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By Alameda County Environmental Health 10:32 am, Dec 08, 2015

December 8, 2015

Alameda County Department of  
Environmental Health  
1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor  
Alameda, CA 94502

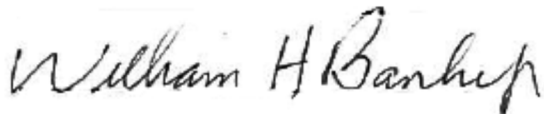
Attention: Mark Detterman

Subject: Results of Additional Soil Gas Sampling  
3800 San Pablo Avenue, Emeryville, California  
**ACDEH Fuel Leak Case: RO00002520; Global ID: T06019788682**

Ladies and Gentlemen:

Attached please find a copy of the *Results of Additional Soil Gas Sampling* letter prepared by Gribi Associates. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Very truly yours,



William H. Banker, Jr.  
San Pablo Avenue Venture  
530 The Glade  
Orinda, CA 94563



December 8, 2015

Alameda County Department of  
Environmental Health  
1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor  
Alameda, CA 94502

Attention: Mark Detterman

Subject: Results of Additional Soil Gas Sampling  
3800 San Pablo Avenue, Emeryville, California  
**ACDEH Fuel Leak Case: RO00002520; Global ID: T06019788682**

Ladies and Gentlemen:

Gribi Associates is pleased to submit this letter documenting additional soil gas sampling at for the property located at 3800 San Pablo Avenue in Emeryville, California (Site) (see Figure 1 and Figure 2) on November 18, 2015.

On October 13, 2015, Gribi Associates sampled sub-slab vapor well SS-1 and soil gas well SG-4, both located adjacent to the former UST area over-excavated on September 25, 2015. During sampling, helium was used as a leak detection compound, and Gribi Associates requested laboratory analysis for TPH-G/BTEX, methane, fixed gases, and helium. However, the analytical laboratory indicated that, after analyzing for TPH-G/BTEX and methane, there was insufficient sample for fixed gas and helium analysis. Thus, SS-1 and SG-4 were resampled on November 18, 2015, seven weeks after completion of the excavation.

On November 18, 2015, Gribi Associates re-sampled sub-slab vapor well SS-1 and soil gas well SG-4. Vapor sampling was conducted in general conformance with applicable DTSC guidelines using the methods described in previous reports. During sampling, helium was used as a leak detection compound. Vapor samples were analyzed by Sunstar Laboratories for TPH-G/BTEX, methane, fixed gases, and helium.

Laboratory analytical results for the November 18 sampling event are summarized in Table 1, and the laboratory data report is included in Attachment A. Vapor samples from SS-1 and SG-4

showed respective methane concentrations of 0.44 % and 0.34 %, indicating that rebound is not occurring. Sub-slab TPH-G concentrations were non-detect (RL=7,170 ug/m<sup>3</sup>). Based on these results, we conclude that recent soil excavation activities in September 2015 were effective in mitigating previously-identified methane vapor impacts, which clearly represented a relict vapor plume trapped beneath the building slab over many decades. Further, it is our conclusion that vapor mitigation is not necessary in this or other sub-slab areas of the building.

Approval to proceed with construction in this portion of the site is therefore requested.

We appreciate this opportunity to provide this letter for your review. Please contact us if there are questions or if additional information is required.

Very truly yours,



James E. Gribi  
Professional Geologist  
California No. 5843



JEG:ct  
Enclosure

C Mr. Bill Banker, Jr., San Pablo Avenue Venture  
Mr. Tom Graf, GrafCon

**TABLE**

**Table 4**  
**CUMULATIVE SOIL GAS LABORATORY ANALYTICAL RESULTS**  
Former Maz Glass UST Site

Sample ID	Date	Sample Depth	TPH-D (ug/m3)	TPH-G (ug/m3)	B (ug/m3)	T (ug/m3)	E (ug/m3)	X (ug/m3)	Other (ug/m3)	Methane (%)	CO2 (%)	N (%)	O2 (%)	Helium (%)
<b>SOIL GAS SAMPLES</b>														
SG-1	8/28/2014	5.5 ft	NA	<7,170	<3.3	<3.8	<4.4	<8.8	Heptane = 5.1	<0.00081	<1.62	62.1	14.2	<1.62
	12/7/2014	Sucked water; did not sample												
	1/29/2015	Sucked water; did not sample												
SG-2	9/15/2014	5.5 ft	NA	7,600	<3.3	<3.8	<4.4	<8.8	Cyclohexane = 310 Heptane = 46 Hexane = 1,000 1,3,5-TMB = 56	0.017	3.87	51.0	13.2	<1.57
	9/25/2014	5.5 ft	NA	<7,170	<160	<190	<220	<220	Cyclohexane = 1,900 Hexane = 1,000	0.0077	5.3	58.3	2.01	0.00
	12/7/2014	Sucked water; did not sample												
	1/29/2015		NA	<7,170	<3.3	<3.8	<4.4	<8.8	Cyclohexane = 53 Heptane = 14 Hexane = 42 TCE = 16	0.0493	<1.75	59.2	2.11	0.00
SG-3	8/28/2014	5.5 ft	NA	<7,170	<3.3	<3.8	<4.4	<8.8	All ND	<0.00076	<1.51	49.7	16.6	<1.51
	12/7/2014	Did not attempt to sample due to shallow groundwater depths												
	1/29/2015	Sucked water; did not sample												
SG-4	8/28/2014	5.5 ft	NA	<7,170	<3.3	<3.8	<4.4	<8.8	1,2,4-TMB = 13	0.024	<1.54	52.3	5.87	<1.54
	12/7/2014	Did not attempt to sample due to shallow groundwater depths												
	1/29/2015		NA	440,000	<160	<190	<220	<220	Cyclohexane = 52,000 Heptane = 9,800 Hexane = 26,000	0.0121	6.49	64.5	<1.72	0.00
	3/11/2015		120,000 (A)	420,000	<160	<190	<220	<220	Cyclohexane = 35,000 Heptane = 150,000 Hexane = 9,700	38	8.01	68.5	2.08	0.00
	(Dup) 3/11/2015		NA	485,000	<160	<190	<220	<220	Cyclohexane = 48,000 Heptane = 37,000 Hexane = 20,000	43	8.64	70.9	<1.72	0.00
	3/18/2015		NA	NA	<10,000	<10,000	<10,000	<10,000	All ND	26	14.0	NA	0.93	0.00
	10/13/2015		NA	174,000	<3.3	<3.8	<4.4	<8.8	All ND	1.3	NA	NA	NA	NA
	(Dup) 10/13/2015		NA	201,000	<3.3	<3.8	<4.4	<8.8	All ND	1.5	NA	NA	NA	NA
11/18/2015		NA	576,000	<160	<190	<220	<220	All ND	0.34	3.84	80.6	<1.0	<5.0	

**Table 4**  
**CUMULATIVE SOIL GAS LABORATORY ANALYTICAL RESULTS**  
Former Maz Glass UST Site

Sample ID	Date	Sample Depth	TPH-D (ug/m3)	TPH-G (ug/m3)	B (ug/m3)	T (ug/m3)	E (ug/m3)	X (ug/m3)	Other (ug/m3)	Methane (%)	CO2 (%)	N (%)	O2 (%)	Helium (%)	
SG-5 (Dup)	8/28/2014	5.5 ft	NA	<7,170	<b>1,700</b>	<b>5,600</b>	<b>1,200</b>	<b>4,570</b>	All ND	<b>0.015</b>	<1.53	<b>49.7</b>	<b>12.5</b>	<1.53	
	9/25/2014		NA	<7,170	<3.3	<3.8	<4.4	<8.8	All ND	<b>0.0018</b>	<b>2.01</b>	<b>54.7</b>	<b>9.28</b>	0.00	
	9/25/2014		NA	<7,170	<3.3	<3.8	<4.4	<8.9	All ND	<0.00079	<b>2.01</b>	<b>53.5</b>	<b>10.8</b>	0.00	
	12/7/2014	Sucked water; did not sample													
	1/29/2015		NA	<7,170	<3.3	<3.8	<4.4	<8.8	Tetrahydrofuran = <b>47</b> Tetrachloroethene = <b>8.7</b> 2-Butanone (MEK) = <b>47</b>	<b>0.00031</b>	<1.54	<b>41.9</b>	<b>2.1</b>	0.00	
	3/11/2015		<1,000	<7,170	<3.3	<3.8	<4.4	<8.8	Heptane = <b>4.8</b> Hexane = <b>4.0</b> Tetrachloroethene = <b>39</b> 1,1,2-Trichloroethane = <b>17</b> Trichloroethene = <b>11</b>	<b>0.17</b>	<1.85	<b>71.1</b>	<b>11</b>	0.00	
<b>SUB-SLAB VAPOR SAMPLES</b>															
SS-1	3/18/2015	0.5 ft	NA	NA	<b>17</b>	<b>23</b>	<22	<66	All ND	<b>5.8</b>	<b>10.0</b>	NA	<b>1.0</b>	0.00	
	10/13/2015	0.5 FT	NA	<7,170	<3.3	<3.8	<4.4	<8.8	All ND	<0.00050	NA	NA	NA	NA	
	11/18/2015	0.5 ft	NA	<7,170	<3.3	<3.8	<4.4	<8.8	All ND	<b>0.44</b>	<b>4.14</b>	<b>88.7</b>	<1.0	<5.0	
SS-2	3/18/2015	0.5 ft	NA	NA	<16	<b>35</b>	<22	<b>130</b>	Chloroform = <b>36</b> 4-Ethyltoluene = <b>31</b> 1,2,4-Trimethylbenzene = <b>140</b> 1,3,5-Trimethylbenzene = <b>74</b>	<b>0.0047</b>	<b>3.2</b>	NA	<b>14</b>	0.00	
SS-3	3/18/2015	0.5 ft	NA	NA	<b>4.0</b>	<b>4.3</b>	<b>5.4</b>	<b>32</b>	Chloroform = <b>27</b> 4-Ethyltoluene = <b>6.3</b> MIBK = <b>5.1</b> Tetrachloroethene = <b>4.3</b> 1,2,4-Trimethylbenzene = <b>19</b> 1,3,5-Trimethylbenzene = <b>6.8</b>	<b>0.0003</b>	<b>9.6</b>	NA	<b>9.0</b>	0.00	
SS-4	3/25/2015	0.5 ft	NA	<b>1,100</b>	<b>8.6</b>	<b>86</b>	<b>40</b>	<b>330</b>	Acetone = <b>66</b> 2-Butanone (MEK) = <b>19</b> 4-Methyl-2-pentanone = <b>1,300</b> Cumene = <b>6.1</b> 4-Ethyltoluene = <b>7.6</b> 1,2,4-Trimethylbenzene = <b>19</b>	<0.00021	<b>6.8</b>	NA	<b>12</b>	<0.11	
SS-5	3/25/2015	0.5 ft	NA	<430	<3.4	<4.0	<4.6	<4.6	Acetone = <b>27</b> 4-Methyl-2-pentanone = <b>5.9</b>	<0.00021	<b>5.7</b>	NA	<b>14</b>	<0.11	

**Table 4**  
**CUMULATIVE SOIL GAS LABORATORY ANALYTICAL RESULTS**  
Former Maz Glass UST Site

Sample ID	Date	Sample Depth	TPH-D (ug/m3)	TPH-G (ug/m3)	B (ug/m3)	T (ug/m3)	E (ug/m3)	X (ug/m3)	Other (ug/m3)	Methane (%)	CO2 (%)	N (%)	O2 (%)	Helium (%)
SS-6	3/25/2015	0.5 ft	NA	9,000	<3.4	25	30	252	Acetone = 120 2-Butanone (MEK) = 14 Tetrahydrofuran = 7.7 2,2,4-Trimethylpentane = 16 4-Methyl-2-pentanone = 500 4-Ethyltoluene = 5.4 1,2,4-Trimethylbenzene = 8.1	0.32	13	NA	1.6	<0.11
SS-7	3/25/2015	0.5 ft	NA	260,000	<27	<32	<37	<37	Acetone = 410	20	9.9	NA	1.1	<0.14
SS-8	3/25/2015	0.5 ft	NA	490	<3.4	<4.0	<4.6	<4.6	4-Methyl-2-pentanone = 5.8	0.015	0.58	NA	20	<0.13
SS-9	3/25/2015	0.5 ft	NA	<430	4.6	<4.0	<4.6	6.5	Acetone = 34 Chloroform = 9.1 Carbon Tetrachloride = 78 4-Methyl-2-pentanone = 12	<0.00021	1.2	NA	19	<0.10
SS-10	3/25/2015	0.5 ft	NA	2,500	<3.4	6.6	5.5	48	4-Methyl-2-pentanone = 34	<0.00021	0.12		20	<0.10
SS-11	3/25/2015	0.5 ft	NA	<440	6.0	6.2	6.0	28	Acetone = 38 Carbon Disulfide = 68 4-Methyl-2-pentanone = 52 Tetrachloroethene = 62	<0.00021	0.14	NA	19	<0.11
<b>Soil Gas ESL</b>			<b>2.5E+06</b>	<b>2.5E+06</b>	<b>420</b>	<b>1.3E+06</b>	<b>4,900</b>	<b>4.4E+05</b>	Various	<b>LEL = 4.4</b>	--	--	--	--

**Table Notes**

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

1,2,4-TMB = 1,2,4-Trimethylbenzene

ug/m3 = micrograms per cubic meter

ppmv = parts per million by volume

% = Percent

Other = Other VOCs, includes approximately 47 individual VOC compounds

<7,170 = Not detected at or above the expressed value.

ND = Not detected above laboratory detection levels.

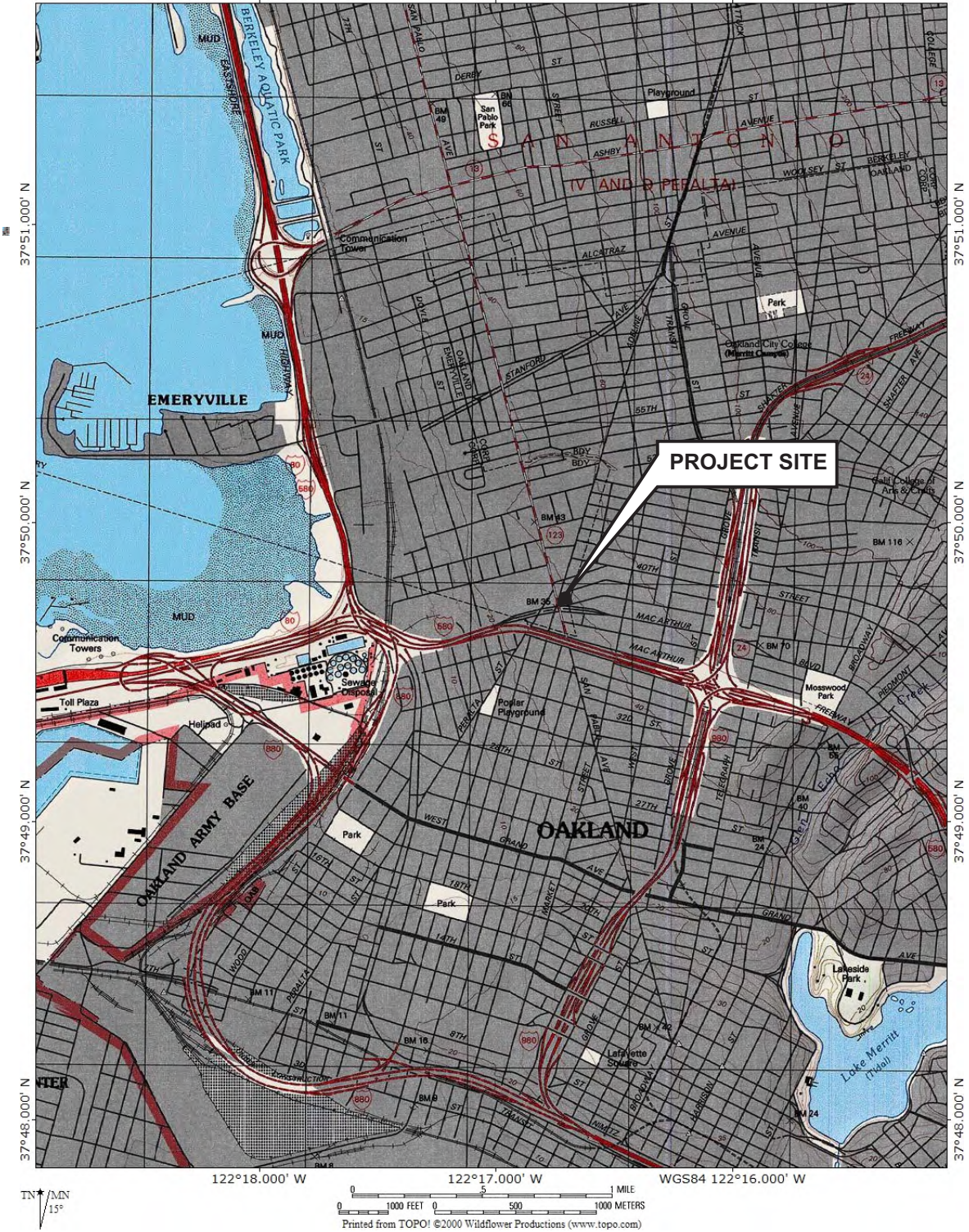
NA = Not analyzed for this analyte

(A) = The McCampbell Analytical report states: "Due to the high organic content observed in the sample, a quantification of the internal standards were unobtainable. The quantitated TPH-diesel and naphthalene concentrations are calculated using a modified TO-17 analytical procedure which includes an external calibration. The TPH-diesel and naphthalene results are estimated. It is noted that the majority of the calculated TPH-diesel concentration is derived from an observed lighter eluting TPH-gas range pattern."

## FIGURES



TOPO! map printed on 04/03/07 from "California.tpo" and "Untitled.tpg"  
 122°18.000' W 122°17.000' W WGS84 122°16.000' W



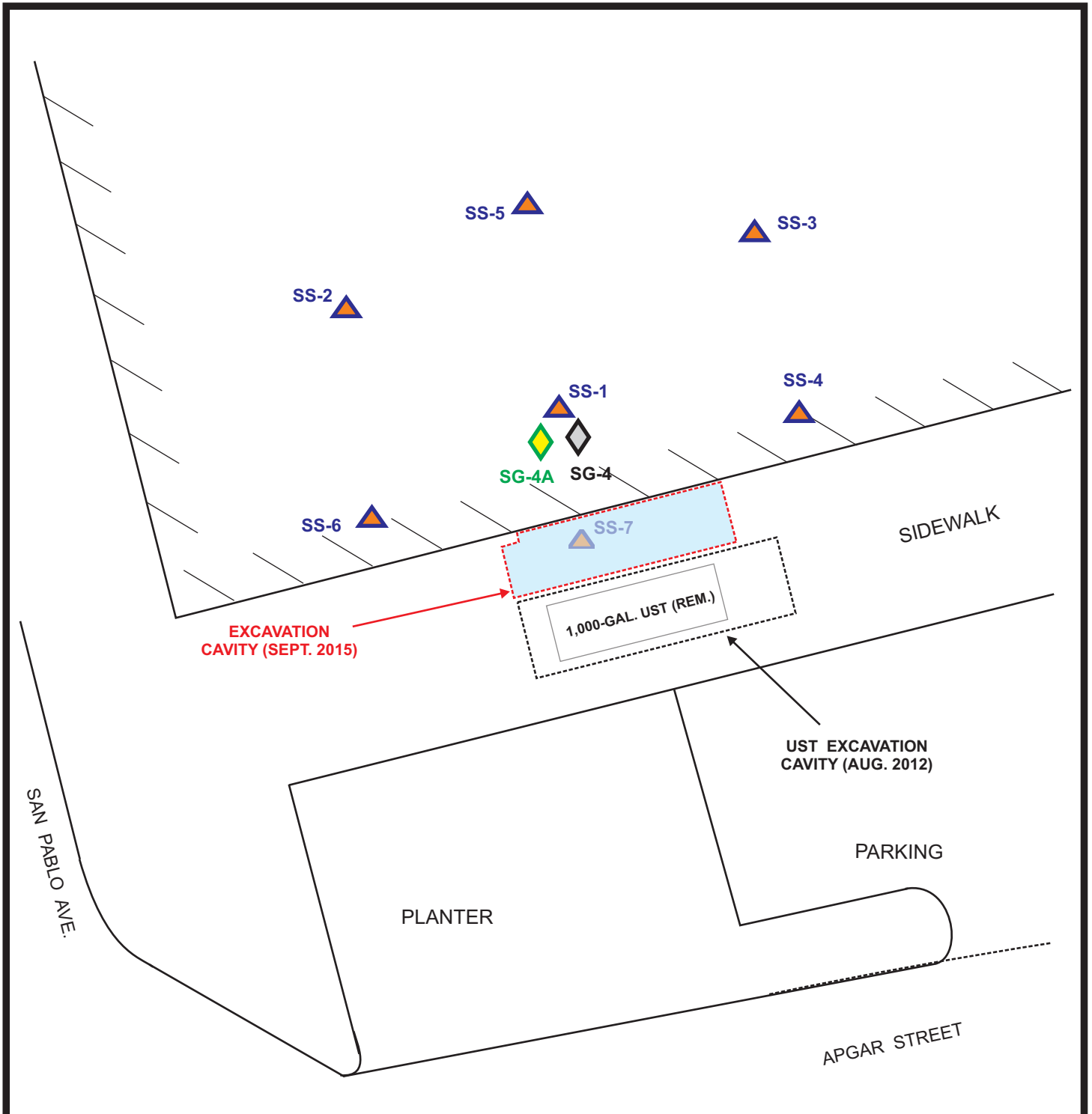
DESIGNED BY:	CHECKED BY: JG
DRAWN BY: MR	SCALE:
PROJECT NO:	




**SITE VICINITY MAP**

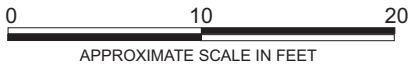
3800 SAN PABLO AVENUE  
 EMERYVILLE, CALIFORNIA

DATE: 12/08/2015      FIGURE: 1





-  - SUB-SLAB VAPOR SAMPLE LOCATION
-  - SOIL GAS WELL LOCATION (MARCH 2015)
-  - SOIL GAS WELL LOCATION (AUG 2014)



DESIGNED BY:	CHECKED BY: JG	<b>SITE PLAN</b>	DATE: 12/08/2015	FIGURE: 2
DRAWN BY: MR	SCALE:			
PROJECT NO:		3800 SAN PABLO AVENUE EMERYVILLE, CALIFORNIA		

**ATTACHMENT A**

**LABORATORY DATA REPORTS AND  
CHAIN-OF-CUSTODY RECORDS**



25712 Commercentre Drive  
Lake Forest, California 92630  
949.297.5020 Phone  
949.297.5027 Fax

07 December 2015

Jim Gribi  
Gribi Associates  
1090 Adam Street, Suite K  
Benicia, CA 94510  
RE: Maz Glass

Enclosed are the results of analyses for samples received by the laboratory on 11/19/15 10:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Katherine RunningCrane  
Project Manager



25712 Commercentre Drive  
Lake Forest, California 92630  
949.297.5020 Phone  
949.297.5027 Fax

Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510	Project: Maz Glass Project Number: [none] Project Manager: Jim Gribi	<b>Reported:</b> 12/07/15 16:09
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**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SG-4	T152914-01	Air	11/18/15 10:54	11/19/15 10:45
SS-1	T152914-02	Air	11/18/15 11:20	11/19/15 10:45

SunStar Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Katherine RunningCrane, Project Manager

Gribi Associates  
1090 Adam Street, Suite K  
Benicia CA, 94510

Project: Maz Glass  
Project Number: [none]  
Project Manager: Jim Gribi

**Reported:**  
12/07/15 16:09

**DETECTIONS SUMMARY**

**Sample ID:** SG-4

**Laboratory ID:** T152914-01

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Methane	3400	5.0		ppm(v)	8015M	
C6-C12 (GRO)	576000	7170		ug/m <sup>3</sup> Air	TO-3/TO-14 m	
Carbon Dioxide	3.84	1.00		%	GC	
Nitrogen	80.6	1.00		%	GC	

**Sample ID:** SS-1

**Laboratory ID:** T152914-02

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Methane	4400	5.0		ppm(v)	8015M	
Carbon Dioxide	4.14	1.00		%	GC	
Nitrogen	88.7	1.00		%	GC	

SunStar Laboratories, Inc.

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Katherine RunningCrane, Project Manager

Gribi Associates  
1090 Adam Street, Suite K  
Benicia CA, 94510

Project: Maz Glass  
Project Number: [none]  
Project Manager: Jim Gribi

**Reported:**  
12/07/15 16:09

**SG-4  
T152914-01 (Air)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**SunStar Laboratories, Inc.**

**TO-15**

Benzene	ND	160	ug/m <sup>3</sup> Air	1	5111917	11/19/15	11/23/15	TO-15	TO-14
Toluene	ND	190	"	"	"	"	"	"	TO-14
Ethylbenzene	ND	220	"	"	"	"	"	"	TO-14
m,p-Xylene	ND	220	"	"	"	"	"	"	TO-14
o-Xylene	ND	220	"	"	"	"	"	"	TO-14

**Methane by GC**

<b>Methane</b>	<b>3400</b>	5.0	ppm(v)	1	5112031	11/20/15	11/30/15	8015M	
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**Total Volatile Organic Compounds by TO-3 (modified)**

<b>C6-C12 (GRO)</b>	<b>576000</b>	7170	ug/m <sup>3</sup> Air	1	5120127	11/19/15	11/23/15	TO-3/TO-14 m	
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**Fixed Gases ASTM D1946-90**

<b>Carbon Dioxide</b>	<b>3.84</b>	1.00	%	1	5112030	11/20/15	11/30/15	GC	
Oxygen	ND	1.00	"	"	"	"	"	"	
<b>Nitrogen</b>	<b>80.6</b>	1.00	"	"	"	"	"	"	
Helium	ND	5.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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*Katherine RunningCrane*

Katherine RunningCrane, Project Manager

Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510	Project: Maz Glass Project Number: [none] Project Manager: Jim Gribi	<b>Reported:</b> 12/07/15 16:09
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**SS-1**  
**T152914-02 (Air)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**SunStar Laboratories, Inc.**

**TO-15**

Benzene	ND	3.3	ug/m <sup>3</sup> Air	1.7	5111917	11/19/15	11/25/15	TO-15	
Toluene	ND	3.8	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		103 %	40-160		"	"	"	"	

**Methane by GC**

<b>Methane</b>	<b>4400</b>	5.0	ppm(v)	1	5112031	11/20/15	11/30/15	8015M	
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**Total Volatile Organic Compounds by TO-3 (modified)**

C6-C12 (GRO)	ND	7170	ug/m <sup>3</sup> Air	1	5120127	11/19/15	11/23/15	TO-3/TO-14 m	
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**Fixed Gases ASTM D1946-90**

<b>Carbon Dioxide</b>	<b>4.14</b>	1.00	%	1	5112030	11/20/15	11/30/15	GC	
Oxygen	ND	1.00	"	"	"	"	"	"	
<b>Nitrogen</b>	<b>88.7</b>	1.00	"	"	"	"	"	"	
Helium	ND	5.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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*Katherine RunningCrane*

Katherine RunningCrane, Project Manager





25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510	Project: Maz Glass Project Number: [none] Project Manager: Jim Gribi	Reported: 12/07/15 16:09
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**TO-15 - Quality Control**  
**SunStar Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 5111917 - Canister Analysis**

**Blank (5111917-BLK1)**

Prepared: 11/19/15 Analyzed: 11/25/15

Acetone	ND	12	ug/m <sup>3</sup> Air							
1,3-Butadiene	ND	4.5	"							
Carbon Disulfide	ND	3.2	"							
1,1,2-trichloro-1,2,2-trifluoroethane (CFC 113)	ND	7.7	"							
Isopropyl alcohol	ND	13	"							
Bromodichloromethane	ND	6.8	"							
Bromoform	ND	11	"							
Bromomethane	ND	4.0	"							
Carbon tetrachloride	ND	6.4	"							
Chlorobenzene	ND	4.7	"							
Chloroethane	ND	2.7	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	11	"							
Cyclohexane	ND	3.5	"							
Heptane	ND	4.2	"							
Hexane	ND	3.6	"							
Dibromochloromethane	ND	8.7	"							
1,2-Dibromoethane (EDB)	ND	7.8	"							
1,2-Dichlorobenzene	ND	6.1	"							
1,3-Dichlorobenzene	ND	6.1	"							
1,4-Dichlorobenzene	ND	6.1	"							
Dichlorodifluoromethane	ND	5.0	"							
1,1-Dichloroethane	ND	4.1	"							
1,2-Dichloroethane	ND	4.1	"							
1,1-Dichloroethene	ND	4.0	"							
cis-1,2-Dichloroethene	ND	4.0	"							
trans-1,2-Dichloroethene	ND	4.0	"							
1,2-Dichloropropane	ND	4.7	"							
cis-1,3-Dichloropropene	ND	4.6	"							
trans-1,3-Dichloropropene	ND	4.6	"							
4-Ethyltoluene	ND	5.0	"							
Methylene chloride	ND	3.5	"							
Styrene	ND	4.3	"							
1,1,2,2-Tetrachloroethane	ND	7.0	"							
Tetrahydrofuran	ND	3.0	"							

SunStar Laboratories, Inc.

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*Katherine RunningCrane*

Katherine RunningCrane, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510	Project: Maz Glass Project Number: [none] Project Manager: Jim Gribi	Reported: 12/07/15 16:09
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**TO-15 - Quality Control**  
**SunStar Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 5111917 - Canister Analysis**

**Blank (5111917-BLK1)**

Prepared: 11/19/15 Analyzed: 11/25/15

Tetrachloroethene	ND	6.9	ug/m <sup>3</sup> Air							
1,1,2-Trichloroethane	ND	5.6	"							
1,1,1-Trichloroethane	ND	5.6	"							
Trichloroethene	ND	5.5	"							
Trichlorofluoromethane	ND	5.7	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl acetate	ND	3.6	"							
Vinyl chloride	ND	2.6	"							
1,4-Dioxane	ND	18	"							
2-Butanone (MEK)	ND	15	"							
Methyl isobutyl ketone	ND	42	"							
Benzene	ND	3.3	"							
Toluene	ND	3.8	"							
Ethylbenzene	ND	4.4	"							
m,p-Xylene	ND	8.8	"							
o-Xylene	ND	4.4	"							
<i>Surrogate: 4-Bromofluorobenzene</i>	52.1		"	45.3		115	40-160			

**Duplicate (5111917-DUP1)**

Source: T152914-01

Prepared: 11/19/15 Analyzed: 11/23/15

Acetone	ND	120	ug/m <sup>3</sup> Air		ND			30		TO-14
1,3-Butadiene	ND	110	"		ND			30		TO-14
Carbon Disulfide	ND	160	"		ND			30		TO-14
1,1,2-trichloro-1,2,2-trifluoroethane (CFC 113)	ND	390	"		ND			30		TO-14
Isopropyl alcohol	ND	130	"		ND			30		TO-14
Bromodichloromethane	ND	340	"		ND			30		TO-14
Bromoform	ND	530	"		ND			30		TO-14
Bromomethane	ND	200	"		ND			30		TO-14
Carbon tetrachloride	ND	320	"		ND			30		TO-14
Chlorobenzene	ND	230	"		ND			30		TO-14
Chloroethane	ND	130	"		ND			30		TO-14
Chloroform	ND	250	"		ND			30		TO-14
Chloromethane	ND	110	"		ND			30		TO-14
Cyclohexane	ND	170	"		ND			30		TO-14
Heptane	ND	210	"		ND			30		TO-14

SunStar Laboratories, Inc.

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*Katherine RunningCrane*

Katherine RunningCrane, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510	Project: Maz Glass Project Number: [none] Project Manager: Jim Gribi	Reported: 12/07/15 16:09
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**TO-15 - Quality Control**  
**SunStar Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 5111917 - Canister Analysis**

Duplicate (5111917-DUP1)	Source: T152914-01			Prepared: 11/19/15 Analyzed: 11/23/15			
Hexane	888	180	ug/m <sup>3</sup> Air	928	4.45	30	TO-14
Dibromochloromethane	ND	430	"	ND		30	TO-14
1,2-Dibromoethane (EDB)	ND	390	"	ND		30	TO-14
1,2-Dichlorobenzene	ND	310	"	ND		30	TO-14
1,3-Dichlorobenzene	ND	310	"	ND		30	TO-14
1,4-Dichlorobenzene	ND	310	"	ND		30	TO-14
Dichlorodifluoromethane	ND	250	"	ND		30	TO-14
1,1-Dichloroethane	ND	210	"	ND		30	TO-14
1,2-Dichloroethane	ND	210	"	ND		30	TO-14
1,1-Dichloroethene	ND	200	"	ND		30	TO-14
cis-1,2-Dichloroethene	ND	200	"	ND		30	TO-14
trans-1,2-Dichloroethene	ND	200	"	ND		30	TO-14
1,2-Dichloropropane	ND	240	"	ND		30	TO-14
cis-1,3-Dichloropropene	ND	230	"	ND		30	TO-14
trans-1,3-Dichloropropene	ND	230	"	ND		30	TO-14
4-Ethyltoluene	ND	250	"	ND		30	TO-14
Methylene chloride	ND	180	"	ND		30	TO-14
Styrene	ND	220	"	ND		30	TO-14
1,1,2,2-Tetrachloroethane	ND	350	"	ND		30	TO-14
Tetrahydrofuran	ND	150	"	ND		30	TO-14
Tetrachloroethene	ND	350	"	ND		30	TO-14
1,1,2-Trichloroethane	ND	280	"	ND		30	TO-14
1,1,1-Trichloroethane	ND	280	"	ND		30	TO-14
Trichloroethene	ND	270	"	ND		30	TO-14
Trichlorofluoromethane	ND	290	"	ND		30	TO-14
1,3,5-Trimethylbenzene	ND	250	"	ND		30	TO-14
1,2,4-Trimethylbenzene	ND	250	"	ND		30	TO-14
Vinyl acetate	ND	180	"	ND		30	TO-14
Vinyl chloride	ND	130	"	ND		30	TO-14
1,4-Dioxane	ND	180	"	ND		30	TO-14
2-Butanone (MEK)	ND	150	"	ND		30	TO-14
Methyl isobutyl ketone	ND	210	"	ND		30	TO-14
Benzene	ND	160	"	ND		30	TO-14
Toluene	ND	190	"	ND		30	TO-14
Ethylbenzene	ND	220	"	ND		30	TO-14
m,p-Xylene	ND	220	"	ND		30	TO-14

SunStar Laboratories, Inc.

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*Katherine RunningCrane*

Katherine RunningCrane, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510	Project: Maz Glass Project Number: [none] Project Manager: Jim Gribi	<b>Reported:</b> 12/07/15 16:09
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**TO-15 - Quality Control**  
**SunStar Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 5111917 - Canister Analysis**

<b>Duplicate (5111917-DUP1)</b>	<b>Source: T152914-01</b>		Prepared: 11/19/15 Analyzed: 11/23/15							
o-Xylene	ND	220	ug/m <sup>3</sup> Air		ND				30	TO-14

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Katherine RunningCrane, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510	Project: Maz Glass Project Number: [none] Project Manager: Jim Gribi	<b>Reported:</b> 12/07/15 16:09
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**Methane by GC - Quality Control**  
**SunStar Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 5112031 - EPA 5030 GC**

<b>Blank (5112031-BLK1)</b>		Prepared: 11/20/15 Analyzed: 11/30/15								
Methane	ND	5.0	ppm(v)							
<b>Duplicate (5112031-DUP1)</b>		Source: T152914-01 Prepared: 11/20/15 Analyzed: 11/30/15								
Methane	3310	5.0	ppm(v)		3420			3.30	20	

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Katherine RunningCrane, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510	Project: Maz Glass Project Number: [none] Project Manager: Jim Gribi	Reported: 12/07/15 16:09
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**Total Volatile Organic Compounds by TO-3 (modified) - Quality Control**

**SunStar Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 5120127 - Canister Analysis**

<b>Blank (5120127-BLK1)</b>	Prepared: 11/19/15 Analyzed: 11/23/15									
C6-C12 (GRO)	ND	7170	ug/m <sup>3</sup> Air							
<b>Duplicate (5120127-DUP1)</b>	Source: T152914-01 Prepared: 11/19/15 Analyzed: 11/23/15									
C6-C12 (GRO)	570000	7170	ug/m <sup>3</sup> Air		576000			1.10	30	

SunStar Laboratories, Inc.

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*Katherine RunningCrane*

Katherine RunningCrane, Project Manager



25712 Commercentre Drive  
 Lake Forest, California 92630  
 949.297.5020 Phone  
 949.297.5027 Fax

Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510	Project: Maz Glass Project Number: [none] Project Manager: Jim Gribi	Reported: 12/07/15 16:09
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**Fixed Gases ASTM D1946-90 - Quality Control**  
**SunStar Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 5112030 - EPA 5030 GC**

**Blank (5112030-BLK1)**

Prepared: 11/20/15 Analyzed: 11/30/15

Carbon Dioxide	ND	1.00	%							
Oxygen	ND	1.00	"							
Helium	ND	5.00	"							

**Duplicate (5112030-DUP1)**

Source: T152914-01

Prepared: 11/20/15 Analyzed: 11/30/15

Carbon Dioxide	3.77	1.00	%		3.84			1.81	20	
Oxygen	ND	1.00	"		ND				20	
Nitrogen	79.6	1.00	"		80.6			1.23	20	
Helium	ND	5.00	"		ND				200	

SunStar Laboratories, Inc.

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*Katherine RunningCrane*

Katherine RunningCrane, Project Manager

Gribi Associates  
1090 Adam Street, Suite K  
Benicia CA, 94510

Project: Maz Glass  
Project Number: [none]  
Project Manager: Jim Gribi

**Reported:**  
12/07/15 16:09

### Notes and Definitions

TO-14 TO-15 analysis of sample was not performed due to high concentration of analyte(s). Sample was analyzed utilizing method TO-14 and reporting limit has been adjusted accordingly.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference







## SAMPLE RECEIVING REVIEW SHEET

BATCH # T182919

Client Name: GRAB

Project: MAZ GLASS

Received by: BRIAN

Date/Time Received: 11/19/13 10:45

Delivered by :  Client  SunStar Courier  GSO  FedEx  Other \_\_\_\_\_

Total number of coolers received 0 Temp criteria = 6°C > 0°C (no frozen containers)

Temperature: cooler #1 20.2 °C +/- the CF (- 0.2°C) = 20.0 °C corrected temperature

cooler #2 \_\_\_\_\_ °C +/- the CF (- 0.2°C) = \_\_\_\_\_ °C corrected temperature

cooler #3 \_\_\_\_\_ °C +/- the CF (- 0.2°C) = \_\_\_\_\_ °C corrected temperature

Samples outside temp. but received on ice, w/in 6 hours of final sampling.  Yes  No\*  N/A

Custody Seals Intact on Cooler/Sample  Yes  No\*  N/A

Sample Containers Intact  Yes  No\*

Sample labels match COC ID's  Yes  No\*

Total number of containers received match COC  Yes  No\*

Proper containers received for analyses requested on COC  Yes  No\*

Proper preservative indicated on COC/containers for analyses requested  Yes  No\*  N/A

Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times.  Yes  No\*

\* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date BC 11/19/13

Comments:

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**WORK ORDER**

**T152914**

<b>Client:</b> Gribi Associates	<b>Project Manager:</b> Katherine RunningCrane
<b>Project:</b> Maz Glass	<b>Project Number:</b> [none]

**Report To:**

Gribi Associates  
 Jim Gribi  
 1090 Adam Street, Suite K  
 Benicia, CA 94510

<b>Date Due:</b> 11/30/15 15:00 (5 day TAT)	<b>Date Received:</b> 11/19/15 10:45
<b>Received By:</b> Brian Charon	<b>Date Logged In:</b> 11/19/15 11:08
<b>Logged In By:</b> Brian Charon	

<b>Samples Received at:</b> 20°C
<b>Custody Seals</b> Yes <b>Received On Ice</b> No
<b>Containers Intact</b> Yes
<b>COC/Labels Agree</b> Yes
<b>Preservation Confirmed</b> No

Analysis	Due	TAT	Expires	Comments
<b>T152914-01 SG-4 [Air] Sampled 11/18/15 10:54 (GMT-08:00) Pacific Time (US &amp;</b>				
8015m Methane	11/30/15 15:00	5	11/21/15 10:54	
Fixed Gases	11/30/15 15:00	5	11/23/15 10:54	+ He
TO-15	11/30/15 15:00	5	12/18/15 10:54	BTEX only
TO-3	11/30/15 15:00	5	12/18/15 10:54	
<b>T152914-02 SS-1 [Air] Sampled 11/18/15 11:20 (GMT-08:00) Pacific Time (US &amp;</b>				
8015m Methane	11/30/15 15:00	5	11/21/15 11:20	
Fixed Gases	11/30/15 15:00	5	11/23/15 11:20	+ He
TO-15	11/30/15 15:00	5	12/18/15 11:20	BTEX only
TO-3	11/30/15 15:00	5	12/18/15 11:20	