Silica & Respirable Dust – October 3, 2016

Sample #	Air Sampling Location and Description	Sampling Time (minutes)	Respirable Crystalline Silica (mg/m³)			Respirable Dust (mg/m³)
			Cristobalite	Quartz	Tridymite	
100316VD-1	██████████ Foreman monitoring his employees in the B1& B2 and traveling to all areas of the building	365	0.012	<0.0054	<0.021	0.22
100316VD -2	██████████ - no work activity except for walking from E4 to E6, no grinding or cutting, no installation	373	0.015	<0.0053	<0.021	0.32
100316VD -3	██████████ - A6-B1 Zone 1 and the drive aisle, working between column lines 68-69. All work was on overhead cable trays - installing conduit, dressing lighting cables and making up junction boxes. He walked to the lay down area in A4-B2 a few times.	418	0.015	<0.0047	<0.019	0.31
100316VD -4	██████████ - sweeping and vacuuming in the B-3 & B-2 level and A3 & A4 area	364	0.01	<0.0054	<0.022	0.14
100316VD -5	Area Sample – A5, B1	351	0.0087	<0.0056	<0.022	0.12
100316VD -6	Area Sample – E3, B2	395	0.013	<0.005	<0.02	0.23
100316VD -7	Area Sample – A6, B1	398	0.014	<0.0049	<0.02	0.27
100316VD -8	Area Sample – A7, B1	395	0.0081	<0.005	<0.02	0.14
100316VD -9	██████████ Flagger in the A1 tunnel	368	0.0094	<0.0054	<0.021	0.11
100316VD -10	Area Sample – E4, B2	378	0.019	<0.0052	<0.021	0.35
100316VD -11	Field Blank Sample	NA	0.005 mg	<0.005 mg	<0.020 mg	<0.050 mg
Cai/OSHA 8-Hour TWA PELs			0.05	0.1	0.05	5
Fed/OSHA 8- Hour TWA Action Level			0.025	0.025	0.025	NA
Fed/OSHA 8- Hour TWA PEL			0.05	0.05	0.05	5
ACGIH 8-Hour TWA TLV			0.025	0.025	NE	3

mg/m³ = milligrams per cubic meter

ND = Non Detect

NA = Not Applicable

NE = None Established

Conclusions

Based on the air sampling results of this survey and information provided by workers and/or Holder Construction while onsite, all of the personal and area air samples collected on October 3, 2016 for respirable dust and respirable crystalline silica at the AC2 construction site were either non-detect or below the applicable Cal/OSHA PEL, Fed/OSHA PEL, Fed/OSHA Action Level, and the ACGIH TLV.

Based on the air sampling results and information provided by workers and/or Holder Construction, BSI recommends the following:

- Communicate the results of this survey to affected employees following receipt of this report
- Continue the use of wet methods as observed on the day of sampling to minimize airborne dust generation
- Continue using industrial fans and dust exhaust ventilation systems. Place exhaust fans in high foot and vehicle traffic areas
- Comply with applicable sections of Title 8, CCR Section 1530.1 - Control Employee Exposures from Dust-Generating Operations Conducted on Concrete including the following:
 - During operations in which powered tools or equipment are used to cut, grind, core, or drill, concrete or masonry materials, a dust reduction system shall be applied to effectively reduce airborne particulate
 - Employee training: An employer whose operations include using powered tools or equipment to cut, grind, core, or drill concrete or masonry materials shall provide training to all employees prior to their assignment to jobs or work areas where the employer will be conducting these operations
 - Additional requirements of this standard apply
- Cal/OSHA has 6 months to enact its own silica dust standard or adopt the new Federal OSHA Silica Dust standard. Additional requirements to construction activities in California may be applicable at that time
- Maintain air monitoring exposure records in accordance with Title 8, California Code of Regulations (CCR), Section 3204, "Access to Employee Exposure and Medical Records"

BSI appreciates the opportunity to have performed this work for your construction site. Please feel free to call me at 408.790.9200 if you have questions regarding this air sampling report.

Sincerely,

Vraj Derodra

Vraj Derodra
Associate Consultant

Reviewed by:

Xavier Alcaraz

Xavier Alcaraz, MSPH, CIH, CSP
Principal Consultant

Attachments:

Attachment 1: Analytical Lab Results and Chain-of-Custody Form
Attachment 2: BSI Field Air Sampling Data Sheets

Attachment 3: BIOS DryCal Calibration Certificate
Attachment 4: Photos

Attachment 1

Analytical Lab Results and Chain-of-Custody Form

All analytical lab results and chain-of-custody forms will adhere to the following labeling and tracking requirements. All analytical lab results must be submitted to the project manager within 24 hours of receipt. All analytical lab results must be submitted to the project manager within 24 hours of receipt.

Upon receipt of analytical lab results, all analytical lab results will be placed in a binder with the analytical lab results labeled by date received. All analytical lab results will be tracked by date received. All analytical lab results will be tracked by date received. All analytical lab results will be tracked by date received.

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SGS

GALSON

Mr. Vraj Derodra
BSI EHS Services and Solutions
4 N 2nd St
Suite 1270
San Jose, CA 95113

October 07, 2016

DOH ELAP #11626
AIHA-LAP #100324

Account# 13350

Login# L387790

Dear Mr. Derodra:

Enclosed are the analytical results for the samples received by our laboratory on October 05, 2016. All test results meet the quality control requirements of AIHA-LAP and NELAC unless otherwise stated in this report. All samples on the chain of custody were received in good condition unless otherwise noted.

Results in this report are based on the sampling data provided by the client and refer only to the samples as they were received at the laboratory. Unless otherwise requested, all samples will be discarded 14 days from the date of this report, with the exception of IOMs, which will be cleaned and disposed of after seven calendar days.

Current Scopes of Accreditation can be viewed at www.galsonlabs.com in the accreditations section under the "about Galson" tab.

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

Sincerely,

SGS Galson Laboratories



Lisa Swab
Laboratory Director

Enclosure(s)

Galson Laboratories, Inc. is now a part of SGS, the world's leading inspection, verification, testing, and certification company. As part of our transition to SGS, you will begin to see some formatting changes with reports that will improve the presentation of data and allow for the transition to the new logo.



GALSON

LABORATORY ANALYSIS REPORT

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

Client : BSI EHS Services and Solutions Account No.: 13350
Site : Holder Const.-AC2 Sampling Login No. : L387790
Project No. : 16-2001
Date Sampled : 03-OCT-16 Date Analyzed : 05-OCT-16
Date Received : 05-OCT-16 Report ID : 960118

Respirable Dust

<u>Sample ID</u>	<u>Lab ID</u>	Air Vol liter	Total mg	Conc mg/m ³
100316VD-1	L387790-1	931.3	0.21	0.22
100316VD-2	L387790-2	943.07	0.30	0.32
100316VD-3	L387790-3	1058.86	0.33	0.31
100316VD-4	L387790-4	921.1	0.13	0.14
100316VD-5	L387790-5	898.03	0.11	0.12
100316VD-6	L387790-6	1010.02	0.23	0.23
100316VD-7	L387790-7	1012.84	0.28	0.27
100316VD-8	L387790-8	996.06	0.14	0.14
100316VD-9	L387790-9	931.41	0.10	0.11
100316VD-10	L387790-10	955.84	0.34	0.35
100316VD-11	L387790-11	NA	<0.050	NA

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

Level of quantitation: 0.050 mg

Submitted by: KBD

Analytical Method : mod. NIOSH 0600; Gravimetric

Approved by : KRK

OSHA PEL : PNOR 5 mg/m³ (TWA)

Date : 07-OCT-16

NYS DOH # : 11626

Collection Media : PVC PW 37mm

Supervisor: KRK

QC by: MLN

< -Less Than mg -Milligrams m³ -Cubic Meters kg -Kilograms NA -Not Applicable ND -Not Detected
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ppm -Parts per Million



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 Site : Holder Const.-AC2 Sampling Login No. : L387790
 Project No. : 16-2001
 Date Sampled : 03-OCT-16 Date Analyzed : 05-OCT-16 - 07-OCT-16
 Date Received : 05-OCT-16 Report ID : 960627

Respirable Crystalline Silica (RCS): Quartz, Cristobalite, Tridymite

Sample ID	Lab ID	Analyte	Air Vol		
			l	ug	ug/m3
100316VD-1	L387790-1	Quartz	931.3	11	12
		Cristobalite	931.3	<5.0	<5.4
		Tridymite	931.3	<20	<21
		RCS	931.3	11	12
100316VD-2	L387790-2	Quartz	943.07	14	15
		Cristobalite	943.07	<5.0	<5.3
		Tridymite	943.07	<20	<21
		RCS	943.07	14	15
100316VD-3	L387790-3	Quartz	1058.86	16	15
		Cristobalite	1058.86	<5.0	<4.7
		Tridymite	1058.86	<20	<19
		RCS	1058.86	16	15

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

Level of quantitation: Q:5ug C:5ug T:20ug

Submitted: AJD

Analytical Method : mod. NIOSH 7500/mod. OSHA ID-142; XRD

Approved: KRK

OSHA PEL : 50 ug/m3 RCS

Date : 07-OCT-16 NYS DOH # : 11626

Collection Media : PVC PW 37mm

Supervisor: KRK

QC by: MLN

< -Less Than

mg -Milligrams

kg -Kilograms

ppm -Parts per Million

> -Greater Than

ug -Micrograms

m3 -Cubic Meters

NS -Not Specified

NA -Not Applicable

ND -Not Detected

l -Liters

mppcf -Million Particles per Cubic Foot



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Project No. : 16-2001
Date Sampled : 03-OCT-16 Date Analyzed : 05-OCT-16 - 07-OCT-16
Date Received : 05-OCT-16 Report ID : 960627

Respirable Crystalline Silica (RCS): Quartz, Cristobalite, Tridymite

<u>Sample ID</u>	<u>Lab ID</u>	<u>Analyte</u>	Air Vol <u>l</u>	<u>ug</u>	<u>ug/m3</u>
100316VD-4	L387790-4	Quartz	921.1	9.3	10
		Cristobalite	921.1	<5.0	<5.4
		Tridymite	921.1	<20	<22
		RCS	921.1	9.3	10
100316VD-5	L387790-5	Quartz	898.03	7.8	8.7
		Cristobalite	898.03	<5.0	<5.6
		Tridymite	898.03	<20	<22
		RCS	898.03	7.8	8.7
100316VD-6	L387790-6	Quartz	1010.02	13	13
		Cristobalite	1010.02	<5.0	<5.0
		Tridymite	1010.02	<20	<20
		RCS	1010.02	13	13

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

Level of quantitation: Q:5ug C:5ug T:20ug Submitted: AJD
Analytical Method : mod. NIOSH 7500/mod. OSHA ID-142; XRD Approved: KRK
OSHA PEL : 50 ug/m3 RCS Date : 07-OCT-16 NYS DOH # : 11626
Collection Media : PVC PW 37mm Supervisor: KRK QC by: MLN

< -Less Than	mg -Milligrams	kg -Kilograms	ppm -Parts per Million
> -Greater Than	ug -Micrograms	m3 -Cubic Meters	NS -Not Specified
NA -Not Applicable	ND -Not Detected	l -Liters	mppcf -Million Particles per Cubic Foot



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 Site : Holder Const.-AC2 Sampling Login No. : L387790
 Project No. : 16-2001
 Date Sampled : 03-OCT-16 Date Analyzed : 05-OCT-16 - 07-OCT-16
 Date Received : 05-OCT-16 Report ID : 960627

Respirable Crystalline Silica (RCS): Quartz, Cristobalite, Tridymite

Sample ID	Lab ID	Analyte	Air Vol		
			l	ug	ug/m3
100316VD-7	L387790-7	Quartz	1012.84	14	14
		Cristobalite	1012.84	<5.0	<4.9
		Tridymite	1012.84	<20	<20
		RCS	1012.84	14	14
100316VD-8	L387790-8	Quartz	996.06	8.0	8.1
		Cristobalite	996.06	<5.0	<5.0
		Tridymite	996.06	<20	<20
		RCS	996.06	8.0	8.1
100316VD-9	L387790-9	Quartz	931.41	8.7	9.4
		Cristobalite	931.41	<5.0	<5.4
		Tridymite	931.41	<20	<21
		RCS	931.41	8.7	9.4

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

Level of quantitation: Q:5ug C:5ug T:20ug

Submitted: AJD

Analytical Method : mod. NIOSH 7500/mod. OSHA ID-142; XRD

Approved: KRK

OSHA PEL : 50 ug/m3 RCS

Date : 07-OCT-16 NYS DOH # : 11626

Collection Media : PVC PW 37mm

Supervisor: KRK

QC by: MLN

< -Less Than

mg -Milligrams

kg -Kilograms

ppm -Parts per Million

> -Greater Than

ug -Micrograms

m3 -Cubic Meters

NS -Not Specified

NA -Not Applicable

ND -Not Detected

l -Liters

mppcf -Million Particles per Cubic Foot



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 Project No. : 16-2001
 Date Sampled : 03-OCT-16 Date Analyzed : 05-OCT-16 - 07-OCT-16
 Date Received : 05-OCT-16 Report ID : 960627

Respirable Crystalline Silica (RCS): Quartz, Cristobalite, Tridymite

<u>Sample ID</u>	<u>Lab ID</u>	<u>Analyte</u>	<u>Air Vol</u>	<u>l</u>	<u>ug</u>	<u>ug/m3</u>
100316VD-10	L387790-10	Quartz	955.84	18	19	
		Cristobalite	955.84	<5.0	<5.2	
		Tridymite	955.84	<20	<21	
		RCS	955.84	18	19	
100316VD-11	L387790-11	Quartz	NA	<5.0	NA	
		Cristobalite	NA	<5.0	NA	
		Tridymite	NA	<20	NA	
		RCS	NA	<5.0	NA	

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

Level of quantitation: Q:5ug C:5ug T:20ug
 Submitted: AJD
 Analytical Method : mod. NIOSH 7500/mod. OSHA ID-142; XRD Approved: KRK
 OSHA PEL : 50 ug/m3 RCS Date : 07-OCT-16 NYS DOH # : 11626
 Collection Media : PVC PW 37mm Supervisor: KRK QC by: MLN

< -Less Than	mg -Milligrams	kg -Kilograms	ppm -Parts per Million
> -Greater Than	ug -Micrograms	m3 -Cubic Meters	NS -Not Specified
NA -Not Applicable	ND -Not Detected	l -Liters	mpcf -Million Particles per Cubic Foot



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LABORATORY FOOTNOTE REPORT

Client Name : BSI EHS Services and Solutions
 Site : Holder Const.-AC2 Sampling
 Project No. : 16-2001

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Date Sampled : 03-OCT-16 Account No.: 13350
 Date Received: 05-OCT-16 Login No. : L387790
 Date Analyzed: 05-OCT-16 - 07-OCT-16

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.

Unless otherwise noted below, 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. The findings herein constitute no warranty of the samples' representativeness of any sampled environment and strictly relate to the samples as they were presented to the laboratory.

Uncrounded 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 below, reported results have not been blank corrected for any field blank or method blank.

L387790 (Report ID: 960118):

SOPs: GRAV-SOP-5(16), GRAV-SOP-6(15)
 Gravimetric analytical accuracy of the sampling media is -0.001 +/- 0.006 mg (average blank weight change +/- 35% confidence interval or k=2). The estimated uncertainty applies to the media, technology, and SOP(s) referenced in this report and does not account for any uncertainty associated with the sampling process.
 PNOR = Particulates Not Otherwise Regulated.

L387790-3-8,10 (Report ID: 960118):

Cassette middle was cracked when received for analysis. Effect on sample is unknown.

L387790 (Report ID: 960627):

SOPs: ix-xrdreview(13), ix-xrddashprep(25), ix-calibrate(11), ix-xrdstdprep(25)
 We perform a quantitative secondary angle confirmation on all Quartz results greater than 0.025 mg.
 Secondary angle quantitative confirmation is not possible below 0.025 mg.
 We were able to confirm Quartz in samples L387790-3 and L387790-10 qualitatively using the secondary angle.

L387790-3-8,10 (Report ID: 960627):

Cassette middle was cracked when received for analysis. Effect on sample is unknown.

< -Less Than	mg -Milligrams	m³ -Cubic Meters	kg -Kilograms	ppm -Parts per Million	
> -Greater Than	ug -Micrograms	l -Liters	WS -Not Specified	ND -Not Detected	NA -Not Applicable



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Site : Holder Const.-AC2 Sampling
Project No. : 16-2001

Date Sampled : 03-OCT-16 Account No.: 13350
Date Received: 05-OCT-16 Login No. : L387790
Date Analyzed: 05-OCT-16 - 07-OCT-16

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
Cristobalite	+/-11.9%	96.1%
Quartz	+/-11.5%	97.9%
Tridymite	+/-15.2%	102%

< -Less Than mg -Milligrams m³ -Cubic Meters kg -Kilograms ppm -Parts per Million
> -Greater Than µg -Micrograms l -Liters NS -Not Specified ND -Not Detected NA -Not Applicable

GALSON
LABORATORIES

6603 Kirkville Rd
East Syracuse, NY 13057
Tel: (315) 432-5227
888-432-LABS (5227)
Fax: (315) 437-0571
www.galsonlabs.com

<input type="checkbox"/> New Client?	Report To* : <u>Vraj Derodra</u> <u>BSI(Formerly EORM)</u>	Invoice To* : <u>Accounts Payable</u> <u>EORM</u>
Client Account No.*: <u>13350</u>	4 N 2nd Street, Suite 1270 San Jose, CA 95110	4 N 2nd Street, Suite 1270 San Jose, CA 95110
Phone No.* : <u>408-790-9200</u>	Phone No. : <u>408-790-9200</u>	
Cell No. : <u>205-253-8627</u>	Email : <u>ap@eorm.com</u>	
Email Results to : <u>derodrav@eorm.com</u>	P.O. No. : <u>16-0803</u>	
Email address : <u>alcárazx@eorm.com</u>	Credit Card : <input type="checkbox"/> Card on File <input type="checkbox"/> Call for Credit Card Info.	

Need Results By:	(surcharge)
<input type="checkbox"/> Standard	0%
<input type="checkbox"/> 4 Business Days	35%
<input type="checkbox"/> 3 Business Days	50%
<input checked="" type="checkbox"/> 2 Business Days	75%
<input type="checkbox"/> Next Day by 6pm	100%
<input type="checkbox"/> Next Day by Noon	150%
<input type="checkbox"/> Same Day	200%

<input type="checkbox"/> Samples submitted using the FreePumpLoan™ Program	<input type="checkbox"/> Samples submitted using the FreeSamplingBadges™ Program					
Site Name : Holder Const. - AC2 Sampling 100316 Project : 16-2001						
Comments: Construction						
Sample Identification* (Maximum of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml/min/in2/cm2/ft2	State samples were collected in (e.g., NY) CA	Please indicate which DEL this data will be used for: <input checked="" type="checkbox"/> OSHA PEL <input checked="" type="checkbox"/> ACGIH TLV <input checked="" type="checkbox"/> Cal OSHA <input type="checkbox"/> MSHA <input checked="" type="checkbox"/> Other (specify):
100316VD-1	10/03/16	37mm 3pm PVC	931.30	L	Respirable dust, crystalline christobalite, crystalline quartz, and crystalline tridymite	Method Reference: NIOSH 0600
-2			943.07			
-3			1058.86			
-4			921.10			
-5			898.03			
-6			1010.02			
-7			1012.84			
-8			996.06			
-9			981.41			
-10			955.84			
-11			Blank			

*Galson Laboratories will substitute our routine/preferred method if it does not match the method listed on the COC unless this box is checked: Use method(s) listed on COC

For metals analysis: if requesting an analyte with the option of a lower LOQ, please indicate if the lower LOQ is required (only available for certain analytes - see SAG):

For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite):

Chain of Custody	Print Name/Signature	Date	Time	Print Name/Signature	Date	Time
Relinquished by : <u>Vraj Derodra</u>	<u>Henley</u>	<u>10/3/16</u>		Received by :		
Relinquished by :				Received by : <u>Emily Tamm</u>	<u>10-5-16</u>	<u>0901</u>

Samples received after 3pm will be considered as next day's business

* Required fields, failure to complete these fields may result in a delay in your samples being processed.

Page 1 of 1

Attachment 2

BSI Field Air Sampling Data Sheets

BSI AIR SAMPLING DATA RECORD**PROJECT DATA:**

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alcaraz

EMPLOYEE AND WORK AREA DATA:

Location description: Foreman B1/B2	Employee Name: Corey Oviedo	Employee Number: —
	Job Title/Duties: Foreman	Phone Number: —
	Work Duration & Frequency: ~ 8 hrs.	
	Number of Employees performing similar duties: —	
Engineering Controls: Industrial fans, exhausts, wet methods.	Personal Protective Equipment Used: Hard hat, Safety glasses, N95s, safety shoes.	
	Ambient Weather Conditions: —	

SAMPLING DATA:

Pump ID: 1	Collection Media: 37mm 3pc PVC	Sample ID: 100316 VD - 1	Size and Lot Number: PSY390024	Analytes	
Start Time:	Stop Time:	Total Sampling Time (min): 365 min	Avg Flow Rate (L/min): 2.5515	Sampled Volume (L): 931.30	

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: Gilair 2015a801012	Primary Standard: N/A	Pump Condition: Good		
Pre-Survey Date/Time: 10/3/16	Technician: VD	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min) 2.5470	Trial 2: (L/min) 2.5570	Trial 3: (L/min) 2.5600
				Flow Rate Avg (L/min): 2.5547
Post-Survey Date/Time: 10/3/16	Technician: VD	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min) 2.5500	Trial 2: (L/min) 2.5470	Trial 3: (L/min) 2.5480
				Flow Rate Avg (L/min): 2.5483
			Pre- and post-cal avg. flow rate (L/min)	2.5515

Industrial Hygienist/IH Tech (Print & Signature):

Date:

Vraj Denodra Hegde	10/3/16
--------------------	---------

BSI AIR SAMPLING DATA RECORD**PROJECT DATA:**

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alcaraz

EMPLOYEE AND WORK AREA DATA:

Location description: E4 to E6, no activity except for walking from E4 to E6. No grinding or cutting or installation.	Employee Name: David Santelmann	Employee Number: -
	Job Title/Duties:	Phone Number: -
	Work Duration & Frequency: ~8 hrs.	Number of Employees performing similar duties: -
Personal Protective Equipment Used: Hard hat, safety glasses, N95, safety shoes		
Engineering Controls: Industrial fans, exhausts, wet methods		Ambient Weather Conditions:

SAMPLING DATA:

Pump ID: 2	Collection Media: 37mm 3pc PVC	Sample ID: 10-0316VD-2	Size and Lot Number: Psy 890029	Analytes: Resp dust + resp silica.
Start Time: 10/3/16	Stop Time:	Total Sampling Time (min): 373	Avg Flow Rate (L/min): 2.5283	Sampled Volume (L): 943.07.

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: Gilmair R5569.	Primary Standard: Y/N	Pump Condition:		
Pre-Survey Date/Time: 10/3/16	Technician: VD	Temperature:	Barometric Pressure:	Relative Humidity:
	Trial 1: (L/min) 2.5350	Trial 2: (L/min) 2.5440	Trial 3: (L/min) 2.5410	Flow Rate Avg (L/min): 2.5400
Post-Survey Date/Time: 10/3/16	Technician: VD	Temperature:	Barometric Pressure:	Relative Humidity:
	Trial 1: (L/min) 2.5140	Trial 2: (L/min) 2.5170	Trial 3: (L/min) 2.5190	Flow Rate Avg (L/min): 2.5167
Pre- and post-cal avg flow rate (L/min)			2.5283	

Industrial Hygienist/IH Tech (Print & Signature):

Date:

Vraj Desai / VD	10/3/16
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BSI AIR SAMPLING DATA RECORD

May 10

PROJECT DATA:

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alcaraz

EMPLOYEE AND WORK AREA DATA:

Location description: A4/B2, A6/B1	Employee Name: Matt Engwall	Employee Number: 1040
	Job Title/Duties: D	Phone Number: —
	Work Duration & Frequency: Wkly	Number of Employees performing similar duties: —
Engineering Controls: Industrial fans, exhausts, wet methods	Personal Protective Equipment Used: Hard hat, safety glasses, safety shoes, N95	
	Ambient Weather Conditions: —	

SAMPLING DATA:

Pump ID:	3		
Collection Media:	Sample ID:	Size and Lot Number:	Analytes
37mm 3pc PVC	100316VD - 3	Psy390029	Resp dust + Resp Silica.
Start Time:	Stop Time:	Total Sampling Time (min):	Avg Flow Rate (L/min):
		418	25170 ¹⁰
			1058.86
			2.5332

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: <u>Gilair</u> <u>R11582</u>	Primary Standard: Y/N	Pump Condition: <u>Good</u>		
Pre-Survey Date/Time: <u>10/3/16</u>	Technician: <u>VD</u>	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min)	Trial 2: (L/min)	Trial 3: (L/min)
		<u>2.5170</u>	<u>2.5200</u>	<u>2.5140</u>
				Flow Rate Avg (L/min): <u>2.5170</u>
Post-Survey Date/Time: <u>10/3/16</u>	Technician: <u>VD</u>	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min)	Trial 2: (L/min)	Trial 3: (L/min)
		<u>2.5560</u>	<u>2.5440</u>	<u>2.5580</u>
				Flow Rate Avg (L/min): <u>2.5493</u>
			Pre- and post-cal avg. flow rate (L/min)	

Industrial Hygienist/IH Tech (Print & Signature):

Date:

Industrial Hygienist/IRI Tech (Print & Signature): Date:
Vraj Desadra Mykle 04/30/16.

BSI AIR SAMPLING DATA RECORD

4 of 10

PROJECT DATA:

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alcaraz

EMPLOYEE AND WORK AREA DATA:

Location description: A4/B2 and B3 - Sweeping & Vacuuming	Employee Name: Regetia Diaz	Employee Number: -
	Job Title/Duties:	Phone Number: -
	Work Duration & Frequency: ~ 8 hrs	Number of Employees performing similar duties: -
Engineering Controls: Industrial fans, exhausts, wet methods.	Personal Protective Equipment Used: Hard hat, safety glasses/shoes, N95	
	Ambient Weather Conditions: -	

SAMPLING DATA:

Pump ID:		Analytes		
Collection Media:	Sample ID:	Size and Lot Number:		
87mm 3pc PVC	100316VB-4	Psy 390029	Resp dust + Resp Silica	
Start Time:	Stop Time:	Total Sampling Time (min):	Avg Flow Rate (L/min):	Sampled Volume (L):
		364	2.5305	921.10

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: Gilair R251479		Primary Standard: Y/N	Pump Condition: Good	
Pre-Survey Date/Time: 10/31/16	Technician: VB	Temperature:	Barometric Pressure:	Relative Humidity:
	Trial 1: (L/min) 2.5440	Trial 2: (L/min) 2.5390	Trial 3: (L/min) 2.5470	Flow Rate Avg (L/min): 2.5433
Post-Survey Date/Time: 10/31/16	Technician: VB	Temperature:	Barometric Pressure:	Relative Humidity:
	Trial 1: (L/min) 2.5140	Trial 2: (L/min) 2.5190	Trial 3: (L/min) 2.5200	Flow Rate Avg (L/min): 2.5177
			Pre- and post-cal avg. flow rate (L/min)	2.5305

Industrial Hygienist/IH Tech (Print & Signature):

Date:

Industrial Hygienist/Env Tech (Print & Signature)

collected

5 of 10

BSI AIR SAMPLING DATA RECORD

PROJECT DATA:

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alearaz

EMPLOYEE AND WORK AREA DATA:

Location description: <i>Area Sample - AS,B1</i>	Employee Name: —	Employee Number: —
	Job Title/Duties: —	Phone Number: —
	Work Duration & Frequency: —	Number of Employees performing similar duties: —
Personal Protective Equipment Used: —		
Engineering Controls: <i>Industrial fans, exhausts, wet methods.</i>	Ambient Weather Conditions: —	

SAMPLING DATA:

Pump ID: 5	Collection Media: 37mm 3pc PVC	Sample ID: 100316VD-5	Size and Lot Number: Pey 390029	Analytes	
Start Time: 10/3/16	Stop Time: VD	Total Sampling Time (min): 351	Avg Flow Rate (L/min): 2.5585	Sampled Volume (L): 898.03	

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: <i>Gilmair 17754</i>	Primary Standard: Y/N	Pump Condition: <i>Good</i>		
Pre-Survey Date/Time: 10/3/16	Technician: VD	Temperature:	Barometric Pressure:	Relative Humidity:
	Trial 1: (L/min) 2.5510	Trial 2: (L/min) 2.5490	Trial 3: (L/min) 2.5550	Flow Rate Avg (L/min): 2.5513
Post-Survey Date/Time: 10/3/16	Technician: VD	Temperature:	Barometric Pressure:	Relative Humidity:
	Trial 1: (L/min) 2.5600	Trial 2: (L/min) 2.5670	Trial 3: (L/min) 2.5700	Flow Rate Avg (L/min): 2.5657
Pre- and post-cal avg. flow rate (L/min)			<i>2.5585</i>	

Industrial Hygienist/IH Tech (Print & Signature):

Date:

<i>Vraj Devadoss Hyle</i>	<i>10/3/16</i>
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BSI AIR SAMPLING DATA RECORD**PROJECT DATA:**

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alcaraz

EMPLOYEE AND WORK AREA DATA:

Location description: Area Sample - E3, B2	Employee Name: -	Employee Number: -
	Job Title/Duties: -	Phone Number: -
	Work Duration & Frequency: -	
	Number of Employees performing similar duties: -	
	Personal Protective Equipment Used: -	
Engineering Controls: Industrial fan, exhausts, wet methods.	Ambient Weather Conditions: -	

SAMPLING DATA:

Pump ID:	VP05
Collection Media:	Sample ID:
37mm 3pc PVC	100316WD-6
Start Time:	Stop Time:

Size and Lot Number:	Analytes		
Psy 390029	Resp dust + Resp Silica		
Total Sampling Time (min):	Avg Flow Rate (L/min):	Sampled Volume (L):	
395	2.5570	1010.02	

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: Sklc 16020	Primary Standard: Y/N	Pump Condition: Good.
Pre-Survey Date/Time:	Technician: VD	Temperature: Barometric Pressure: Relative Humidity:
	Trial 1: (L/min) 2.5460	Trial 2: (L/min) 2.5430
		Trial 3: (L/min) 2.5430
		Flow Rate Avg (L/min): 2.5440
Post-Survey Date/Time:	Technician: VD	Temperature: Barometric Pressure: Relative Humidity:
	Trial 1: (L/min) 2.5780	Trial 2: (L/min) 2.5600
		Trial 3: (L/min) 2.5720
		Flow Rate Avg (L/min): 2.5700
		Pre- and post-cal avg. flow rate (L/min): 2.5570.

Industrial Hygienist/IH Tech (Print & Signature):

Date:

Vej Devendra Hyle

10/3/16

BSI AIR SAMPLING DATA RECORD**PROJECT DATA:**

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alcaraz

EMPLOYEE AND WORK AREA DATA:

Location description: <i>Area Sampler - A6, B1</i>	Employee Name: -	Employee Number: -
	Job Title/Duties: -	Phone Number: -
	Work Duration & Frequency: -	Number of Employees performing similar duties: -
Personal Protective Equipment Used: -		
Engineering Controls: <i>Industrial fans, exhausts, wet methods.</i>	Ambient Weather Conditions: -	

SAMPLING DATA:

Pump ID: VP01	Collection Media: 37mm 3pc PVC	Sample ID: 100316ND-7	Size and Lot Number: Psy 390029	Analytes	
Start Time:	Stop Time:	Total Sampling Time (min): 398	Avg Flow Rate (L/min): 2.5448	Sampled Volume (L): 1012.84	

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: SKC 16018	Primary Standard: Y/N	Pump Condition: Grand		
Pre-Survey Date/Time: 10/3/16	Technician: VP	Temperature:	Barometric Pressure:	Relative Humidity:
	Trial 1: (L/min) 2.5480	Trial 2: (L/min) 2.5350	Trial 3: (L/min) 2.5430	Flow Rate Avg (L/min): 2.5420
Post-Survey Date/Time: 10/3/16	Technician: VP	Temperature:	Barometric Pressure:	Relative Humidity:
	Trial 1: (L/min) 2.5530	Trial 2: (L/min) 2.5560	Trial 3: (L/min) 2.5340	Flow Rate Avg (L/min): 2.5477
			Pre- and post-cal avg. flow rate (L/min)	2.5448

Industrial Hygienist/IH Tech (Print & Signature):

Date:

Vraj Deshpande	Hayden	10/3/16
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8 of 1

BSI AIR SAMPLING DATA RECORD

PROJECT DATA:

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alcaraz

EMPLOYEE AND WORK AREA DATA:

Location description: <i>Area Sample - B1, A7</i>	Employee Name: —	Employee Number: —
	Job Title/Duties: —	Phone Number: —
	Work Duration & Frequency: —	Number of Employees performing similar duties: —
Personal Protective Equipment Used: —		—
Engineering Controls: <i>Industrial fans, exhausts, wet methods.</i>	Ambient Weather Conditions: —	

SAMPLING DATA:

Pump ID: <i>VP02</i>	Collection Media:	Sample ID: <i>100316VD-8</i>	Size and Lot Number: <i>Reg 390029</i>	Analytes <i>Respdust + resp silica</i>
Start Time: <i>10/3/16</i>	Stop Time: <i>10/3/16</i>	Total Sampling Time (min): <i>395</i>	Avg Flow Rate (L/min): <i>2.5217</i>	Sampled Volume (L): <i>996.06</i>

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: <i>SKC 16017</i>	Primary Standard: Y/N <i>Y</i>	Pump Condition: <i>Good</i>		
Pre-Survey Date/Time: <i>10/3/16</i>	Technician: <i>VD</i>	Temperature: <i>—</i>	Barometric Pressure: <i>—</i>	Relative Humidity: <i>—</i>
		Trial 1: (L/min) <i>2.5320</i>	Trial 2: (L/min) <i>2.5290</i>	Trial 3: (L/min) <i>2.5350</i>
				Flow Rate Avg (L/min): <i>2.5320</i>
Post-Survey Date/Time: <i>10/3/16</i>	Technician: <i>VD</i>	Temperature: <i>—</i>	Barometric Pressure: <i>—</i>	Relative Humidity: <i>—</i>
		Trial 1: (L/min) <i>2.5140</i>	Trial 2: (L/min) <i>2.5090</i>	Trial 3: (L/min) <i>2.5110</i>
				Flow Rate Avg (L/min): <i>2.5113</i>
			Pre- and post-cal avg. flow rate (L/min): <i>2.5217</i>	

Industrial Hygienist/IH Tech (Print & Signature):

Date:

Vraj Devadra Haylor
10/3/16

BSI AIR SAMPLING DATA RECORD**PROJECT DATA:**

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Aleazar

EMPLOYEE AND WORK AREA DATA:

Location description: <i>Gate 5 - E1 tunnel flagger</i>	Employee Name: <i>Danilo</i>	Employee Number: -
	Job Title/Duties:	Phone Number: -
	Work Duration & Frequency: <i>~8hrs.</i>	
	Number of Employees performing similar duties: -	
Engineering Controls: <i>Industrial fan, exhaust,</i>	Personal Protective Equipment Used: <i>Safety shoes, glasses, hard hat, N95</i>	
	Ambient Weather Conditions: -	

SAMPLING DATA:

Pump ID: <i>VP03</i>	Collection Media:	Sample ID: <i>100316VD-9</i>	Size and Lot Number: <i>Psy 390029</i>	Analytes <i>Resp dust + resp silica.</i>
Start Time:	Stop Time:	Total Sampling Time (min): <i>368</i>	Avg Flow Rate (L/min): <i>2.5310</i>	Sampled Volume (L): <i>931.41</i>

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: <i>SRG 16016</i>	Primary Standard: Y/N	Pump Condition: <i>Good</i>		
Pre-Survey Date/Time: <i>10/3/16</i>	Technician: <i>VD</i>	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min) <i>2.5220</i>	Trial 2: (L/min) <i>2.5240</i>	Trial 3: (L/min) <i>2.5190</i>
				Flow Rate Avg (L/min): <i>2.5217</i>
Post-Survey Date/Time: <i>10/3/16</i>	Technician: <i>VD</i>	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min) <i>2.5390</i>	Trial 2: (L/min) <i>2.5440</i>	Trial 3: (L/min) <i>2.5380</i>
				Flow Rate Avg (L/min): <i>2.5310</i>
			Pre- and post-cal avg. flow rate (L/min)	<i>2.5310</i>

Industrial Hygienist/IH Tech (Print & Signature):

Date:

<i>Vtej Devadoss Hfgh</i>	<i>10/3/16.</i>
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BSI AIR SAMPLING DATA RECORD**PROJECT DATA:**

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alcaraz

EMPLOYEE AND WORK AREA DATA:

Location description: Area Sample - E4, B2	Employee Name: —	Employee Number: —
	Job Title/Duties: —	Phone Number: —
	Work Duration & Frequency: —	Number of Employees performing similar duties: —
	Personal Protective Equipment Used: —	
Engineering Controls: Industrial fars, exhausts, wet methods.	Ambient Weather Conditions: —	

SAMPLING DATA:

Pump ID: VP04	Collection Media: 37mm 3pc PVC	Sample ID: 100316VD-10	Size and Lot Number: Psy 390029	Analytes		
Start Time:	Stop Time:	Total Sampling Time (min): 378	Avg Flow Rate (L/min): 2.5373	Sampled Volume (L): 955.84		

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: SKC 16019	Primary Standard: Y/N	Pump Condition: Good		
Pre-Survey Date/Time: 10/3/16	Technician: VD	Temperature:	Barometric Pressure:	Relative Humidity:
	Trial 1: (L/min) 2.5400	Trial 2: (L/min) 2.5370	Trial 3: (L/min) 2.5350	Flow Rate Avg (L/min): 2.5373
Post-Survey Date/Time: 10/3/16	Technician: VD	Temperature:	Barometric Pressure:	Relative Humidity:
	Trial 1: (L/min) 2.5250	Trial 2: (L/min) 2.5170	Trial 3: (L/min) 2.5180	Flow Rate Avg (L/min): 2.5200
			Pre- and post-cal avg. flow rate (L/min)	2.5373

Industrial Hygienist/IH Tech (Print & Signature):

Date:

Vic Devadoss	Henry	10/3/16
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Attachment 3

BIOS DryCal Calibration Certificate



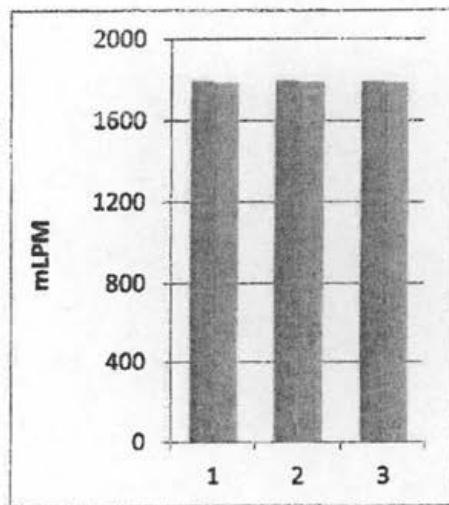
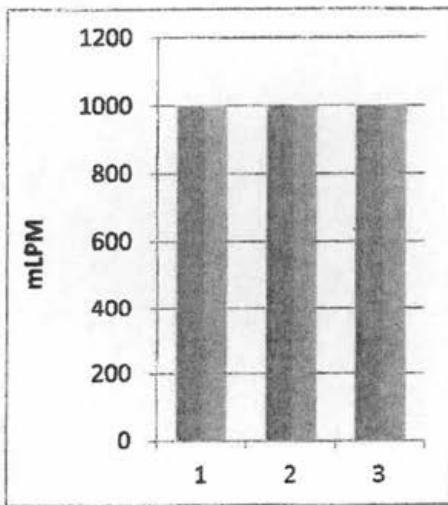
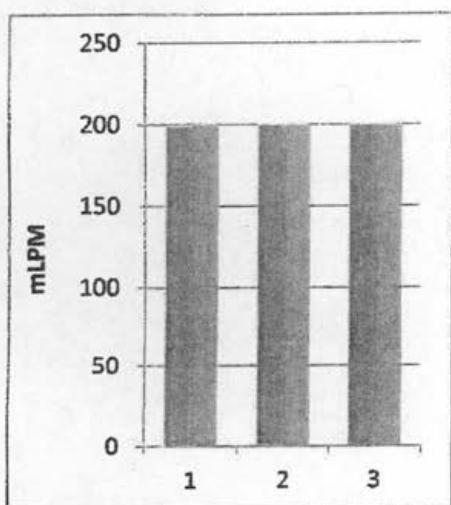
CERTIFICATE OF CALIBRATION

Primary Flow Calibrator

Manufacturer: BIOS
 Model Number: DCL-ML
 Serial Number: 7252
 Service Order: 21333
 Reference Number: 21333-DCLML-7252

Calibration Date: September 22, 2016
 Date Due: September 22, 2017
 Temperature: 74.3 °F
 Relative Humidity: 47 %
 Barometric Pressure: 30.05 inHg

	Reference mL/min	Actual mL/min	Relative Difference	Percent Difference
@ 199 mLPM				
1	199.01	200.1	1.09	0.55%
2	199.63	199.8	0.17	0.09%
3	199.32	199.7	0.38	0.19%
@ 1004 mLPM				
1	1003.0	1001	-2.0	0.20%
2	1004.8	1003	-1.8	0.18%
3	1002.6	1002	-0.6	0.06%
@ 1799 mLPM				
1	1799.6	1790	-9.6	0.53%
2	1801.5	1792	-9.5	0.53%
3	1797.1	1792	-5.1	0.28%



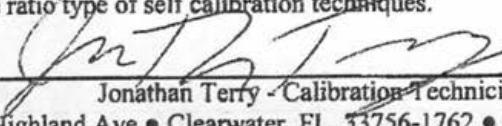
■ Reference □ Actual

STANDARDS

Manufacturer	Description	Model	Serial Number	Certificate Number	Due Date
Bios	Air Flow Meter	220-H	110577	86198	3/23/2017

This report may not be reproduced except in full. CIH Calibration Laboratory certifies that the instrument specified above meets the manufacturer's specifications and was calibrated using standards and instruments also listed where the accuracy is traceable to National Institute of Standards and Technology (NIST), or have been derived from accepted values of natural physical constants or have been derived by the ratio type of self calibration techniques.

Calibrated By:


Jonathan Terry - Calibration Technician

Date: 09/22/16

1806 South Highland Ave • Clearwater, FL 33756-1762 • USA • PH: (727) 584-5063 • FX: (727) 581-5921
 Toll Free: (888) 873-2443 • Website: <http://www.cihequipment.com>

Attachment 4

Photos

Photo 1: Wet method used in tunnel next to A5, B1 to prevent dust generation

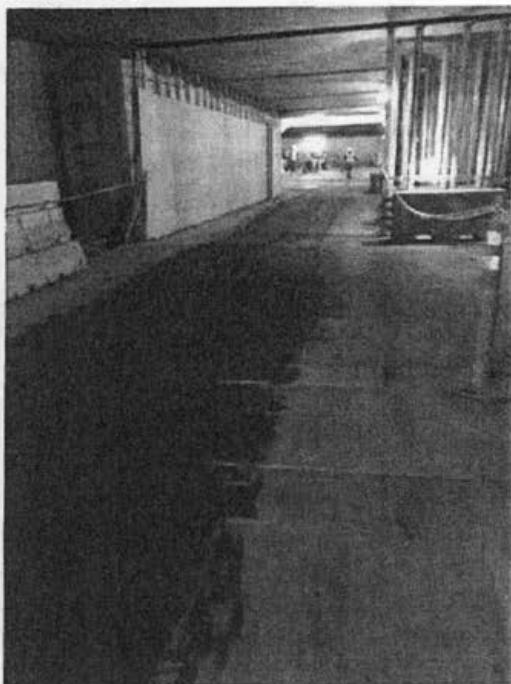


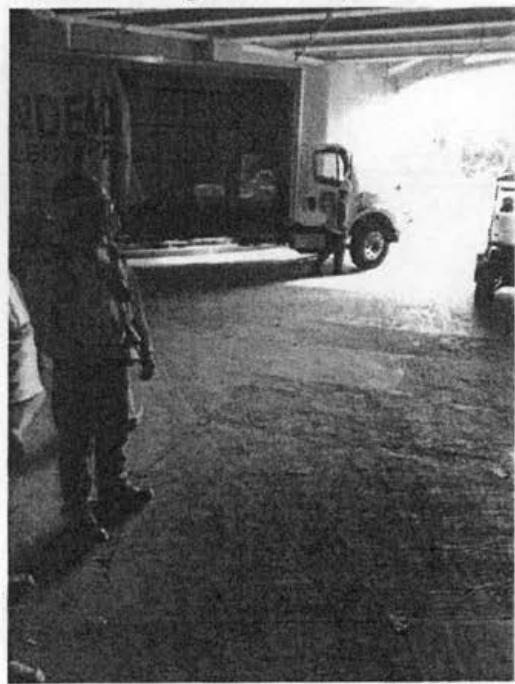
Photo 2: Sample adjacent to E4, B2. Visible suspended dust



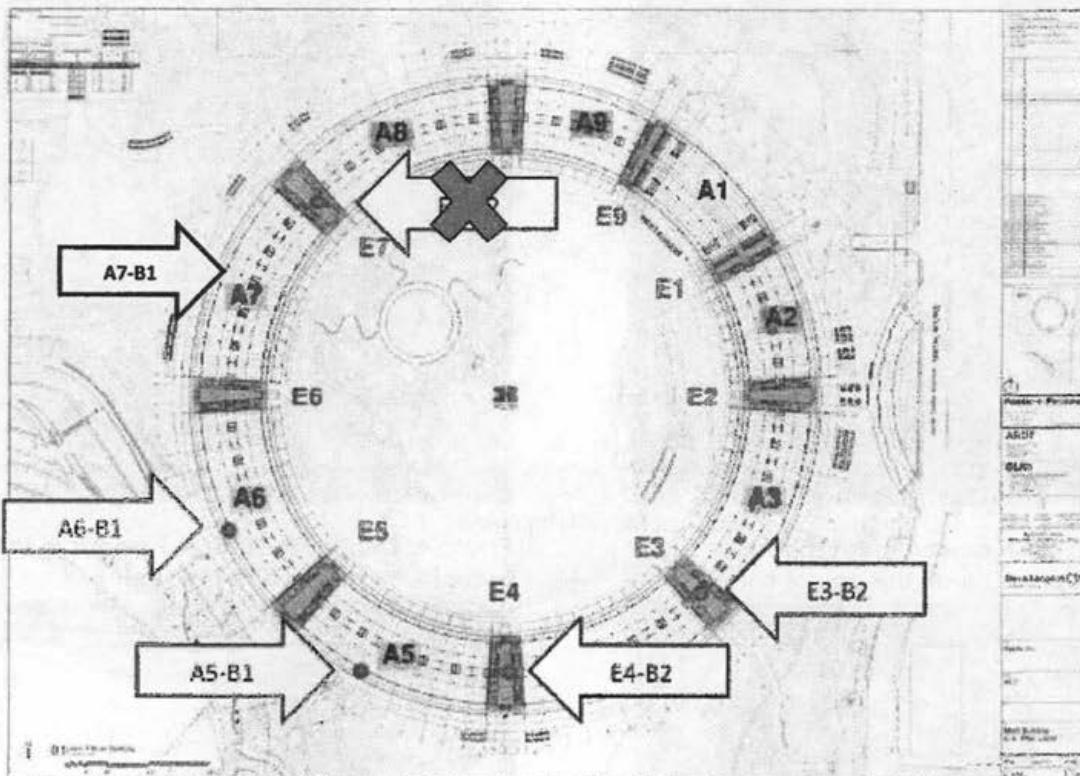
Photo 3: Overhead industrial fan – Non-operation on the day of sampling



Photo 4: Danilo Acevedo – Flagger in the A1 tunnel wearing an N95 respirator



Areas Monitored



Huezo, Angelica@DIR

From: Enrique Ovcharenko <Enrique.Ovcharenko@rsconst.com>
Sent: Thursday, January 05, 2017 11:33 AM
To: DIR DOSHFREMONT
Cc: Gee, David@DIR
Subject: Complaints No. 1166238 and No. 1166799 - Rudolph and Sletten Response
Attachments: CALOSHA Complaint No 1166238.pdf; CALOSHA Complaint No 1166799.pdf; Daily Safety Dispatch.pdf

January 5, 2017

State of California
Department of Industrial Relations

Division of Occupational Safety and Health
Fremont District Office
39141 Civic Center Drive, Suite 310
Fremont, CA 94538

Dear Kelly Tatum,

I am responding to your DOSH complaints #1166238-Ltr D and #1166799-Ltr D, alleging the following conditions at a Rudolph and Sletten (R&S) construction project Apple Campus 2 (AC2), located at 10590 N. Tantau Ave., Cupertino.

R&S does not agree with any of the alleged conditions noted in complaints #1166238-Ltr D and #1166799-Ltr D. Please find attached the response for each of the letters.

Per David Gee's request, I am copying him on this email. Please contact me if you require additional information to close these complaints.

Kind regards,

Enrique Peralta O., MS CSP CHST
Rudolph and Sletten Safety Manager

(917) 232-3531 mobile
Enrique_ovcharenko@rsconst.com



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January 5, 2017

State of California
Department of Industrial Relations

Division of Occupational Safety and Health
Fremont District Office
39141 Civic Center Drive, Suite 310
Fremont, CA 94538

Dear Kelly Tatum,

I am responding to your DOSH complaint #1166238-Ltr D, alleging the following conditions at a Rudolph and Sletten (R&S) construction project Apple Campus 2 (AC2), located at 10590 N. Tantau Ave., Cupertino:

See attached 1166238-Ltr D (FMTOSHDO). R&S does not agree with any of the alleged conditions noted in complaint #1166238-Ltr D.

1. **Alleged condition: Potential concerns regarding open tiles/floor/roof opening not being guarded and causing tripping hazards around facility. Please refer to Title 9 of CCR, Section 1632.**

R&S response: R&S and its subcontractors are currently not working in the referenced area. Notifications of open tiles would be immediately forwarded to the other General Contractor (GC) for action. See Holder's response.

2. **Alleged condition: Scaffold systems set up on location are inspected and tagged off by unqualified/uncertified inspectors. Please refer to Title 8 of CCR, Section 1637.**

R&S response: Scaffolds under R&S management are inspected daily and tagged by a designated scaffold competent person provided by each subcontractor.

3. **Alleged condition: Extent and duration of employee pre-job safety meetings are no sufficient nor effective. Please refer to Title 8 of CCR, Section 1509, ref. 3203.**

R&S response: Per site requirements each crew is required to have a daily pre-job safety meeting to cover the steps, hazards and controls for the shift. GC's staff of 20+ safety professionals periodically attends the pre-job safety meeting and audits the written pre-task plans for effectiveness.

Furthermore, on a daily basis a "Daily Safety Dispatch" is sent to project teams including first-line supervisors to communicate about the safety observations, logistics and updates on the project. Please find an example of the Daily Safety Dispatch attached.

4. **Alleged condition: Construction areas, ramps, and corridors are poorly lit and lack illumination. Please refer to Title 8 of CCR, Section 1523**

R&S response: The other GC manages the subcontractor tasked with maintaining the temporary power on the project. Notification of a poorly lit areas would be immediately forwarded to the other GC for action.

5. **Alleged condition: Inappropriate clothing, lack of hardhat and /or googles and personal protective equipment (PPE) are worn by employees throughout site. Please refer to Title 8 of CCR, Section 3380 and 3381.**

R&S response: R&S and subcontractors are required to wear at minimum the following personal protective equipment (except in office and lunch areas): Sturdy work boots, ANSI-rated Z-87 safety glasses, ANSI-rated Z89.1 hardhat, and a Class II high-visibility vest. Additional personal protective equipment is required when necessary.

6. **Alleged condition: Poor housekeeping around site. Please refer to Title 8 of CCR, Section 1523**

R&S response: Housekeeping is a daily part of operations. All crews are instructed (by contract) to leave their work areas "broom swept" at the end of shift. GC's staff of 20+ safety professionals constantly monitor for tripping hazards. Subcontractors also have safety professionals that inspect work areas multiple times daily.

Please contact me if you require additional information to close this complaint.

Regards,

Enrique Peralta O., MS CSP CHST
Rudolph and Sletten Safety Manager

(917) 232-3531 mobile
Enrique_ovcharenko@rsconst.com

January 5, 2017

State of California
Department of Industrial Relations

Division of Occupational Safety and Health
Fremont District Office
39141 Civic Center Drive, Suite 310
Fremont, CA 94538

Dear Kelly Tatum,

I am responding to your DOSH complaint #1166799-Ltr D, alleging the following conditions at a Rudolph and Sletten (R&S) construction project Apple Campus 2 (AC2), located at 10590 N. Tantau Ave., Cupertino:

See attached 1166799-Ltr D (FMTOSHDO). R&S does not agree with any of the alleged conditions noted in complaint #1166799-Ltr D.

1. Alleged condition: The employer (Holder Construction) has not performed clean-up for airborne dust/dirt at the lower basement areas (#1 and #2). The dust is causing congestion for workers in the area. The dust is being tracked in from the outside by workers and industrial trucks. This is on-going for weeks. Please refer to Title 8 of CCR Sections 1530.1, 1513, and 1530.

§1530.1. Control of Employee Exposures from Dust-Generating Operations Conducted on Concrete or Masonry Materials.

During the peak of masonry's contractor (Bratton Masonry) operations, R&S performed dust and silica assessment on the employees with the potential highest exposure, performing mixing operation for the 8-hour shift in the basement levels. The assessment results indicated that exposure to dust and silica levels were below the permissible exposure limits established by Cal/OSHA and Fed OSHA. Highest concentration detected for respirable dust were identified at 1.9 mg/m³ and 0.035 mg/m³ for silica concentration.

Since that time Bratton Masonry operations have ramped down significantly while continuing to implement similar engineering controls that were in place during the assessment.

§1513. Housekeeping.

In the below grade levels, general contractors are taking a joint effort approach with a crew of 18 laborers, in addition to subcontractors laborers crews, to perform general housekeeping utilizing dust mitigation controls. Per site rules, all equipment operator and drivers are required to maintain 12 MPH speed limit while driving around the site, and 5 MPH driving inside the building to prevent the dust getting airborne. Additional efforts are coordinated with other general contractors to run sweepers and water trucks where heavy vehicle traffic is present.

§1530. General Requirements of Mechanical Ventilation Systems.

Notifications of the ventilation system not working would be immediately forwarded to Holder for action. See Holder's response.

Please contact me if you require additional information to close this complaint.

Regards,

Enrique Peralta O., MS CSP CHST
Rudolph and Sletten Safety Manager

(917) 232-3531 mobile
Enrique_ovcharenko@rsconst.com

Daily Safety Dispatch

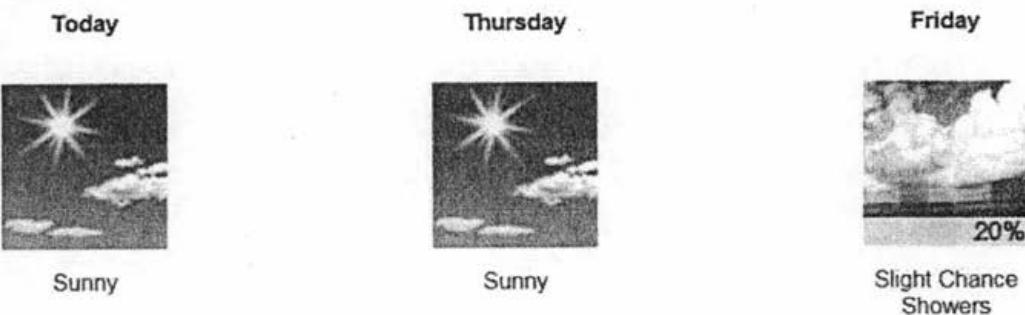
From: Daily Safety Dispatch <ac2safety@icloud.com>
Sent: Wednesday, December 28, 2016 5:37 AM
Subject: AC2 Daily Safety Dispatch
Attachments: AC- Tobacco Free Policy.pdf; Temporary Water As Built 12.19.pdf

AC2 Daily Safety Dispatch for December 12/28/2016

NOAA Weather Forecast:

Day: Sunrise at 7:21am. Sunny, with a high near 60. Northwest wind 9 to 13 mph.

Night: Sunset at 4:58pm. Mostly clear, with a low around 39. Northwest wind 5 to 7 mph.



1. Tackling Construction's Fatal Four. In construction approximately 60% of fatal injuries fall in 4 categories:

- Falls: off ladders, from same level, to lower level.
- Struck by: flying object, falling object, swinging object and rolling object.
- Electrocution: Burns, Electrocution, Shock, Arc flash/arc blast, Fire and Explosions.
- Caught in between: being pulled into or caught in machinery and equipment, being compressed or crushed between rolling, sliding or shifting objects.

During your daily planning discuss these categories with the crew to identify potential exposures, controls and raise the awareness of your operations.

2. Material handling. To minimize muscle strains, pulls and repetitive motion injuries - each employee must be trained on the safe and proper use of the most important, primary tool—their bodies. Proper techniques of stretching, lifting, bending, moving, securing good footing, the importance of good nutrition and hydration, should be address and reminded on a regular basis.

During the cold weather season, stretch and flex is key to keep our bodies healthy for the long run.

3. Upcoming tobacco free policy. Please find attached the site's upcoming Tobacco Free Policy that will be enforced starting 1/1/2017.

4. Non-potable water. Please see the attached current as built of the temporary non potable water on site.

The AC2 Daily Safety Dispatch should only be used as reminder to general safe work practices. AC2 specific rules and CalOSHA regulations must be used as the primary guide when performing work.

On behalf of

AC2 Safety Team

January 06, 2017

VIA E-MAIL

DIRDOSHFREMONT@DIR.ca.gov

Kelly Tatum, District Manager
Department of Industrial Relations
Division of Occupational Safety and Health
Fremont District Office
39141 Civic Center Drive, Suite 310
Fremont, CA 94538

Dear Ms. Tatum,

I am responding to your letters of December 23, 2016 regarding Complaint Nos. 1166238 and 1166799. These letters identify seven alleged safety or health issues at the Apple Campus 2 (AC2) construction project located at 10600 N. Tantau Ave., Cupertino, CA.

As you are likely aware, the AC2 construction project is the construction of a new 175 acre campus for Apple on the site of the former Hewlett Packard (HP) campus. The project involves the demolition of approximately 2.65 million square feet of existing office, research and development buildings (now completed) and the construction of an office, research and development building comprising approximately 2.8 million square feet, a 1,000 seat corporate auditorium, a corporate fitness center, a central operating plant, research facilities, and associated parking.

Apple Inc. is not a construction company and does not direct or supervise the construction work at AC2. Rather, Apple relies upon the expertise of its General Contractors, Holder Construction Company (Holder) and Rudolph and Sletten (R&S), to direct the project and ensure compliance with all applicable laws at the worksite. We understand that the Division submitted Complaints 1166238 and 1166799 directly to both Holder and R&S for response. Copies of their respective responses are enclosed herewith.

I have reviewed the responses prepared by Holder and R&S on both Complaints and believe them to be appropriate statements addressing the allegations in the complaints. Throughout the AC2 project, Apple has stressed to all contractors the need to ensure safety and health obligations are met. Apple has invited all contractors to raise any safety concerns that they may have so that they can be appropriately addressed. There is a coordinated network of safety professionals onsite at all times reviewing and

Kelly Tatum, District Manager
January 6, 2017
Page 2 of 2

correcting any issues which arise. We believe that the practices and procedures for soliciting, identifying, and responding to any unsafe conditions at the worksite are appropriate.

Apple remains dedicated to providing safe workspaces to employees and contractors on any of our contraction job sites. If you have any questions regarding this report, please feel free to contact me directly (513) 304-6486.

Sincerely,



Brian Bellucci
Apple Inc.

Enclosures



Via Facsimile (501) 794-3889

January 5th, 2017

Ms. Kelly Tatum
Acting District Manager
State of California Department of Industrial Relations
Division of Occupational Safety and Health
39141 Civic Center Drive, Suite 310
Fremont, CA 94538

Re: Complaint Number: 1166238– Ltr D

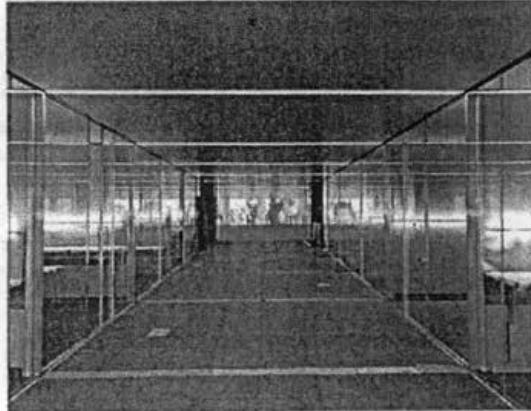
Dear Ms. Tatum:

We received the referenced Complaint via mail on December 23rd, 2016. Holder Construction Company is proactively implementing our policies and procedures to ensure a safe project site. Below is our response to the alleged conditions:

1. Potential concerns regarding open tiles/floors/roof openings not being guarded and causing tripping hazards around facility. Please refer to Title 8 of CCR, Sections 1632

Response: §1632. Floor, Roof, and Wall Openings to Be Guarded- Holder Construction has proactively identified and continues to monitor the ongoing installation and modification of floor tiles referenced in the complaint. The following items are being implemented for specific tasks in regards to floor openings/tiles: Danger Tape and signage is used to restrict the area to Authorized Personnel Only. Employees that are authorized to work in these areas are noting the hazard with the specific task which may include pulling multiple floor tiles at a time to complete the work. (see photos below). Once the task is complete, floor tiles are covered and the restricted area is opened up. In addition, floor openings are inspected daily to ensure they are properly protected and secured. Note that these areas do not affect the primary access/egress routes throughout the site.

Holder Construction is not aware of any roof "openings".



2. Scaffold systems set up on location are inspected and tagged off by unqualified/uncertified inspectors. Please refer to Title 8 of CCR, Section 1637

Response: T8CCR §1637. General Requirements- There are multiple metal scaffolds on site being utilized for various tasks, and all scaffolds are tagged and inspected before use. A trained, designated competent person from each subcontractor is responsible for performing daily inspections on their own working scaffolds.

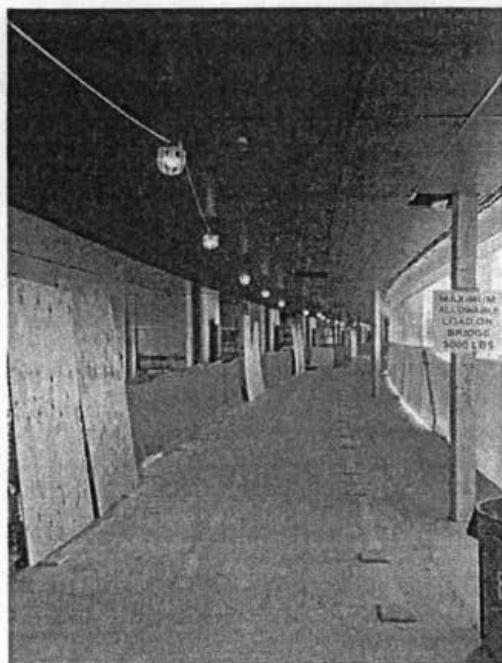
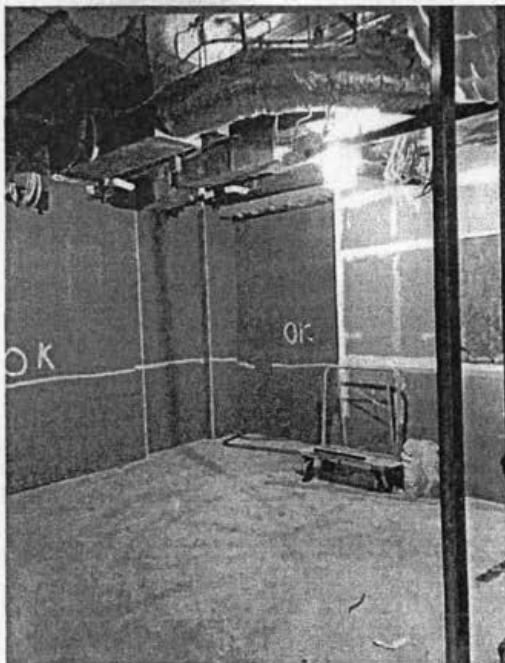
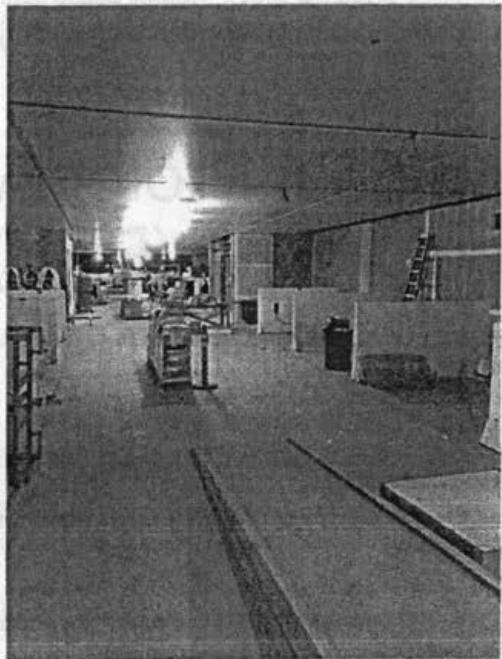
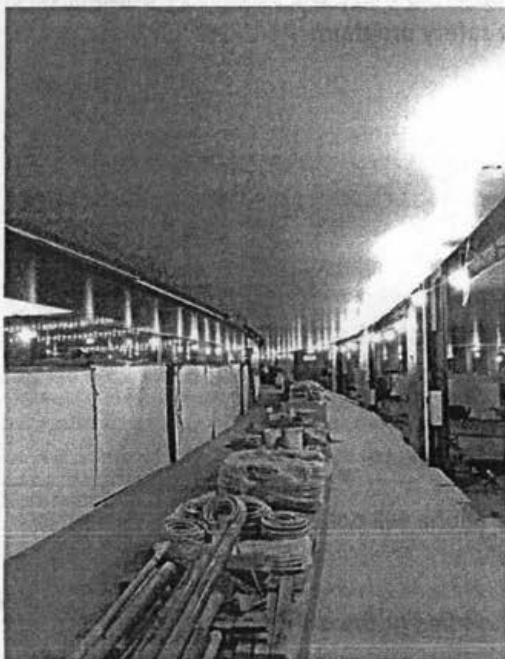
3. Extent and duration of employee pre-job safety meetings are not sufficient nor effective. Please refer to Title 8 of CCR, Section 1509, ref. 3203

Response: T8CCR §1509, ref. 3203- In order to promote a safe working environment and review the relevant hazards, each subcontractor is required to meet each morning with their crews to discuss and review their specific Pre-Task Plan. In addition, Holder Construction and the partnering General Contractor conduct job-wide safety meetings on a weekly basis. The meetings are held at four different locations, (including one with Spanish speaking workers) throughout the Main Building with PA systems. Each meeting location discusses the same topic, other site specific concerns, incident reviews, weekly tool giveaways and raffles to help involve the crowd. (see attached agenda for example).

		<ul style="list-style-type: none">• Logistics<ul style="list-style-type: none">◦ Tobacco-Free Site January 1, 2017◦ Gate 10 does not open until 4am Mon–Fri. SCCPD is patrolling the streets and residential areas for people that are parked outside of these areas before them.◦ Accommodations have been made to keep the food trucks for an extended period of time, locations will be A1 Loading dock below grade, and MSR Tunnel below grade.• Tool Winners<ul style="list-style-type: none">◦ Ask quality or safety questions – answers win tools• Bingo Numbers<ul style="list-style-type: none">◦ Two winners last week<ul style="list-style-type: none">◦ Mark Jordan – Holder◦ Jackie Winslow – Gartner (A5)• Meeting Conducted by: <u>HCC & R&S</u>
Job-Wide Safety Meeting Agenda		Date: 12-20-16
<p>Number of Personnel Attending:</p> <p>Meeting PREP - 5 Minutes before 7:00 all GC and Sub foreman and JSC's help with:</p> <ul style="list-style-type: none">• Need everyone to move forward• Need everyone to put on all of their PPE, look around is everyone in compliance?• Need everyone to put away the electronic devices.• Need everyone to pay attention and be quiet <p>Meeting Topics:</p> <ul style="list-style-type: none">• Superintendent Focus (expand on this topic)<ul style="list-style-type: none">◦ As a Supervisor, part of your job is to mentor, guide and CONTROL your Team for improved safety, quality and production.• Safety Topic<ul style="list-style-type: none">◦ Staying focused- Many accidents tend to happen right before the holidays, whether that's from rushing to complete a task, lack of planning or not being aware of what's happening around you. Use some of the small techniques whether that's using the 10, 10, 10 rule- Every 10 minutes, take 10 seconds to look 10 feet to make yourself aware of your surroundings.◦ Take safety home with you. If you have a long drive home or driving during the holiday please be safe and responsible while traveling on the roads as many other families will be traveling as well, and get plenty of rest. Be cognizant when leaving lighting on over an extended amount of time or cooking your holiday meals. Thank you for all of your hard work, daily commitment and all milestones achieved this year.• Incident Review<ul style="list-style-type: none">◦ Boom lift came in contact with parked truck outside A1- Keep in mind that when working within a boom lift that the swing radius is delineated or traffic is closed off in the work area to all other traffic. Areas outside the building are getting more and more congested.◦ Employee removing floor tile stepped into a hole by accident injuring his right shin- Although this was a part of the plan working within the Raised Access Floor and the area was delineated, constant awareness and understanding the work area is vital for this operation. <p>Bingo Cards are being passed around, PLEASE BE SURE TO DISCARD YOUR OLD BINGO CARDS, they are no longer valid.</p> <p>Bingo Numbers this week: D72 N44</p>		

4. Construction areas, ramps, and corridors are poorly lit and lack illumination. Please refer to Title 8 CCR, section 1523

Response: T8CCR §1523 Lighting- The electrical subcontractor is responsible for providing adequate lighting throughout the project site. If such alleged conditions exist, Holder Construction as well as the electrical contractor are tracking these open items and closing them accordingly. Furthermore, the building currently contains over 25 miles of temporary lighting that has been installed, all of which are being maintained by a designated temporary power and lighting crew on a daily basis.



5. Inappropriate clothing, lack of hardhat and/or goggles and personal protective equipment (PPE) are worn by employees throughout the site. Please refer to Title 8 of CCR, Section 3380 and 3381

Response: All employees working on the AC2 project site are required to undergo the on-boarding Project Safety Orientation before they begin work on site, which lists the specific PPE requirements for the project. (see attached slide). Holder Construction enforces these site policies by utilizing verbal and written disciplinary action in accordance to our project safety program.

Personal Protective Equipment (PPE)

Proper PPE must be worn on this project at all times.

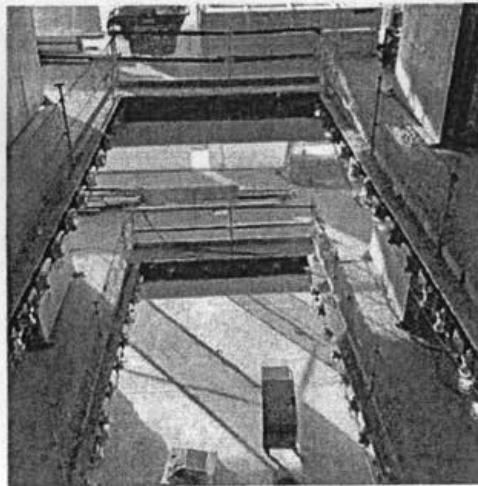
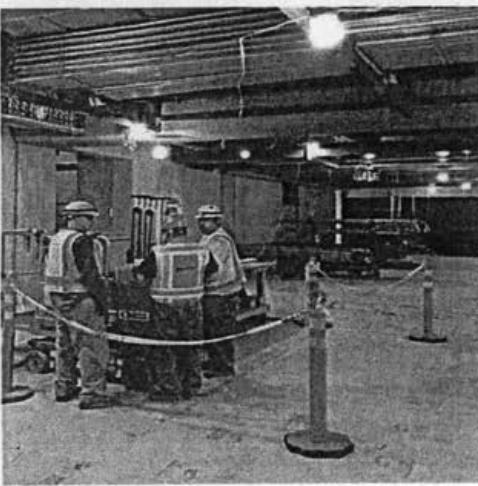
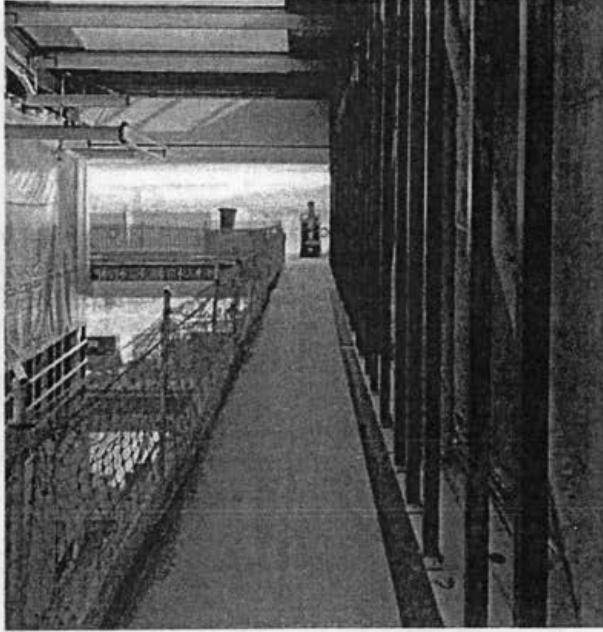
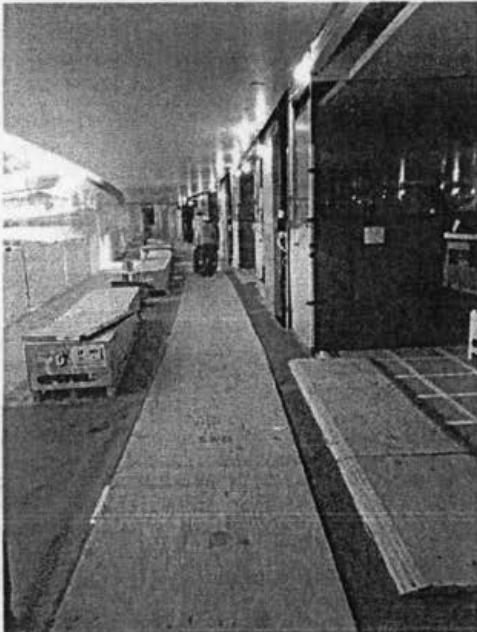
- Hard hats should be worn in accordance with manufacturer recommendations.
- Hard hats should meet ANSI requirements, alterations will not be permitted.
- At a minimum, Class II Reflective vests, coats hoodies or tee-shirts are required.
- Safety glasses should be worn 100%.
- Safety glasses with tinted or smoked lens are not recommended inside the building.
- Goggles or over-the-glass safety glasses must be provided if prescription glasses do not meet ANSI Z-87 requirements.



6. Poor housekeeping around site. Please refer to Title 8 of CCR, Section 1513

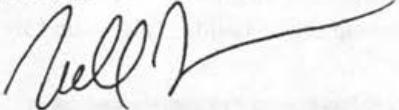
Response: T8CCR §1513 Housekeeping- T8CCR §1513 Housekeeping

Housekeeping efforts have been continuous and effective. Dedicated walking paths have been established to prevent alleged hazards (see photos below). Clean-up crews conduct clean-up for scrap materials such as pallets, wood, conduit, scrap metals, etc.



We trust that the information outlined above satisfactorily addresses the aforementioned Complaint.
Please let us know if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Todd Turner".

Todd Turner
General Superintendent

Enclosure

cc: Dave O'Haren, Gavin Kalley, Shawn Belin, Allen Martin – Holder Construction Company



Via Facsimile (501) 794-3889

January 5th, 2017

Ms. Kelly Tatum
Acting District Manager
State of California Department of Industrial Relations
Division of Occupational Safety and Health
39141 Civic Center Drive, Suite 310
Fremont, CA 94538

Re: Complaint Number: 1166799 – Ltr D

Dear Ms. Tatum:

We received the referenced Complaint via mail on December 23rd, 2016. Holder Construction Company is proactively implementing our policies and procedures to ensure a safe project site. Below is our response to the alleged conditions:

1. The employer (Holder Construction) has not performed clean-up for airborne dust/dirt at the lower basement areas (#1 and #2). The dust is causing congestion for workers in the area. The dust is being tracked in from the outside by workers and industrial trucks. This is on-going for weeks. (Reference T8CCR 1530.1, 1513, and 1530)

Response:

§1530.1 Control of Employee Exposures from Dust-Generating Operations Conducted on Concrete or Masonry Materials – Over 99% of the Main Building concrete operations have been completed in the below grade levels. Please also be advised that the remaining concrete masonry work is under the control of another General Contractor, which is also 99% complete. Although we do not have supervision or control of masonry work, it has been communicated to Holder that the following engineering controls are in place for the masonry operations:

- Fans are used to direct non-captured dust to negative air machines with Hepa Filters.
- Water is sprayed onto the grout as it is dumped from the bag and into the mixing hopper.
- All mixing crews have been trained in proper engineering dust control

It has also been communicated to Holder that multiple dust and silica IH assessments were performed on the employees with the highest potential exposure which involved mixing operations over an 8-hour shift in the basement levels. The assessment results indicated that exposure to dust and silica levels were below the established permissible exposure limits established by Cal/OSHA and Fed OSHA. The highest concentration detected for respirable dust was identified at 1.9 mg/m³ and 0.035 mg/m³ for silica concentration.

Additionally, Holder Construction has taken a proactive approach by performing additional IH sampling for Respirable Dust and Crystalline Silica throughout the basement levels which were either non-detect, or below the applicable Cal/OSHA PEL, Fed OSHA PEL, Fed OSHA Action Level, and the ACGIH TLV (see attached report). Furthermore, several trade contractors working full time in the basement levels voluntarily wore personal monitors. The personal monitoring also produced samples that were well below the applicable levels. The results of the IH and personal samples have been shared and communicated. Please see attached email from one of the volunteers who participated in the personal sampling.

§1530 General Requirements of Mechanical Ventilation Systems – The Basement levels currently contain two separate ventilation systems provided by both permanent garage exhaust and temporary air systems. Both temporary and permanent systems contain media filters to aid in filtration. In order to promote continuous air movement throughout the basement levels, additional box fans are strategically placed throughout. Our vendor is routinely onsite to help manage the ongoing process of repositioning the temporary fans, perform routine maintenance and replace filters as needed.

§1513 Housekeeping- Housekeeping efforts have been continuous and effective. A crew of 18 laborers as well as Subcontractor labor crews are performing general housekeeping in the below grade levels utilizing vacuums, Zamboni's and a water buffalo to assist with dust mitigation. Additionally, the General Contractors are partnering together to ensure that any dust that has the potential of being tracked into building is mitigated by use of sweeper/vacuum trucks. Daily logs are being shared by all GC's to ensure the ongoing maintenance is occurring. (See attached daily cleaning log)

We trust that the information outlined above satisfactorily addresses the aforementioned Complaint. Please let us know if you have any questions.

Sincerely,



Todd Turner
General Superintendent

Enclosure

cc: Dave O'Haren, Gavin Kalley, Shawn Belin, Allen Martin – Holder Construction Company

CleanSweep Services, Inc.

APPLE TUNNEL SWEEP LOG

Dec 9- Dec 15, 2016

	<u>Friday</u>	<u>12/9/2016</u>			<u>Saturday</u>	<u>12/10/2016</u>			<u>Monday</u>	<u>12/12/2016</u>	
AM	<u>Driver</u>	<u>In</u>	<u>Out</u>	AM	<u>Driver</u>	<u>In</u>	<u>Out</u>	AM	<u>Driver</u>	<u>In</u>	<u>Out</u>
	Juan	8:00	8:21		Jose	8:16	8:29		Juan	7:15	7:45
	Omar	8:00	8:30		Jose	9:23	9:41		Omar	8:00	8:30
	Jose	8:20	8:40		Jose	10:31	10:45		Juan	8:10	8:40
	Jose	9:14	9:27		Jose	11:10	11:26		Jose	8:16	8:27
	Juan	9:30	9:39		Demetrio	3:22	3:30		Juan	9:06	9:23
	Omar	10:00	10:30		Demetrio	3:32	3:45		Jose	9:21	9:40
	Juan	10:10	10:19						Omar	10:00	10:30
	Jose	10:31	10:46						Juan	10:10	10:15
	Omar	11:00	11:15						Jose	10:30	10:47
PM	Juan	11:10	11:30	PM				PM	Juan	10:45	11:27
	Jose	11:16	11:27						Omar	11:00	11:30
	Jose	12:28	12:42						Jose	11:17	11:28
	Juan	2:00	2:13						Jose	12:34	12:52
	Omar	2:00	2:15						Omar	2:00	2:30
	Jose	2:18	2:41						Jose	2:19	2:42
	Omar	3:00	3:30						Juan	3:00	3:28
	Juan	3:09	3:15						Omar	3:00	3:45
	Jose	3:28	3:48						Jose	3:16	3:30
	Jose										
	<u>Tuesday</u>	<u>12/13/2016</u>			<u>Wednesday</u>	<u>12/14/2016</u>			<u>Thursday</u>	<u>12/15/2016</u>	
AM	<u>Driver</u>	<u>In</u>	<u>Out</u>	AM	<u>Driver</u>	<u>In</u>	<u>Out</u>	AM	<u>Driver</u>	<u>In</u>	<u>Out</u>
	Juan	7:15	7:45		Juan	7:15	7:37		Juan	7:10	7:35
	Omar	8:00	8:30		Juan	8:10	8:30		Omar	8:00	8:30
	Jose	8:20	8:40		Jose	8:18	8:39		Jose	8:17	8:34
	Juan	9:06	9:23		Omar	9:00	9:30		Juan	8:15	8:23
	Jose	9:16	9:29		Jose	9:22	9:40		Jose	9:25	9:43
	Omar	9:30	10:00		Juan	10:10	10:36		Juan	9:10	9:17
	Juan	10:10	10:19		Jose	10:14	10:28		Omar	10:00	10:15
	Jose	10:25	10:42		Omar	10:30	11:00		Juan	10:10	11:00
	Omar	11:00	11:30		Jose	10:14	10:28		Jose	10:31	10:50
	Juan	11:40	11:55		Jose	11:31	11:49	PM	Jose	12:16	12:30
	Jose	12:24	12:43	PM	Jose	1:29	1:49		Jose	1:23	1:42
	Omar	1:00	1:30		Omar	2:00	2:30		Omar	2:00	2:30
	Jose	1:18	1:40		Juan	2:10	3:00		Juan	2:30	3:30
	Omar	2:00	2:30		Jose	2:25	2:44		Jose	2:32	2:52
PM	Jose	2:32	2:51		Omar	3:00	3:30		Jose	3:17	3:37
	Omar	3:30	4:00		Juan	3:10	3:15		Omar	3:30	4:00
	Jose	3:39	3:55		Jose	3:32	3:51				

Allen Martin

From: Robert Godinez [REDACTED]
Sent: Tuesday, October 4, 2016 7:37 AM
To: Allen Martin; Dave Kivi Rosendin Sfty; Ivan Camacho
Subject: Yesterday's environmental test

Good morning, thought I let you know that my men and I appreciate being included in the testing.
I will also be able to report favorably at the next local safety committee and this month at the NSC conference.
It is good to see the men in the field and safety working together in a positive manner.
In solidarity Robert Godinez IBEW 332 Safety committee member



EHS Services and Solutions
4 North 2nd Street
Suite 1270
San Jose, CA 95113
800.790.6236
bsigroup.com

October 17, 2016

Allen Martin
Senior Safety Coordinator
Holder Construction
1905 Pruneridge Avenue
Cupertino, CA 95014

Re: Industrial Hygiene Air Sampling for Respirable Dust and Respirable Crystalline Silica at AC2 Construction Site, Cupertino, California – BSI Project No. 16–2001

Dear Mr. Martin:

Pursuant to your request, BSI EHS Services and Solutions (BSI) performed industrial hygiene air sampling to evaluate potential and representative employee exposures to respirable dust and respirable crystalline silica to select workers at the AC2 construction site (the site) located in Cupertino, California. BSI Associate Consultant Vraj Derodra performed the air monitoring event at the site on October 3, 2016. This report was written by Mr. Derodra with quality review provided by BSI Principal Consultant Xavier Alcaraz, MSPH, CIH, CSP. This report describes the sampling methodology and analysis employed, presents the findings as compared to regulatory and other occupational exposure limits, and discusses conclusions and recommendations, where applicable.

Background and Purpose

Mr. Allen Martin, Senior Safety Coordinator with Holder Construction (Holder) retained BSI's services to perform an industrial hygiene assessment of respirable dust and respirable crystalline silica in common work areas and for select construction personnel at the AC2 construction site.

BSI performed personal sampling of respirable dust and silica on workers chosen by Holder Construction's safety coordinators. The objective of the personal air sampling was to evaluate the levels of respirable dust and respirable crystalline silica to personnel working select tasks at the site. BSI understands that the monitoring was being performed following concerns of potential exposures to respirable dust and respirable silica associated with on-going construction activities at the AC2-construction site. The objective of the area sampling was to evaluate potential exposures and levels of respirable dust and crystalline silica in common areas frequented by general trades such as walkways, drive aisles, and hallways within the building construction site. Area sampling locations were identified by Mr. Ivan Camacho of Holder Construction based on his knowledge of the AC2 construction site. Mr. Camacho also served as BSI's site contact on the day of sampling.

During the walkthrough, BSI was informed that a Holder Construction representative was tasked with spraying the areas of high vehicle and foot traffic inside the AC2 site with water on an hourly basis to reduce the amount of construction-related dust suspended in the air (Photo 1, Attachment 4). There were also multiple workers performing sweeping and vacuuming activities on a regular basis. Visible dust was observed in some areas including E4, B2 tunnel area (Photo 2, Attachment 4). Some areas had accumulated notable dust which became suspended in the air when a vehicle drove by. Dust control methods also included use of high volume fans and industrial dust exhaust systems (>3500 cubic feet per minute). Some of the overhead dust exhaust systems were not operational on the day of sampling including those at A5, B1 tunnel and A6, B1 tunnels (Photo 3, Attachment 4). Some workers were observed wearing N95 masks (Photo 4, Attachment 4), which were provided by Holder for use on a voluntary basis. Other personal protective equipment (PPE) worn by the construction workers included safety glasses, hard hats and steel-toed shoes.

Sampling Methods

Sampling media for the respirable dust and respirable crystalline silica air samples were fitted to an aluminum cyclone (with particle cut point of 4 microns) attached by plastic tubing to an air sampling pump calibrated to the method-specified flow rate in liters of air per minute (lpm). The sampling pumps were calibrated with a BIOS DryCal calibrator prior to and following sampling to verify the sample flow rate (BIOS DryCal calibration Certificate in Attachment 3). After sampling, the media were labeled, sealed, and submitted for analysis by an independent, American Industrial Hygiene Association (AIHA)-accredited laboratory, SGS –Galson Laboratories in East Syracuse, New York.

The air samples were collected and analyzed according to the following NIOSH and OSHA Analytical Methods:

- Respirable Crystalline Silica: modified NIOSH 7500/OSHA ID –142, 3-piece, 37 mm, polyvinyl chloride (PVC) filters with SKC aluminum cyclones at ~2.5 lpm
- Respirable Dust: NIOSH 0600, 3 piece, 37 mm, polyvinyl chloride (PVC) filters with SKC aluminum cyclones at ~2.5 lpm

Note that SGS-Galson Laboratories may utilize "modified" analytical techniques to improve analytical results.

Regulatory Standards

California Occupational Safety and Health Administration (Cal/OSHA) has established Permissible Exposure Limits (PELs) for airborne contaminants in Title 8, California Code of Regulations (CCR), Section 5155, Table AC-1, which represent average airborne contaminant levels that nearly all workers may be exposed to repeatedly without adverse health effects. The PEL is the maximum 8-hour Time-Weighted Average (TWA) concentration allowed for an airborne contaminant, and it is typically expressed as a PEL-TWA. Cal/OSHA has also established Short-Term Exposure Limits (STELs) and Ceiling Limits (CLs) for some substances which have fast-acting and immediate effects such as irritation. A STEL is a 15-minute TWA exposure level which is not to be exceeded at any time during the workday, even if the 8-hour TWA is below the PEL-TWA.

The Ceiling Limit is the maximum concentration of an airborne contaminant to which an employee may be exposed at any time. If exposures exceed the PEL, STEL or Ceiling Limit, then the employer is required by Cal/OSHA to implement control measures to reduce the exposures.

On March 24, 2016, the Federal OSHA enacted the final rule on silica dust for General Industry and Maritime (CFR 1910.1053) and Construction (CFR 1926.1153). Both standards became effective on June 23, 2016. Cal/OSHA has six months to enact its own silica dust standard or adopt the Federal OSHA standard.

The American Conference of Governmental Industrial Hygienists (ACGIH) establishes Threshold Limit Values (TLV) to assist in the evaluation of airborne contaminants. TLVs are typically expressed as eight-hour, time-weighted averages (TLV-TWAs). ACGIH also publishes STELs for 15-minute time-weighted short term exposures for some substances. A Short Term Exposure Limit (STEL) is a 15-minute time-weighted average exposure which is not to be exceeded at any time during the workday, even if the 8-hour time-weighted average is below the TLV. It should be noted that ACGIH TLVs and STELs are not a regulatory requirement, but represent a scientific opinion based on an objective peer-review of scientific literature by committees of experts in public health and related sciences.

Crystalline silica comes in various forms that are of occupational health concern which include cristobalite, quartz, and tridymite. The regulatory occupational exposure limits for the constituents assessed in this survey are summarized in Table 1.

Table 1: Summary of Current 2016 Cal/OSHA, New 2016 Fed/OSHA, and 2016 ACGIH Occupational Exposure Limits (OELs)

Airborne Contaminant	Cal/OSHA PEL 8-hr. TWA (mg/m ³)	Federal/OSHA PEL and Action Level 8-hr. TWA (mg/m ³)	ACGIH TLV 8-hr. TWA (mg/m ³)
Respirable Dust	5	5	3
Respirable Crystalline Silica			
Cristobalite	0.05	PEL = 0.05*	0.025
Quartz	0.1	Action Level = 0.025*	0.025
Tridymite	0.05	(all 3 forms)	NE

mg/m³ = milligrams per cubic meter

ppm = parts per million

Cal/OSHA PEL = California Occupational Safety and Health Administration Permissible Exposure Limit

Fed/OSHA PEL = Federal Occupational Safety and Health Administration

Permissible Exposure Limit

*Fed/OSHA Final Rule for Respirable Crystalline Silica promulgated on 3/24/16

NE = None Established

Results and Discussion

The results from the air sampling performed for respirable dust and respirable crystalline silica at the AC2 construction site for the sampling event on October 3, 2016 are summarized in Table 2. The analytical laboratory report and the chain-of-custody (COC) forms for all sampling events are provided in Attachment 1. The BSI field sampling data sheets are provided in Attachment 2. Calibration record for the primary calibrator used for field calibration of air sampling pumps is provided in Attachment 3.

Personal and area air sampling results for respirable dust and respirable crystalline silica (cristobalite, quartz, and trydmite) at the AC2 construction site on October 3, 2016 were below the respective Cal/OSHA PEL and Fed/OSHA PEL for each of the workers and locations sampled. Respirable quartz was detected in all areas; however, the levels were below the Cal/OSHA PEL and Fed/OSHA PEL. The exposure limits are summarized in Table 2. Lab results are attached.

Table 2: Summary of Personal and Area Air Sampling Results for Respirable Crystalline Silica & Respirable Dust – October 3, 2016

Sample #	Air Sampling Location and Description	Sampling Time (minutes)	Respirable Crystalline Silica (mg/m ³)			Respirable Dust (mg/m ³)
			Cristobalite	Quartz	Tridymite	
100316VD-1	Foreman monitoring his employees in the B1& B2 and traveling to all areas of the building	365	0.012	<0.0054	<0.021	0.22
100316VD-2	- no work activity except for walking from E4 to E6, no grinding or cutting, no installation	373	0.015	<0.0053	<0.021	0.32
100316VD-3	- A6-B1 Zone 1 and the drive aisle, working between column lines 68-69. All work was on overhead cable trays - installing conduit, dressing lighting cables and making up junction boxes. He walked to the lay down area in A4-B2 a few times.	418	0.015	<0.0047	<0.019	0.31
100316VD-4	- sweeping and vacuuming in the B-3 & B-2 level and A3 & A4 area	364	0.01	<0.0054	<0.022	0.14
100316VD-5	Area Sample - A5, B1	351	0.0087	<0.0056	<0.022	0.12
100316VD-6	Area Sample - E3, B2	395	0.013	<0.005	<0.02	0.23
100316VD-7	Area Sample - A6, B1	398	0.014	<0.0049	<0.02	0.27
100316VD-8	Area Sample - A7, B1	395	0.0081	<0.005	<0.02	0.14
100316VD-9	Flagger in the A1 tunnel	368	0.0094	<0.0054	<0.021	0.11
100316VD-10	Area Sample - E4, B2	378	0.019	<0.0052	<0.021	0.35
100316VD-11	Field Blank Sample	NA	0.005 mg	<0.005 mg	<0.020 mg	<0.050 mg
Cai/OSHA 8-Hour TWA PELs			0.05	0.1	0.05	5
Fed/OSHA 8- Hour TWA Action Level			0.025	0.025	0.025	NA
Fed/OSHA 8- Hour TWA PEL			0.05	0.05	0.05	5
ACGIH 8-Hour TWA TLV			0.025	0.025	NE	3

mg/m³ = milligrams per cubic meter

ND = Non Detect

NA = Not Applicable

NE = None Established

Conclusions

Based on the air sampling results of this survey and information provided by workers and/or Holder Construction while onsite, all of the personal and area air samples collected on October 3, 2016 for respirable dust and respirable crystalline silica at the AC2 construction site were either non-detect or below the applicable Cal/OSHA PEL, Fed/OSHA PEL, Fed/OSHA Action Level, and the ACGIH TLV.

Based on the air sampling results and information provided by workers and/or Holder Construction, BSI recommends the following:

- Communicate the results of this survey to affected employees following receipt of this report
- Continue the use of wet methods as observed on the day of sampling to minimize airborne dust generation
- Continue using industrial fans and dust exhaust ventilation systems. Place exhaust fans in high foot and vehicle traffic areas
- Comply with applicable sections of Title 8, CCR Section 1530.1 - Control Employee Exposures from Dust-Generating Operations Conducted on Concrete including the following:
 - During operations in which powered tools or equipment are used to cut, grind, core, or drill, concrete or masonry materials, a dust reduction system shall be applied to effectively reduce airborne particulate
 - Employee training: An employer whose operations include using powered tools or equipment to cut, grind, core, or drill concrete or masonry materials shall provide training to all employees prior to their assignment to jobs or work areas where the employer will be conducting these operations
 - Additional requirements of this standard apply
- Cal/OSHA has 6 months to enact its own silica dust standard or adopt the new Federal OSHA Silica Dust standard. Additional requirements to construction activities in California may be applicable at that time
- Maintain air monitoring exposure records in accordance with Title 8, California Code of Regulations (CCR), Section 3204, "Access to Employee Exposure and Medical Records"

BSI appreciates the opportunity to have performed this work for your construction site. Please feel free to call me at 408.790.9200 if you have questions regarding this air sampling report.

Sincerely,

Vraj Derodra

Vraj Derodra
Associate Consultant

Reviewed by:

Xavier Alcaraz

Xavier Alcaraz, MSPH, CIH, CSP
Principal Consultant

Attachments:

- Attachment 1: Analytical Lab Results and Chain-of-Custody Form
- Attachment 2: BSI Field Air Sampling Data Sheets
- Attachment 3: BIOS DryCal Calibration Certificate
- Attachment 4: Photos

Attachment 1

Analytical Lab Results and Chain-of-Custody Form



GALSON

Mr. Vraj Derodra
BSI EHS Services and Solutions
4 N 2nd St
Suite 1270
San Jose, CA 95113

October 07, 2016

DOH ELAP #11626
AIHA-LAP #100324

Account# 13350

Login# L387790

Dear Mr. Derodra:

Enclosed are the analytical results for the samples received by our laboratory on October 05, 2016. All test results meet the quality control requirements of AIHA-LAP and NELAC unless otherwise stated in this report. All samples on the chain of custody were received in good condition unless otherwise noted.

Results in this report are based on the sampling data provided by the client and refer only to the samples as they were received at the laboratory. Unless otherwise requested, all samples will be discarded 14 days from the date of this report, with the exception of IOMs, which will be cleaned and disposed of after seven calendar days.

Current Scopes of Accreditation can be viewed at www.galsonlabs.com in the accreditations section under the "about Galson" tab.

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

Sincerely,

SGS Galson Laboratories

Lisa Swab
Laboratory Director

Enclosure(s)

Galson Laboratories, Inc. is now a part of SGS, the world's leading inspection, verification, testing, and certification company. As part of our transition to SGS, you will begin to see some formatting changes with reports that will improve the presentation of data and allow for the transition to the new logo.



GALSON

LABORATORY ANALYSIS REPORT

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

Client : BSI EHS Services and Solutions Account No.: 13350
Site : Holder Const.-AC2 Sampling Login No. : L387790
Project No. : 16-2001
Date Sampled : 03-OCT-16 Date Analyzed : 05-OCT-16
Date Received : 05-OCT-16 Report ID : 960118

Respirable Dust

<u>Sample ID</u>	<u>Lab ID</u>	<u>Air Vol</u> liter	<u>Total</u> mg	<u>Conc</u> mg/m ³
100316VD-1	L387790-1	931.3	0.21	0.22
100316VD-2	L387790-2	943.07	0.30	0.32
100316VD-3	L387790-3	1058.86	0.33	0.31
100316VD-4	L387790-4	921.1	0.13	0.14
100316VD-5	L387790-5	898.03	0.11	0.12
100316VD-6	L387790-6	1010.02	0.23	0.23
100316VD-7	L387790-7	1012.84	0.28	0.27
100316VD-8	L387790-8	996.06	0.14	0.14
100316VD-9	L387790-9	931.41	0.10	0.11
100316VD-10	L387790-10	955.84	0.34	0.35
100316VD-11	L387790-11	NA	<0.050	NA

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

Level of quantitation: 0.050 mg Submitted by: KBD
Analytical Method : mod. NIOSH 0600; Gravimetric Approved by : KRK
OSHA PEL : PNOR 5 mg/m³ (TWA) Date : 07-OCT-16 NYS DOH # : 11626
Collection Media : PVC PW 37mm Supervisor: KRK QC by: MLN

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms NA -Not Applicable ND -Not Detected
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ppm -Parts per Million



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Site : Holder Const.-AC2 Sampling Login No. : L387790
Project No. : 16-2001
Date Sampled : 03-OCT-16 Date Analyzed : 05-OCT-16 - 07-OCT-16
Date Received : 05-OCT-16 Report ID : 960627

Respirable Crystalline Silica (RCS): Quartz, Cristobalite, Tridymite

Sample ID	Lab ID	Analyte	Air Vol		
			l	ug	ug/m3
100316VD-1	L387790-1	Quartz	931.3	11	12
		Cristobalite	931.3	<5.0	<5.4
		Tridymite	931.3	<20	<21
		RCS	931.3	11	12
100316VD-2	L387790-2	Quartz	943.07	14	15
		Cristobalite	943.07	<5.0	<5.3
		Tridymite	943.07	<20	<21
		RCS	943.07	14	15
100316VD-3	L387790-3	Quartz	1058.86	16	15
		Cristobalite	1058.86	<5.0	<4.7
		Tridymite	1058.86	<20	<19
		RCS	1058.86	16	15

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

Level of quantitation: Q:5ug C:5ug T:20ug

Submitted: AJD

Analytical Method : mod. NIOSH 7500/mod. OSHA ID-142; XRD

Approved: KRK

OSHA PEL : 50 ug/m3 RCS

Date : 07-OCT-16 NYS DOH # : 11626

Collection Media : PVC PW 37mm

Supervisor: KRK

QC by: MLN

< -Less Than

mg -Milligrams

kg -Kilograms

ppm -Parts per Million

> -Greater Than

ug -Micrograms

m3 -Cubic Meters

NS -Not Specified

NA -Not Applicable

ND -Not Detected

l -Liters

mppcf -Million Particles per Cubic Foot



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 Date Received : 05-OCT-16 Report ID : 960627

Respirable Crystalline Silica (RCS): Quartz, Cristobalite, Tridymite

<u>Sample ID</u>	<u>Lab ID</u>	<u>Analyte</u>	<u>Air Vol</u>		
			<u>l</u>	<u>ug</u>	<u>ug/m3</u>
100316VD-4	L387790-4	Quartz	921.1	9.3	10
		Cristobalite	921.1	<5.0	<5.4
		Tridymite	921.1	<20	<22
		RCS	921.1	9.3	10
100316VD-5	L387790-5	Quartz	898.03	7.8	8.7
		Cristobalite	898.03	<5.0	<5.6
		Tridymite	898.03	<20	<22
		RCS	898.03	7.8	8.7
100316VD-6	L387790-6	Quartz	1010.02	13	13
		Cristobalite	1010.02	<5.0	<5.0
		Tridymite	1010.02	<20	<20
		RCS	1010.02	13	13

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

Level of quantitation: Q:5ug C:5ug T:20ug

Submitted: AJD

Analytical Method : mod. NIOSH 7500/mod. OSHA ID-142; XRD

Approved: KRK

OSHA PEL : 50 ug/m3 RCS

Date : 07-OCT-16 NYS DOH # : 11626

Collection Media : PVC PW 37mm

Supervisor: KRK

QC by: MLN

< -Less Than

mg -Milligrams

kg -Kilograms

ppm -Parts per Million

> -Greater Than

ug -Micrograms

m3 -Cubic Meters

NS -Not Specified

NA -Not Applicable

ND -Not Detected

l -Liters

mppcf -Million Particles per Cubic Foot



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Site : Holder Const.-AC2 Sampling Login No. : L387790
Project No. : 16-2001
Date Sampled : 03-OCT-16 Date Analyzed : 05-OCT-16 - 07-OCT-16
Date Received : 05-OCT-16 Report ID : 960627

Respirable Crystalline Silica (RCS): Quartz, Cristobalite, Tridymite

Sample ID	Lab ID	Analyte	Air Vol		
			l	ug	ug/m3
100316VD-7	L387790-7	Quartz	1012.84	14	14
		Cristobalite	1012.84	<5.0	<4.9
		Tridymite	1012.84	<20	<20
		RCS	1012.84	14	14
100316VD-8	L387790-8	Quartz	996.06	8.0	8.1
		Cristobalite	996.06	<5.0	<5.0
		Tridymite	996.06	<20	<20
		RCS	996.06	8.0	8.1
100316VD-9	L387790-9	Quartz	931.41	8.7	9.4
		Cristobalite	931.41	<5.0	<5.4
		Tridymite	931.41	<20	<21
		RCS	931.41	8.7	9.4

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

Level of quantitation: Q:5ug C:5ug T:20ug Submitted: AJD
Analytical Method : mod. NIOSH 7500/mod. OSHA ID-142; XRD Approved: KRK
OSHA PEL : 50 ug/m3 RCS Date : 07-OCT-16 NYS DOH # : 11626
Collection Media : PVC PW 37mm Supervisor: KRK QC by: MLN

< -Less Than	mg -Milligrams	kg -Kilograms	ppm -Parts per Million
> -Greater Than	ug -Micrograms	m3 -Cubic Meters	NS -Not Specified
NA -Not Applicable	ND -Not Detected	l -Liters	mppcf -Million Particles per Cubic Foot



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Project No. : 16-2001
Date Sampled : 03-OCT-16 Date Analyzed : 05-OCT-16 - 07-OCT-16
Date Received : 05-OCT-16 Report ID : 960627

Respirable Crystalline Silica (RCS): Quartz, Cristobalite, Tridymite

Sample ID	Lab ID	Analyte	Air Vol		
			l	ug	ug/m3
100316VVD-10	L387790-10	Quartz	955.84	18	19
		Cristobalite	955.84	<5.0	<5.2
		Tridymite	955.84	<20	<21
		RCS	955.84	18	19
100316VVD-11	L387790-11	Quartz	NA	<5.0	NA
		Cristobalite	NA	<5.0	NA
		Tridymite	NA	<20	NA
		RCS	NA	<5.0	NA

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

Level of quantitation: Q:5ug C:5ug T:20ug

Analytical Method : mod. NIOSH 7500/mod. OSHA ID-142; XRD

OSHA PEL : 50 ug/m3 RCS

Collection Media : PVC PW 37mm

Submitted: AJD

Approved: KRK

Date : 07-OCT-16 NYS DOH # : 11626

Supervisor: KRK

QC by: MLN

< -Less Than

mg -Milligrams

kg -Kilograms

ppm -Parts per Million

> -Greater Than

ug -Micrograms

m3 -Cubic Meters

NS -Not Specified

NA -Not Applicable

ND -Not Detected

l -Liters

mpcf -Million Particles per Cubic Foot



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LABORATORY FOOTNOTE REPORT

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Client Name : BSI EHS Services and Solutions
Site : Holder Const.-AC2 Sampling
Project No. : 16-2001

Date Sampled : 03-OCT-16 Account No.: 13350
Date Received: 05-OCT-16 Login No. : L387790
Date Analyzed: 05-OCT-16 - 07-OCT-16

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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.

Unless otherwise noted below, 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. The findings herein constitute no warranty of the samples' representativeness of any sampled environment and strictly relate to the samples as they were presented to the laboratory.

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 below, reported results have not been blank corrected for any field blank or method blank.

L387790 (Report ID: 960118):

SOPs: GRAV-SOP-5(16), GRAV-SOP-6(15)
Gravimetric analytical accuracy of the sampling media is -0.001 ± 0.006 mg (average blank weight change $\pm 95\%$ confidence interval or $k=2$). The estimated uncertainty applies to the media, technology, and SOP(s) referenced in this report and does not account for any uncertainty associated with the sampling process.
PNOR - Particulates Not Otherwise Regulated.

L387790-3-8,10 (Report ID: 960118):

Cassette middle was cracked when received for analysis. Effect on sample is unknown.

L387790 (Report ID: 960627):

SOPs: ix-xrdreview(13), ix-xrdashprep(25), ix-calibrate(11), ix-xrdstdprep(25)
We perform a quantitative secondary angle confirmation on all Quartz results greater than 0.025 mg.
Secondary angle quantitative confirmation is not possible below 0.025 mg.
We were able to confirm Quartz in samples L387790-3 and L387790-10 qualitatively using the secondary angle.

L387790-3-8,10 (Report ID: 960627):

Cassette middle was cracked when received for analysis. Effect on sample is unknown.

< -Less Than	mg -Milligrams	m ³ -Cubic Meters	kg -Kilograms	ppm -Parts per Million	
> -Greater Than	ug -Micrograms	l -Liters	MS -Not Specified	ND -Not Detected	NA -Not Applicable



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LABORATORY FOOTNOTE REPORT

Client Name : BSI EHS Services and Solutions
Site : Holder Const.-AC2 Sampling
Project No. : 16-2001

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East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.galsomlabs.com

Date Sampled : 03-OCT-16 Account No.: 13350
Date Received: 05-OCT-16 Login No. : L387790
Date Analyzed: 05-OCT-16 - 07-OCT-16

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
Cristobalite	+/-11.9%	96.1%
Quartz	+/-11.5%	97.9%
Tridymite	+/-15.2%	102%

< -Less Than mg -Milligrams m³ -Cubic Meters kg -Kilograms ppm -Parts per Million
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ND -Not Detected NA -Not Applicable



GALSON
LABORATORIES

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New Client? Client Account No.:
13350

Report To*: Vraj Derodra
BSI(Formerly EORM)
4 N 2nd Street, Suite 1270
San Jose, CA 95110
Phone No.*: 408-790-9200
Cell No.: 205-253-8627
Email Results to: derodrav@eorm.com
Email address: alcaraazx@eorm.com

Invoice To*: Accounts Payable
EORM
4 N 2nd Street, Suite 1270
San Jose, CA 95110
Phone No.: 408-790-9200
Email: ap@eorm.com
P.O. No.: 16-0803
Credit Card: Card on File Call for Credit Card Info.

Need Results By:	(surcharge)
<input type="checkbox"/> Standard	0%
<input type="checkbox"/> 4-Business Days	35%
<input type="checkbox"/> 3 Business Days	50%
<input checked="" type="checkbox"/> 2 Business Days	75%
<input type="checkbox"/> Next Day by 6pm	100%
<input type="checkbox"/> Next Day by Noon	150%
<input type="checkbox"/> Same Day	200%

<input type="checkbox"/> Samples submitted using the FreePumpLoan™ Program <input type="checkbox"/> Samples submitted using the FreeSamplingBadges™ Program				
Site Name: Holder Const. - AC2 Sampling 100316 Project: 16-2001 Sampled by: V. Derodra				
Comments:				
List description of industry or Process/Interferences present in sampling area:				State samples were collected in (e.g., NY) <u>CA</u>
Construction				Please indicate which DEL this data will be used for: <input checked="" type="checkbox"/> OSHA PEL <input checked="" type="checkbox"/> ACGIH TLV <input checked="" type="checkbox"/> Cal OSHA <input type="checkbox"/> MSHA <input checked="" type="checkbox"/> Other (specify):
Sample Identification* (Maximum of 20 characters)	Date-Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml, min, in2, cm2, ft2
100316VD-1	10/03/16	37mm 3pm PVC	931.30	L
-2			943.07	
-3			1058.86	
-4			921.10	
-5			898.03	
-6			1010.02	
-7			1012.84	
-8			996.06	
-9			931.41	
-10			955.84	
-11			Blank	

*Galson Laboratories will substitute our routine/preferred method if it does not match the method listed on the COC unless this box is checked: Use method(s) listed on COC

For metals analysis: If requesting an analyte with the option of a lower LOQ, please indicate if the lower LOQ is required (only available for certain analytes - see SAG):

For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite):

Chain of Custody	Print Name/Signature	Date	Time	Print Name/Signature	Date	Time
Relinquished by:	<u>Vraj Derodra</u> <u>Heyler</u>	10/2/16		Received by:		
Relinquished by:				Received by:	<u>Emily Tomy</u> <u>CVR 2</u>	10-5-16 0901

Samples received after 3pm will be considered as next day's business

* Required fields, failure to complete these fields may result in a delay in your samples being processed.

Page 1 of 1

Attachment 2

BSI Field Air Sampling Data Sheets

BSI AIR SAMPLING DATA RECORD**PROJECT DATA:**

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alearaz

EMPLOYEE AND WORK AREA DATA:

Location description: Foreman B1/B2	Employee Name: Corey Averedo	Employee Number: —
	Job Title/Duties: Foreman	Phone Number: —
	Work Duration & Frequency: ~ 8 hrs.	Number of Employees performing similar duties: —
Personal Protective Equipment Used: Hard hat, Safety glasses, N95s, safety shoes.		
Engineering Controls: Industrial fans, exhausts, wet methods.	Ambient Weather Conditions:	

SAMPLING DATA:

Pump ID: 1	Collection Media: 37mm 3pc PVC	Sample ID: 100316VD-1	Size and Lot Number: PSY390029	Analytes	
Start Time:	Stop Time:	Total Sampling Time (min):	Avg Flow Rate (L/min):	Sampled Volume (L):	
		365 min	2.5515	931.30	

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: Gilair 20150801012	Primary Standard: N/A	Pump Condition: Good		
Pre-Survey Date/Time: 10/2/16	Technician: ND	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min) 2.5470	Trial 2: (L/min) 2.5570	Trial 3: (L/min) 2.5600
				Flow Rate Avg (L/min): 2.5547
Post-Survey Date/Time: 10/3/16	Technician: ND	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min) 2.5600	Trial 2: (L/min) 2.5470	Trial 3: (L/min) 2.5480
				Flow Rate Avg (L/min): 2.5483
			Pre- and post-cal avg. flow rate (L/min)	2.5515

Industrial Hygienist/IH Tech (Print & Signature):

Date:

Vraj Denodra Hegde	10/3/16
--------------------	---------

BSI AIR SAMPLING DATA RECORD**PROJECT DATA:**

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alcaraz

EMPLOYEE AND WORK AREA DATA:

Location description: E4 to E6, no activity except for walking from E4 to E6. No grinding & No cutting or installation.	Employee Name: David Santillano	Employee Number: -
	Job Title/Duties:	Phone Number: -
	Work Duration & Frequency: ~8 hrs.	Number of Employees performing similar duties: -
Personal Protective Equipment Used: Hard hat, safety glasses, N95, safety shoes		
Engineering Controls: Industrial fans, exhausts, wet methods		Ambient Weather Conditions:

SAMPLING DATA:

Pump ID: 2	Collection Media:	Sample ID:	Size and Lot Number:	Analytes	
37mm 3pc PVC	100316VD-2		Psy 890029	Resp dust + resp silica.	
Start Time:	Stop Time:		Total Sampling Time (min):	Avg Flow Rate (L/min):	Sampled Volume (L):
			373	2.5283	943.07.

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: Gulair RS569.	Primary Standard: Y/N	Pump Condition:		
Pre-Survey Date/Time: 10/3/16	Technician: VD	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min)	Trial 2: (L/min)	Trial 3: (L/min)
		2.5350	2.5440	2.5410
				Flow Rate Avg (L/min): 2.5400
Post-Survey Date/Time: 10/3/16	Technician: VD	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min)	Trial 2: (L/min)	Trial 3: (L/min)
		2.5140	2.5170	2.5190
				Flow Rate Avg (L/min): 2.5167
Pre- and post-cal avg. flow rate (L/min)			2.5283	

Industrial Hygienist/IH Tech (Print & Signature):

Date:

Vraj Desodra	Wagle	10/3/16.
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30j 10

BSI AIR SAMPLING DATA RECORD**PROJECT DATA:**

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alcaraz

EMPLOYEE AND WORK AREA DATA:

Location description: <i>A4/B2, A6/B1</i>	Employee Name: <i>Matt Engwall</i>	Employee Number: <i>to v0</i>
	Job Title/Duties: <i>-</i>	Phone Number: <i>-</i>
	Work Duration & Frequency: <i>~8 hrs</i>	Number of Employees performing similar duties: <i>-</i>
Personal Protective Equipment Used: <i>Hard hat, safety glasses, safety shoes, N95</i>		
Engineering Controls: <i>Industrial fans, exhausts, wet methods</i>	Ambient Weather Conditions: <i>-</i>	

SAMPLING DATA:

Pump ID: <i>3</i>	Collection Media:	Sample ID: <i>100316VD - 3</i>	Size and Lot Number: <i>PSY 390029</i>	Analytes	
				<i>Resp dust + Resp Silica.</i>	
Start Time:	Stop Time:		Total Sampling Time (min): <i>418</i>	Avg Flow Rate (L/min): <i>2.5170</i>	Sampled Volume (L): <i>1058.86</i>
				<i>2.5332</i>	

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: <i>Gilair R11582</i>	Primary Standard: Y/N	Pump Condition: <i>Good</i>		
Pre-Survey Date/Time: <i>10/3/16</i>	Technician: <i>VD</i>	Temperature:	Barometric Pressure:	Relative Humidity:
	Trial 1: (L/min) <i>2.5170</i>	Trial 2: (L/min) <i>2.5200</i>	Trial 3: (L/min) <i>2.5140</i>	Flow Rate Avg (L/min): <i>2.5170</i>
Post-Survey Date/Time: <i>10/3/16</i>	Technician: <i>VD</i>	Temperature:	Barometric Pressure:	Relative Humidity:
	Trial 1: (L/min) <i>2.5560</i>	Trial 2: (L/min) <i>2.5440</i>	Trial 3: (L/min) <i>2.5580</i>	Flow Rate Avg (L/min): <i>2.5493</i>
			Pre- and post-cal avg. flow rate (L/min)	

Industrial Hygienist/IH Tech (Print & Signature):

Date:

<i>Vraj Desendra Wyle</i>	<i>10/3/16</i>
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BSI AIR SAMPLING DATA RECORD**PROJECT DATA:**

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alcaraz

EMPLOYEE AND WORK AREA DATA:

Location description: <i>A4/B2 and B3 - Sweeping & Vacuuming</i>	Employee Name: <i>Regelia Diaz</i>	Employee Number: ~
	Job Title/Duties:	Phone Number: ~
	Work Duration & Frequency: ~ 8hr	Number of Employees performing similar duties: ~
Personal Protective Equipment Used: <i>Hard hat, safety glasses/shoes, N95</i>		
Engineering Controls: <i>Industrial fans, exhausts, wet methods.</i>	Ambient Weather Conditions: ~	

SAMPLING DATA:

Pump ID:	Analytes			
Collection Media:	Sample ID:	Size and Lot Number:	Analytes	
87mm 3pc PVC	100316VB-4	Psy 390029	Resp dust + Resp Silica	
Start Time:	Stop Time:	Total Sampling Time (min):	Avg Flow Rate (L/min):	Sampled Volume (L):
		364	2.5305	921.10

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: <i>Gilair R251479</i>	Primary Standard: Y/N	Pump Condition: <i>Good.</i>		
Pre-Survey Date/Time: <i>10/31/16</i>	Technician: <i>VB</i>	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min)	Trial 2: (L/min)	Trial 3: (L/min)
		2.5440	2.5390	2.5470
				2.5483
Post-Survey Date/Time: <i>10/31/16</i>	Technician: <i>VB</i>	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min)	Trial 2: (L/min)	Trial 3: (L/min)
		2.5140	2.5190	2.5200
				2.5177
Pre- and post-cal avg. flow rate (L/min)			2.5305	

Industrial Hygienist/IH Tech (Print & Signature):

Date:

<i>Vivian Deodora</i>	<i>Hayden</i>	<i>10/31/16</i>
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5 of 10

BSI AIR SAMPLING DATA RECORD

PROJECT DATA:

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alearaz

EMPLOYEE AND WORK AREA DATA:

Location description: <i>Area Sample - A5,B1</i>	Employee Name: —	Employee Number: —
	Job Title/Duties: —	Phone Number: —
	Work Duration & Frequency: —	Number of Employees performing similar duties: —
	Personal Protective Equipment Used: —	—
Engineering Controls: <i>Industrial fans, exhausts, wet methods.</i>	Ambient Weather Conditions: —	

SAMPLING DATA:

Pump ID: 5	Collection Media: 37mm 3pc PVC	Sample ID: 100316VD-5	Size and Lot Number: Psy 390029	Analytes	
Start Time:	Stop Time:	Total Sampling Time (min):	Avg Flow Rate (L/min):	Sampled Volume (L):	
		351	2.5585	898.03	

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: <i>Gilair 17754</i>	Primary Standard: Y/N	Pump Condition: <i>Good</i>		
Pre-Survey Date/Time: <i>10/3/16</i>	Technician: <i>VD</i>	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min) <i>2.5510</i>	Trial 2: (L/min) <i>2.5480</i>	Trial 3: (L/min) <i>2.5550</i>
				Flow Rate Avg (L/min): <i>2.5513</i>
Post-Survey Date/Time: <i>10/3/16</i>	Technician: <i>VD</i>	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min) <i>2.5600</i>	Trial 2: (L/min) <i>2.5670</i>	Trial 3: (L/min) <i>2.5700</i>
				Flow Rate Avg (L/min): <i>2.5657</i>
			Pre- and post-cal avg. flow rate (L/min)	<i>2.5585</i>

Industrial Hygienist/IH Tech (Print & Signature):

Date:

<i>Vraj Desai</i>	<i>10/3/16</i>
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BSI AIR SAMPLING DATA RECORD**PROJECT DATA:**

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alcaraz

EMPLOYEE AND WORK AREA DATA:

Location description: Area Sample - E3, B2	Employee Name: -	Employee Number: -
	Job Title/Duties: -	Phone Number: -
	Work Duration & Frequency: -	Number of Employees performing similar duties: -
Personal Protective Equipment Used: -		
Engineering Controls: Industrial fan, exhausts, wet methods.	Ambient Weather Conditions: -	

SAMPLING DATA:

Pump ID: VP05	Collection Media: 37mm 3pc PVC	Sample ID: 100316VD-6	Size and Lot Number: Psy 390029	Analytes	
Start Time:	Stop Time:	Total Sampling Time (min):	Avg Flow Rate (L/min):	Sampled Volume (L):	
		395	2.5570	1010.02	

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: Shc 16020	Primary Standard: Y/N	Pump Condition: Good.		
Pre-Survey Date/Time:	Technician: VD	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min) 2.5460	Trial 2: (L/min) 2.5430	Trial 3: (L/min) 2.5430
				Flow Rate Avg (L/min): 2.5440
Post-Survey Date/Time:	Technician: VD	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min) 2.5780	Trial 2: (L/min) 2.5600	Trial 3: (L/min) 2.5720
				Flow Rate Avg (L/min): 2.5700
			Pre- and post-cal avg. flow rate (L/min)	2.5570.

Industrial Hygienist/IH Tech (Print & Signature):

Date:

Vraj Devendra Rayha	10/3/16
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BSI AIR SAMPLING DATA RECORD**PROJECT DATA:**

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alcaraz

EMPLOYEE AND WORK AREA DATA:

Location description: Area Sampler - A6, B1	Employee Name: -	Employee Number: -
	Job Title/Duties: -	Phone Number: -
	Work Duration & Frequency: -	Number of Employees performing similar duties: -
Personal Protective Equipment Used: -		-
Engineering Controls: Industrial fans, exhausts, wet methods.	Ambient Weather Conditions: -	

SAMPLING DATA:

Pump ID: VP01	Collection Media: 37mm 3pc PVC	Sample ID: 100316ND-7	Size and Lot Number: Psy 390029	Analytes	
Start Time:	Stop Time:	Total Sampling Time (min): 398	Avg Flow Rate (L/min): 2.5448	Sampled Volume (L): 1012.84	

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: SKC 16018	Primary Standard: Y/N	Pump Condition: Graded		
Pre-Survey Date/Time: 10/3/16	Technician: VP	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min) 2.5480	Trial 2: (L/min) 2.5350	Trial 3: (L/min) 2.5430
				Flow Rate Avg (L/min): 2.5420
Post-Survey Date/Time: 10/3/16	Technician: VP	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min) 2.5530	Trial 2: (L/min) 2.5560	Trial 3: (L/min) 2.5340
				Flow Rate Avg (L/min): 2.5477
			Pre- and post-cal avg. flow rate (L/min)	2.5448

Industrial Hygienist/IH Tech (Print & Signature):

Date:

Vraj Desai Haylor	10/3/16
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8 of 10

BSI AIR SAMPLING DATA RECORD

PROJECT DATA:

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alcaraz

EMPLOYEE AND WORK AREA DATA:

Location description: <i>Area Sample - B1, A7</i>	Employee Name: —	Employee Number: —
	Job Title/Duties: —	Phone Number: —
	Work Duration & Frequency: —	Number of Employees performing similar duties: —
Personal Protective Equipment Used: —		—
Engineering Controls: <i>Industrial fans, exhausts, wet methods.</i>	Ambient Weather Conditions: —	

SAMPLING DATA:

Pump ID:	Analytes			
Collection Media:	Sample ID:	Size and Lot Number:	Analytes	
37mm 2pc pvc	100316VD-8	Rsy390029	Respdust + resp silica	
Start Time:	Stop Time:	Total Sampling Time (min):	Avg Flow Rate (L/min):	Sampled Volume (L):
		395	2.5217	996.06

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: <i>SKC 16017</i>	Primary Standard: Y/N	Pump Condition: <i>Good.</i>		
Pre-Survey Date/Time: <i>10/3/16</i>	Technician: <i>VD</i>	Temperature:	Barometric Pressure:	Relative Humidity:
	Trial 1: (L/min) <i>2.5320</i>	Trial 2: (L/min) <i>2.5290</i>	Trial 3: (L/min) <i>2.5350</i>	Flow Rate Avg (L/min): <i>2.5320</i>
Post-Survey Date/Time: <i>10/3/16</i>	Technician: <i>VD</i>	Temperature:	Barometric Pressure:	Relative Humidity:
	Trial 1: (L/min) <i>2.5140</i>	Trial 2: (L/min) <i>2.5090</i>	Trial 3: (L/min) <i>2.5110</i>	Flow Rate Avg (L/min): <i>2.5113</i>
			Pre- and post-cal avg. flow rate (L/min)	<i>2.5217</i>

Industrial Hygienist/IH Tech (Print & Signature):

Date:

<i>Vraj Devadoss</i>	<i>Mayle</i>	<i>10/3/16.</i>
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BSI AIR SAMPLING DATA RECORD

9 of 10

PROJECT DATA:

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alcaraz

EMPLOYEE AND WORK AREA DATA:

Location description: <i>Gate 5 - E1 tunnel flagger</i>	Employee Name: <i>Daniela</i>	Employee Number: -
	Job Title/Duties:	Phone Number: -
	Work Duration & Frequency: <i>~8hrs.</i>	Number of Employees performing similar duties: -
Personal Protective Equipment Used: <i>Safety shoes, glasses, hard hat, N95</i>		
Engineering Controls: <i>Industrial fan, exhaust,</i>	Ambient Weather Conditions: <i>-</i>	

SAMPLING DATA:

Pump ID: <i>VP03</i>	Collection Media:	Sample ID: <i>100316VD-9</i>	Size and Lot Number: <i>Psy 390029</i>	Analytes	
Start Time:	Stop Time:	Total Sampling Time (min): <i>368</i>	Avg Flow Rate (L/min): <i>2.5310</i>	Sampled Volume (L): <i>931.41</i>	

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: <i>SKC 16016</i>	Primary Standard: Y/N	Pump Condition: <i>Good</i>		
Pre-Survey Date/Time: <i>10/3/16</i>	Technician: <i>VD</i>	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min) <i>2.5220</i>	Trial 2: (L/min) <i>2.5240</i>	Trial 3: (L/min) <i>2.5190</i>
				Flow Rate Avg (L/min): <i>2.5217</i>
Post-Survey Date/Time: <i>10/3/16</i>	Technician: <i>VD</i>	Temperature:	Barometric Pressure:	Relative Humidity:
		Trial 1: (L/min) <i>2.5390</i>	Trial 2: (L/min) <i>2.5440</i>	Trial 3: (L/min) <i>2.5380</i>
				Flow Rate Avg (L/min): <i>2.5310</i>
			Pre- and post-cal avg. flow rate (L/min)	<i>2.5310</i>

Industrial Hygienist/IH Tech (Print & Signature):

<i>Vtej Devadra Hfylm</i>	<i>10/3/16.</i>
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BSI AIR SAMPLING DATA RECORD**PROJECT DATA:**

Project Name/Description: Holder Const. AC2 Sampling	Client: Holder Construction	Date/Time: 10/03/16
Survey Location: AC2 Construction Site, Cupertino, California.	Job Number: #16-2001	Project Manager: X. Alcaraz

EMPLOYEE AND WORK AREA DATA:

Location description: Area Sample - E4, B2	Employee Name: -	Employee Number: -
	Job Title/Duties: -	Phone Number: -
	Work Duration & Frequency: -	
	Number of Employees performing similar duties: -	
	Personal Protective Equipment Used: -	
Engineering Controls: Industrial fans, exhausts, wet methods.	Ambient Weather Conditions: -	

SAMPLING DATA:

Pump ID: VP04	Collection Media: 37mm 3pc PVC	Sample ID: 100 316VD-10	Size and Lot Number: Psy 390029	Analytes	
				Resp dust + Resp Silica.	
Start Time:	Stop Time:		Total Sampling Time (min): 378	Avg Flow Rate (L/min): 2.5373	Sampled Volume (L): 955.84

CALIBRATION RECORD:

Pump Manufacturer and Serial Number: SKC 16019	Primary Standard: Y/N	Pump Condition: Good		
Pre-Survey Date/Time: 10/3/16	Technician: VD	Temperature:	Barometric Pressure:	Relative Humidity:
	Trial 1: (L/min) 2.5400	Trial 2: (L/min) 2.5370	Trial 3: (L/min) 2.5350	Flow Rate Avg (L/min): 2.5373
Post-Survey Date/Time: 10/3/16	Technician: VD	Temperature:	Barometric Pressure:	Relative Humidity:
	Trial 1: (L/min) 2.5250	Trial 2: (L/min) 2.5170	Trial 3: (L/min) 2.5180	Flow Rate Avg (L/min): 2.5200
			Pre- and post-cal avg. flow rate (L/min)	2.5373

Industrial Hygienist/IH Tech (Print & Signature):

Date:

Vic Devadoss	Haley	10/3/16
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Attachment 3

BIOS DryCal Calibration Certificate



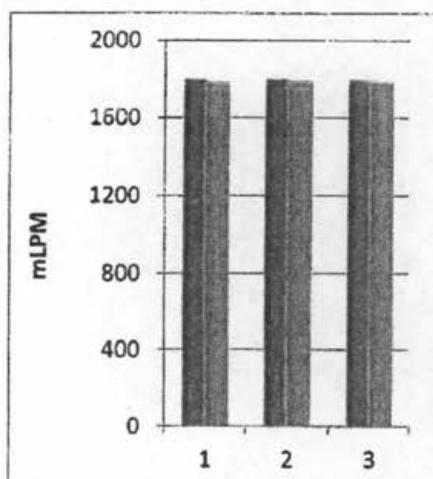
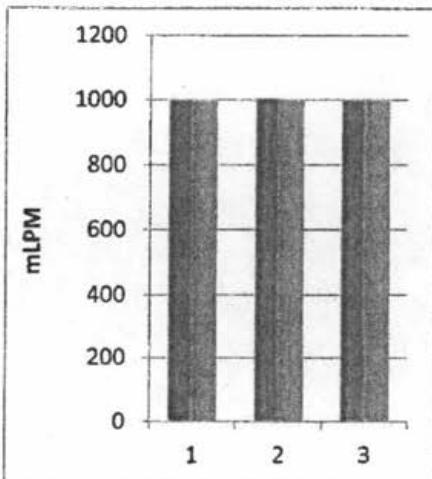
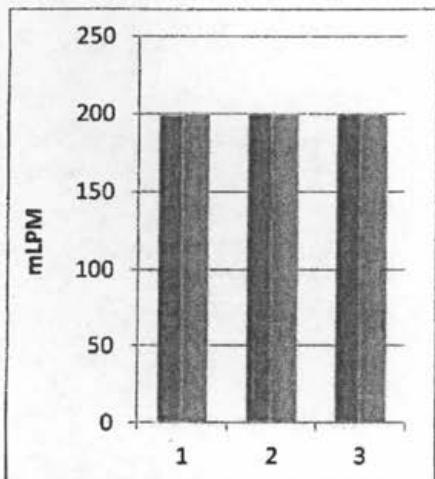
CERTIFICATE OF CALIBRATION

Primary Flow Calibrator

Manufacturer: BIOS
Model Number: DCL-ML
Serial Number: 7252
Service Order: 21333
Reference Number: 21333-DCLML-7252

Calibration Date: September 22, 2016
Date Due: September 22, 2017
Temperature: 74.3 °F
Relative Humidity: 47 %
Barometric Pressure: 30.05 inHg

@ 199 mLPM		Reference mL/min	Actual mL/min	Relative Difference	Percent Difference
1		199.01	200.1	1.09	0.55%
2		199.63	199.8	0.17	0.09%
3		199.32	199.7	0.38	0.19%
@ 1004 mLPM					
1		1003.0	1001	-2.0	0.20%
2		1004.8	1003	-1.8	0.18%
3		1002.6	1002	-0.6	0.06%
@ 1799 mLPM					
1		1799.6	1790	-9.6	0.53%
2		1801.5	1792	-9.5	0.53%
3		1797.1	1792	-5.1	0.28%



■ Reference ■ Actual

STANDARDS

Manufacturer	Description	Model	Serial Number	Certificate Number	Due Date
Bios	Air Flow Meter	220-H	110577	86198	3/23/2017

This report may not be reproduced except in full. CIH Calibration Laboratory certifies that the instrument specified above meets the manufacturer's specifications and was calibrated using standards and instruments also listed where the accuracy is traceable to National Institute of Standards and Technology (NIST), or have been derived from accepted values of natural physical constants or have been derived by the ratio type of self calibration techniques.

Calibrated By:

Jonathan Terry - Calibration Technician

Date: 09/22/16

1806 South Highland Ave • Clearwater, FL 33756-1762 • USA • PH: (727) 584-5063 • FX: (727) 581-5921
Toll Free: (888) 873-2443 • Website: <http://www.cihequipment.com>

Attachment 4

Photos

Photo 1: Wet method used in tunnel next to A5, B1 to prevent dust generation

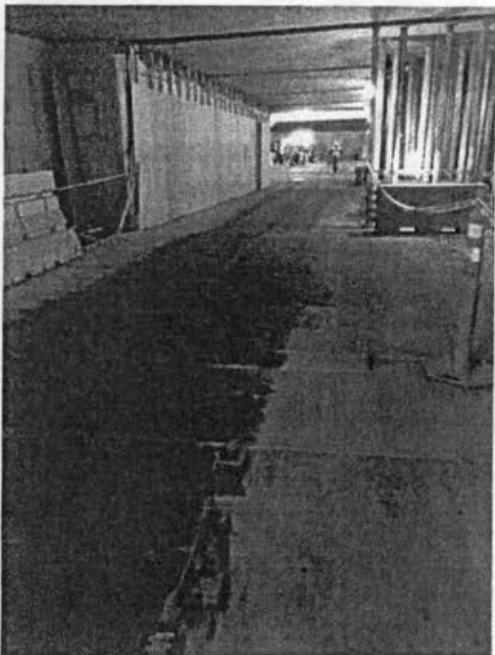


Photo 2: Sample adjacent to E4, B2. Visible suspended dust

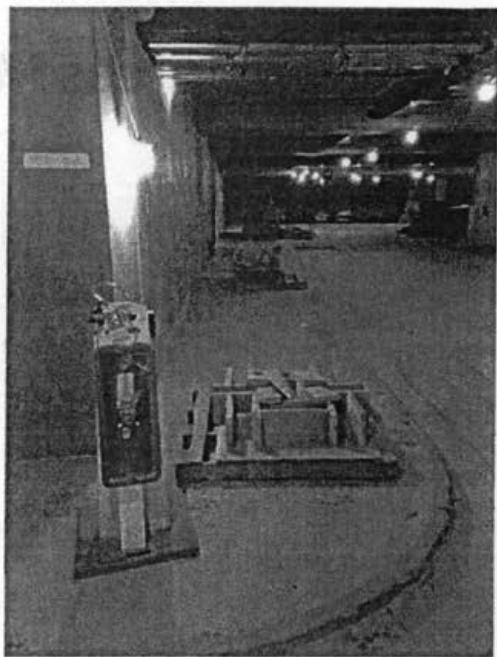
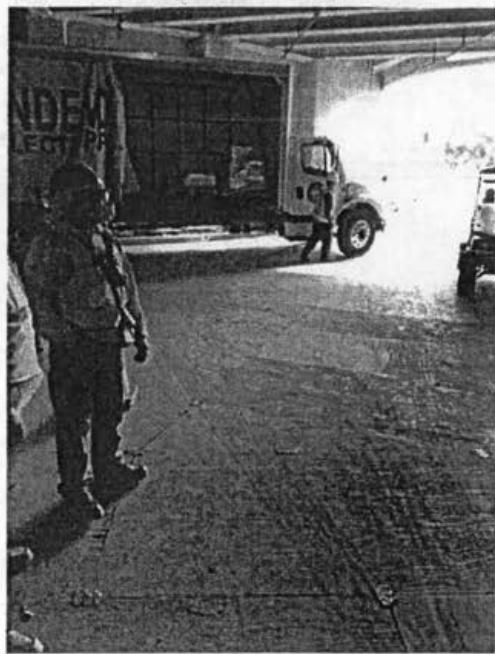


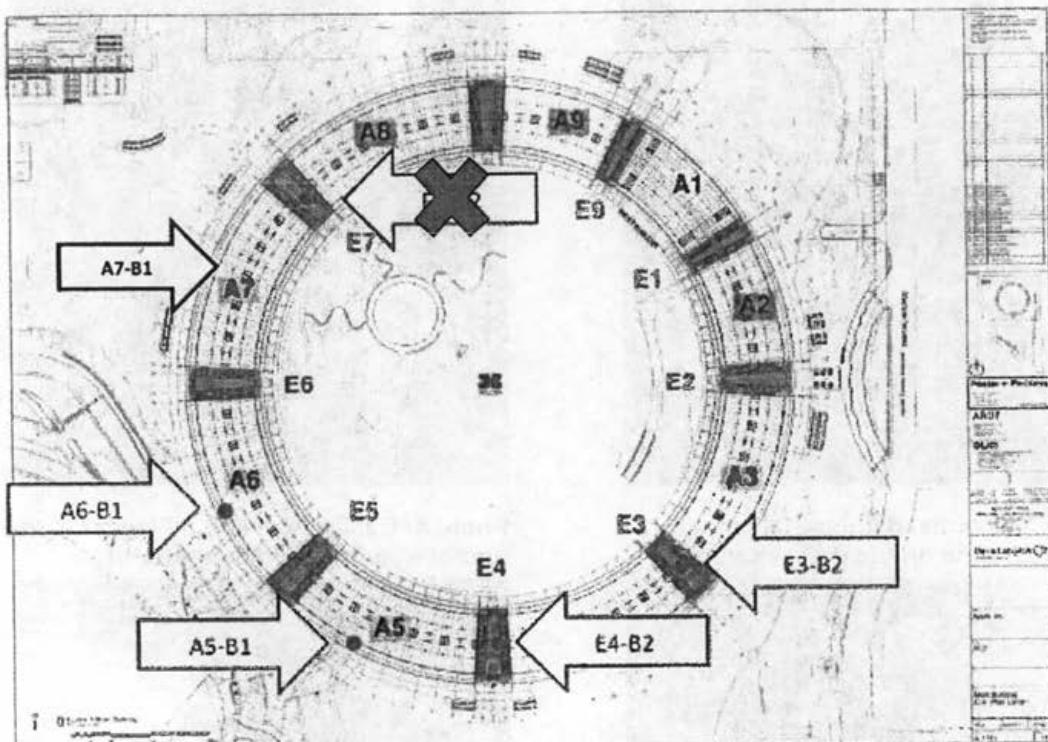
Photo 3: Overhead industrial fan – Non-operation on the day of sampling



Photo 4: Danilo Acevedo – Flagger in the A1 tunnel wearing an N95 respirator



Areas Monitored



January 5, 2017

State of California
Department of Industrial Relations

Division of Occupational Safety and Health
Fremont District Office
39141 Civic Center Drive, Suite 310
Fremont, CA 94538

Dear Kelly Tatum,

I am responding to your DOSH complaint #1166238-Ltr D, alleging the following conditions at a Rudolph and Sletten (R&S) construction project Apple Campus 2 (AC2), located at 10590 N. Tantau Ave., Cupertino:

See attached 1166238-Ltr D (FMTOSHDO). R&S does not agree with any of the alleged conditions noted in complaint #1166238-Ltr D.

1. Alleged condition: Potential concerns regarding open tiles/floor/roof opening not being guarded and causing tripping hazards around facility. Please refer to Title 9 of CCR, Section 1632.

R&S response: R&S and its subcontractors are currently not working in the referenced area. Notifications of open tiles would be immediately forwarded to the other General Contractor (GC) for action. See Holder's response.

2. Alleged condition: Scaffold systems set up on location are inspected and tagged off by unqualified/uncertified inspectors. Please refer to Title 8 of CCR, Section 1637.

R&S response: Scaffolds under R&S management are inspected daily and tagged by a designated scaffold competent person provided by each subcontractor.

3. Alleged condition: Extent and duration of employee pre-job safety meetings are no sufficient nor effective. Please refer to Title 8 of CCR, Section 1509, ref. 3203.

R&S response: Per site requirements each crew is required to have a daily pre-job safety meeting to cover the steps, hazards and controls for the shift. GC's staff of 20+ safety professionals periodically attends the pre-job safety meeting and audits the written pre-task plans for effectiveness.

Furthermore, on a daily basis a "Daily Safety Dispatch" is sent to project teams including first-line supervisors to communicate about the safety observations, logistics and updates on the project. Please find an example of the Daily Safety Dispatch attached.

4. Alleged condition: Construction areas, ramps, and corridors are poorly lit and lack illumination. Please refer to Title 8 of CCR, Section 1523

R&S response: The other GC manages the subcontractor tasked with maintaining the temporary power on the project. Notification of a poorly lit areas would be immediately forwarded to the other GC for action.

5. **Alleged condition: Inappropriate clothing, lack of hardhat and /or googles and personal protective equipment (PPE) are worn by employees throughout site. Please refer to Title 8 of CCR, Section 3380 and 3381.**

R&S response: R&S and subcontractors are required to wear at minimum the following personal protective equipment (except in office and lunch areas): Sturdy work boots, ANSI-rated Z-87 safety glasses, ANSI-rated Z89.1 hardhat, and a Class II high-visibility vest. Additional personal protective equipment is required when necessary.

6. **Alleged condition: Poor housekeeping around site. Please refer to Title 8 of CCR, Section 1523**

R&S response: Housekeeping is a daily part of operations. All crews are instructed (by contract) to leave their work areas "broom swept" at the end of shift. GC's staff of 20+ safety professionals constantly monitor for tripping hazards. Subcontractors also have safety professionals that inspect work areas multiple times daily.

Please contact me if you require additional information to close this complaint.

Regards,

Enrique Peralta O., MS CSP CHST

Rudolph and Sletten Safety Manager

(917) 232-3531 mobile

Enrique_ovcharenko@rsconst.com

January 5, 2017

State of California
Department of Industrial Relations

Division of Occupational Safety and Health
Fremont District Office
39141 Civic Center Drive, Suite 310
Fremont, CA 94538

Dear Kelly Tatum,

I am responding to your DOSH complaint #1166799-Ltr D, alleging the following conditions at a Rudolph and Sletten (R&S) construction project Apple Campus 2 (AC2), located at 10590 N. Tantau Ave., Cupertino:

See attached 1166799-Ltr D (FMTOSHDO). R&S does not agree with any of the alleged conditions noted in complaint #1166799-Ltr D.

1. Alleged condition: The employer (Holder Construction) has not performed clean-up for airborne dust/dirt at the lower basement areas (#1 and #2). The dust is causing congestion for workers in the area. The dust is being tracked in from the outside by workers and industrial trucks. This is on-going for weeks. Please refer to Title 8 of CCR Sections 1530.1, 1513, and 1530.

§1530.1. Control of Employee Exposures from Dust-Generating Operations Conducted on Concrete or Masonry Materials.

During the peak of masonry's contractor (Bratton Masonry) operations, R&S performed dust and silica assessment on the employees with the potential highest exposure, performing mixing operation for the 8-hour shift in the basement levels. The assessment results indicated that exposure to dust and silica levels were below the permissible exposure limits established by Cal/OSHA and Fed OSHA. Highest concentration detected for respirable dust were identified at 1.9 mg/m³ and 0.035 mg/m³ for silica concentration.

Since that time Bratton Masonry operations have ramped down significantly while continuing to implement similar engineering controls that were in place during the assessment.

§1513. Housekeeping.

In the below grade levels, general contractors are taking a joint effort approach with a crew of 18 laborers, in addition to subcontractors laborers crews, to perform general housekeeping utilizing dust mitigation controls. Per site rules, all equipment operator and drivers are required to maintain 12 MPH speed limit while driving around the site, and 5 MPH driving inside the building to prevent the dust getting airborne. Additional efforts are coordinated with other general contractors to run sweepers and water trucks where heavy vehicle traffic is present.

§1530. General Requirements of Mechanical Ventilation Systems.

Notifications of the ventilation system not working would be immediately forwarded to Holder for action. See Holder's response.

Please contact me if you require additional information to close this complaint.

Regards,

Enrique Peralta O., MS CSP CHST
Rudolph and Sletten Safety Manager

(917) 232-3531 mobile
Enrique_ovcharenko@rsconst.com

Daily Safety Dispatch

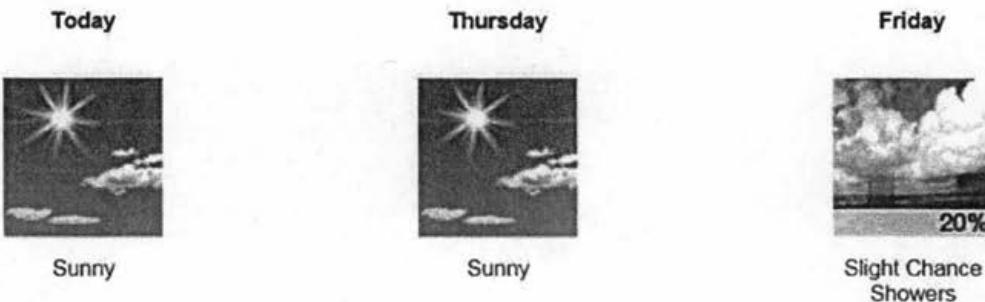
From: Daily Safety Dispatch <ac2safety@icloud.com>
Sent: Wednesday, December 28, 2016 5:37 AM
Subject: AC2 Daily Safety Dispatch
Attachments: AC- Tobacco Free Policy.pdf; Temporary Water As Built 12.19.pdf

AC2 Daily Safety Dispatch for December 12/28/2016

NOAA Weather Forecast:

Day: Sunrise at 7:21am. Sunny, with a high near 60. Northwest wind 9 to 13 mph.

Night: Sunset at 4:58pm. Mostly clear, with a low around 39. Northwest wind 5 to 7 mph.



1. Tackling Construction's Fatal Four. In construction approximately 60% of fatal injuries fall in 4 categories:

- Falls: off ladders, from same level, to lower level.
- Struck by: flying object, falling object, swinging object and rolling object.
- Electrocution: Burns, Electrocution, Shock, Arc flash/arc blast, Fire and Explosions.
- Caught in between: being pulled into or caught in machinery and equipment, being compressed or crushed between rolling, sliding or shifting objects.

During your daily planning discuss these categories with the crew to identify potential exposures, controls and raise the awareness of your operations.

2. Material handling. To minimize muscle strains, pulls and repetitive motion injuries - each employee must be trained on the safe and proper use of the most important, primary tool—their bodies. Proper techniques of stretching, lifting, bending, moving, securing good footing, the importance of good nutrition and hydration, should be address and reminded on a regular basis.

During the cold weather season, stretch and flex is key to keep our bodies healthy for the long run.

3. Upcoming tobacco free policy. Please find attached the site's upcoming Tobacco Free Policy that will be enforced starting 1/1/2017.

4. Non-potable water. Please see the attached current as built of the temporary non potable water on site.

The AC2 Daily Safety Dispatch should only be used as reminder to general safe work practices. AC2 specific rules and CalOSHA regulations must be used as the primary guide when performing work.

On behalf of

AC2 Safety Team