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By Alameda County Environmental Health 11:53 am, Mar 02, 2016

February, 22, 2016

Mark Detterman  
Senior Hazardous Materials Specialist, PG, CEG  
Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502

**RE: 1315 Court Street, Alameda CA**

Dear Mr. Detterman:

I do hereby declare under penalty of perjury under the laws of the State of California, that I am authorized to attest to the veracity of the information contained in the report described herein, and to the best of my knowledge the information, conclusions and recommendations presented in this attached report are true and correct. If you have any questions or comments regarding this report, please do not hesitate to contact Dwight Hoenig of Turner/Maclane Inc. at 510-881-8811.

Sincerely,



Paul D. Meuser

**REMOVAL ACTION COMPLETION REPORT:  
Mercury Removal Project, 1315 Court Street, Alameda, California, 94501  
(Site Cleanup Program Case #RO0003167)**

**PROVIDED TO:  
ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY  
Attention Mr. Mark Detterman**

**Report Provided on Behalf of:  
Mr. Paul Meuser (property owner)**

**Report Prepared by: Turner/Maclane Environmental Consulting Inc.  
February 22, 2016**

**REMOVAL ACTION COMPLETION REPORT:**  
1315 Court Street, Alameda, California**1.0 Introduction:**

This amended report documents the specific tasks and additional analytical results associated with a mercury removal action, which was undertaken at the subject property on December 1, 2015. The soil-removal project was required by the Alameda County Health Care Services Agency (ACDEH). The request for the investigation and removal action was made pursuant to California Health and Safety Code §101480, and was issued in a letter dated February 20, 2014.

**2.0 Background:**

On January 21, 2014, Mr. Paul Meuser (owner of the subject residence) contacted the California Emergency Management Agency and the National Response Center to report a finding of elemental mercury, in soil, at the rear of his home at the subject address. The Alameda County Department of Environmental Health (ACDEH) was contacted and, in turn, contacted the Department of Toxic Substances Control (DTSC). Ultimately, on January 29, 2014, the DTSC emergency response contractor, Parc Specialty, arrived on site to conduct an initial evaluation and limited cleanup of an elemental mercury release. (The residence and spill release area are shown on Figure 1.)

According to information provided by the ACDEH, Parc Specialty evaluated the spill site using a hand-held Mercury Vapor Analyzer and completed a removal action consisting of the manual excavation and off-site disposal of approximately two 55-gallon drums of soil and debris. However, based on residual mercury vapor detections and visual observations, some amount of elemental mercury remained on site.

As a result, the ACDEH requested that Mr. Meuser undertake a further investigation and initiate a soil-removal action, as described in California Health and Safety Code §101480. A workplan to complete a combination Soil Vapor Survey with confirmatory Soil Sampling was drafted by Turner/Maclane Environmental Consulting (Turner/Maclane) and submitted to ACDEH on May 6, 2015. The workplan was approved for implementation by the ACDEH on May 11, 2015.

The investigation was completed by Turner/Maclane, with the results reported to the ACDEH in a letter report issued on September 3, 2015. The report included soil vapor data gathered from throughout the area, as well as soil data from seven discreet soil samples collected in and around the apparent area of the mercury release. The data presented in that report defined the vertical and lateral extent of soil contamination, which was found to be present in the immediate vicinity of the north corner of the property, with evidence of mercury contamination also extending to the shallow soil on the adjacent residence located at 1317 Court Street.

Based on the available data, Turner/Maclane proposed a soil and debris removal action in a workplan, which was submitted to the ACDEH on October 9<sup>th</sup>, 2015. The workplan specified that soil and debris removal would be undertaken to meet the soil clean-up goal prescribed by the ACDEH. That goal

(which was based on Regional Water Quality Control Board Environmental Screening Levels, or ESLs) specified that confirmation soil samples should not exceed the mercury ESL of 6.7 milligrams per kilogram (mg/kg). The workplan was conditionally approved (with minor modifications) by the ACDEH on October 21, 2015.

The property owner contracted directly with American Integrated Services (AIS), a licensed environmental contractor to implement the approved workplan.

### **3.0 Project Implementation:**

On the morning of December 1, 2015, AIS mobilized field equipment, a Project Manager, and a team of four Health-and-Safety trained environmental technicians to the site. The specific tasks undertaken to complete the project included the following:

1. Mobilization of field equipment and Personal Protection Equipment (“Level C” PPE), energizing and calibration of field equipment, including mercury vacuum equipment and Mercury Vapor Meter (Jerome J405).
2. Review and sign off by all team members of the project Health and Safety Plan.
3. Placement of visqueen barriers on access points throughout the yard and the access area to the closed-top, roll-off box.
4. Placement and lining of a 10-cubic-yard, closed-top, roll-off box.
5. Field marking of the block wall and soil excavation boundaries.
6. Vacuum removal of visible mercury from the base of the block wall and concrete footings.
7. Removal of several concrete blocks at the base of the wall with continuous vacuuming of small ‘blebs’ of liquid mercury.
8. Removal and inspection of the upper courses of the block wall with continuous visual inspection for signs of mercury contamination within the blocks.
9. Completion of the block wall inspection, removal and loading of blocks and debris into the roll-off box.
10. Continuous screening for mercury vapor in the soil-removal area. Continuous vacuum removal of mercury from the soil surface during excavation activities.

11. Manual soil excavation from the impacted areas at the north corner of the 1315 Court Street property and southwest corner of 1317 Court Street property.
12. Demolition and removal of approximately 7.5 linear feet of concrete footing at the base of the block wall.
13. Final soil excavation from beneath the removed concrete footing.
14. Excavation and removal of soil from location "8-A" based on anomalous vapor readings recorded at that location during the initial soil vapor assessment completed on June 2, 2015.
15. Final vapor meter readings and collection of confirmation soil samples and sediment samples collected from the mercury vacuum.
16. Demobilization of equipment and contractors.
17. Collection and analysis of a total of 15, multi-depth confirmation soil samples, collected from the combined 1315 and 1317 Court Street properties.

#### **4.0 Discussion:**

The removal action was completed in accordance with the approved workplan. The project resulted in the excavation and disposal of approximately 3.3 cubic yards of soil, 36 square feet of concrete block wall, and the solid concrete footing that supported it.

During the course of the removal project, soil and brick surfaces were carefully examined. The mercury vacuum was utilized to remove all visible traces of mercury encountered during the project (Photo #1).

The void spaces in the concrete blocks were also carefully examined for the presence of liquid mercury (Photo #2). It is important to note that the concrete blocks showed no visual evidence of mercury contamination. In addition, following block removal, individual concrete blocks were further evaluated with the use of the Mercury Vapor Meter. No anomalous mercury readings were detected in the brick void spaces. This is a significant finding in that it was previously hypothesized at the time of the initial Turner/Maclane investigation, that a discharge from the block wall may have been the point of origin of the mercury release.

While there were no traces of mercury detected in the actual concrete blocks, mercury was observed to be present in the form of small metallic 'blebs' along the fractures present in the concrete footing that supported the block wall (Photo #3).

Upon further investigation of the soil excavation on the adjacent 1317 Court Street residence, it was observed that a significant volume of liquid Mercury was present in soil, both inside and outside of a broken clay pot, which had been buried at a shallow depth, adjacent to the block wall. (Photo #4)

Importantly, a fracture in the concrete footing adjacent to the clay pot fragments was also observed to extend across the width of the footing, terminating at the location of the original mercury release at 1315 Court Street. (See Photos #5 and #6)

The soil and debris removal action continued using the mercury vacuum, shovels and hand tools until the mercury vapor concentrations throughout the excavation area at the soil interface, were at or below a concentration of 0.64 micrograms per cubic meter ( $\text{ug}/\text{m}^3$ ). It was also noted that at the completion of excavation activities, the indicated mercury vapor concentrations were at 0.00  $\text{ug}/\text{m}^3$ , upwind and within the breathing zone of the excavation area. During the actual removal-action activities, vapor concentrations at the soil interface ranged from 0.63 to 64.3  $\text{ug}/\text{m}^3$ . The exhaust air stream from the top of the mercury vacuum was checked periodically for anomalous mercury emissions. All readings from the exhaust port of the four stage, HEPA filtered vacuum were also reported at 0.00  $\text{ug}/\text{m}^3$ .

At the completion of the excavation activities a series of eight confirmation soil samples were collected from the excavation invert. Five of the samples were from the excavation bottom and three were from the excavation side-wall. All of the sidewall samples were collected from a depth of approximately 10 inches below surface grade which corresponded to the depth of the mercury accumulations observed at the clay pot. At the request of the ACDEH Project Manager, additional side-wall and bottom hole confirmation samples were collected from both properties on December 11<sup>th</sup>, 2015 and February 5<sup>th</sup> 2016. The confirmation soil samples were collected in clean laboratory supplied sampling jars and labeled with location, time and date of sampling before transported to Curtis and Thompkins laboratory accompanied by a signed Chain-of- Custody.

The complete certified laboratory reports for this project are provided in the attachments to this report. The results indicate that all of the confirmation samples were below the Environmental Screening Level of 6.7 mg/kg established by the Regional Water Quality Control Board. The extent of the removal action, and the laboratory results by sample depth and location are shown graphically on the attached Figure #2. A photo of the completed excavation, remaining block wall, and storage shed is shown in Photo #8.

In addition to the in-place soil samples, one additional sample was collected from the sediment trap from the mercury vacuum, which had been used to extract the liquid mercury during the removal project. The laboratory analysis indicated mercury was present at a concentration of 1,600 mg/kg.

**5.0 Conclusion and Recommendations:**

On December 1, 2015, a removal action consistent with the ACDEH-approved workplan was completed at 1315 and 1317 Court Street in Alameda California. A total of approximately 4.6 tons of contaminated soil and 1.2 tons of concrete blocks and concrete debris were removed during this action.

Information and observations gathered during the course of this project indicate that the source of the original mercury spill was located on the property located at 1317 Court Street. The apparent pathway of migration of the mercury found on the 1315 Court Street was determined to be a fracture in the concrete wall footing adjacent to the mercury contaminated clay pot located on the 1317 Court Street property. The fracture allowed the mercury to migrate laterally onto the 1315 Court Street property.

The contaminated soil and debris from both properties were transported in a Department of Transportation (DOT) approved, closed-top, roll-off bin to the permitted Hazardous Waste Management Landfill located at Kettleman City, California. The waste shipment was sent under signed EPA Manifest # 008874745-JJK. (Attached)

The laboratory data for all confirmation soil samples indicated that the mercury soil clean-up goal specified by the ACDEH (6.7 mg/kg) was attained in all confirmation soil samples for this project.

Based on the completed removal actions and the confirmation soil data presented in this report, we recommend and are requesting that a "Case Closure Letter" for this property be issued by the ACDEH.

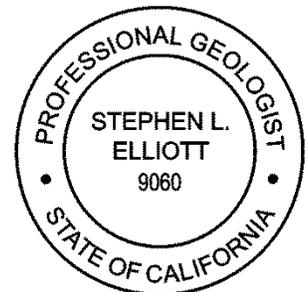
Should you have any questions or need additional information please do not hesitate to contact Turner/Maclane Inc.



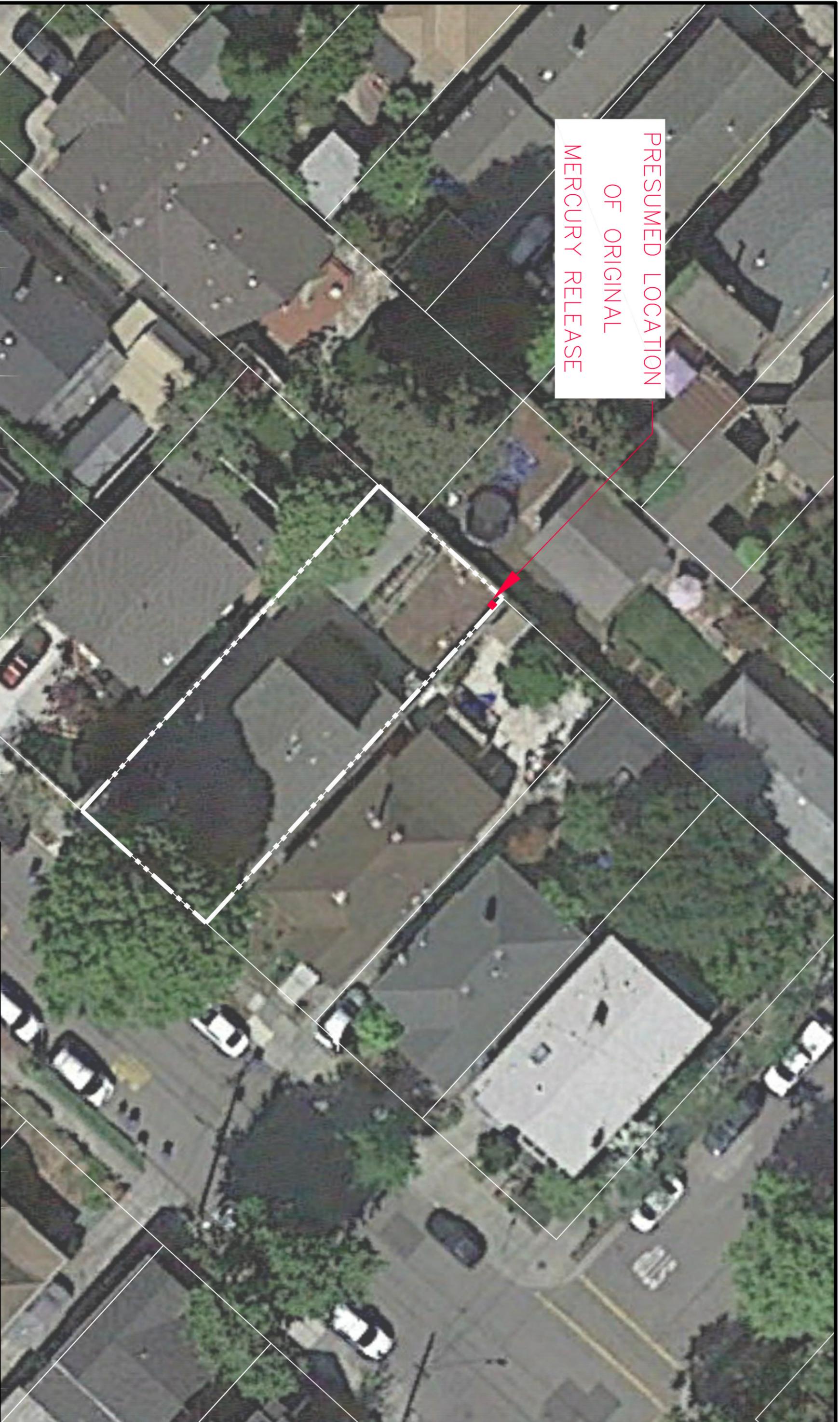
Dwight Hoenig  
President, Turner/Maclane Inc.



Steve Elliot P.G.  
American Integrated Services Inc.



**FIGURES**



PRESUMED LOCATION  
OF ORIGINAL  
MERCURY RELEASE

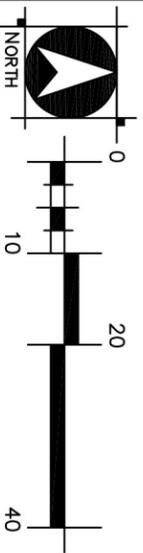
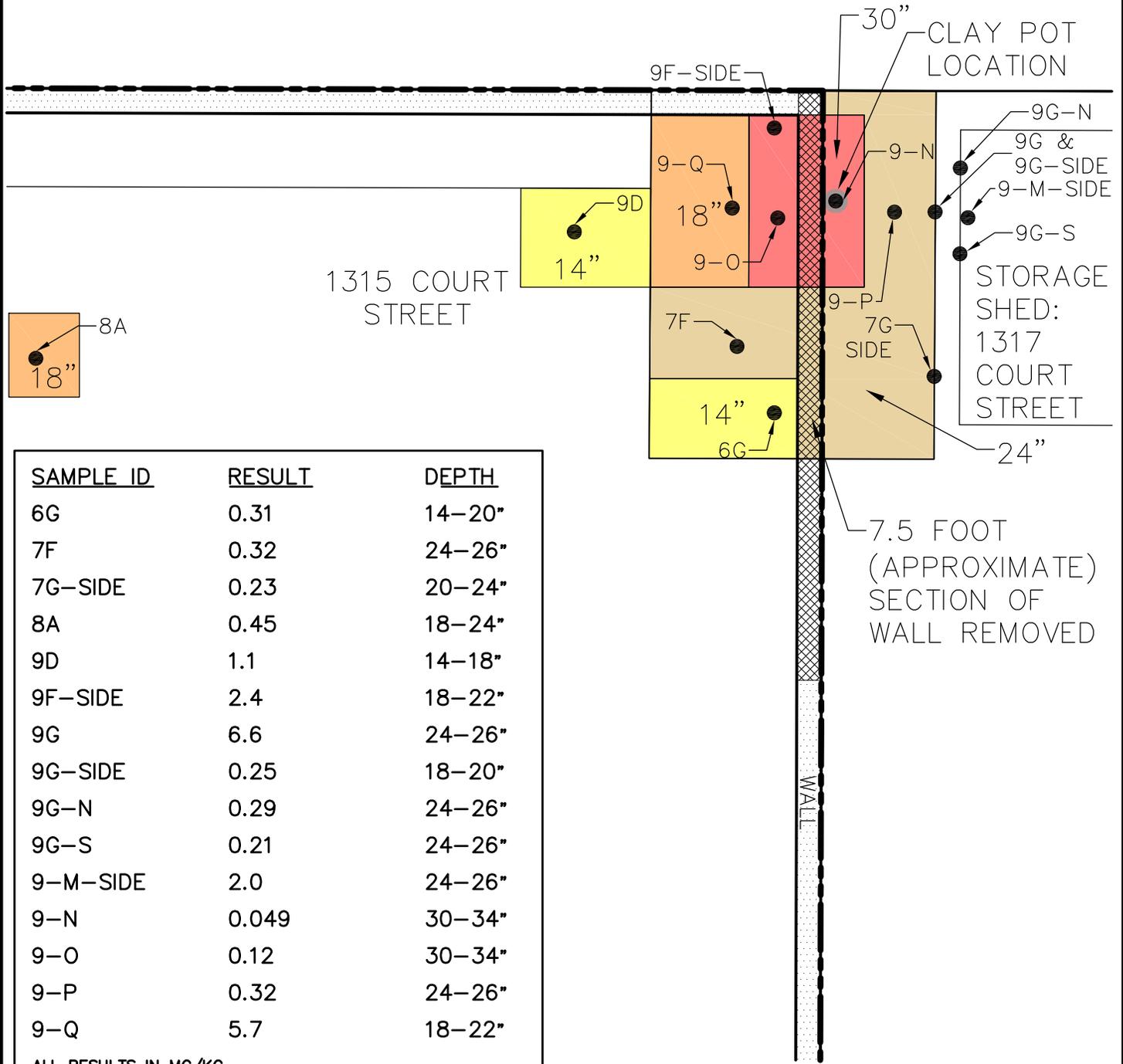


FIGURE #1  
SITE LOCATION; 1315 COURT STREET

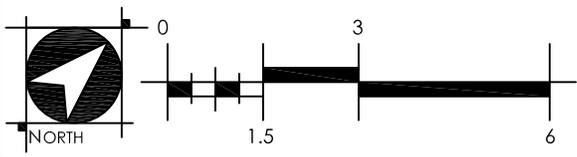
2908 JACKSON STREET



<u>SAMPLE ID</u>	<u>RESULT</u>	<u>DEPTH</u>
6G	0.31	14-20"
7F	0.32	24-26"
7G-SIDE	0.23	20-24"
8A	0.45	18-24"
9D	1.1	14-18"
9F-SIDE	2.4	18-22"
9G	6.6	24-26"
9G-SIDE	0.25	18-20"
9G-N	0.29	24-26"
9G-S	0.21	24-26"
9-M-SIDE	2.0	24-26"
9-N	0.049	30-34"
9-O	0.12	30-34"
9-P	0.32	24-26"
9-Q	5.7	18-22"

ALL RESULTS IN MG/KG

**FIGURE #2**  
 1315 & 1317 COURT STREET,  
 ALAMEDA CA  
 WALL REMOVAL AND SOIL EXCAVATION



**PROJECT PHOTOS**



<b>Project No.</b> TM #12.01.15	<b>Description</b>	Initial removal and Mercury vacuuming	<b>Photo #1</b>
	<b>Name</b>	1315 & 1317 Court St. Alameda CA.	<b>Photo Date</b> December 1, 2015



<b>Project No.</b> TM 12.01.15	<b>Description</b>	Wall Demolition and Concrete Block Inspection	<b>Photo #2</b>
	<b>Name</b>	1315& 1317 Court St. Alameda CA.	<b>Photo Date</b> December 1, 2015





<b>Project No.</b> TM 12.01.15	<b>Description</b>	Disseminated 'blebs' of Mercury found on a fracture in the wall footing.	<b>Photo #3</b>
	<b>Name</b>	1315 & 1317 Court St. Alameda Ca.	<b>Photo Date</b> December 1, 2015



<b>Project No.</b> TM 12.01.15	<b>Description</b>	Broken clay pot with liquid Mercury present inside	<b>Photo #4</b>
	<b>Name</b>	1315 & 1317 Court St. Alameda Ca.	<b>Photo Date</b> December 1, 2015



<b>Project No.</b> TM 12.01.15	<b>Description</b>	Clay Pot with root mass expressing liquid Mercury	<b>Photo #5</b>
	<b>Name</b>	1317 Court Street, Alameda CA.	<b>Photo Date</b> December 1, 2015



<b>Project No.</b> TM 12.01.15	<b>Description</b>	Mercury accumulations and adjacent fracture in concrete wall footing.	<b>Photo #6</b>
	<b>Name</b>	1317 Court St. Alameda CA.	<b>Photo Date</b> December 1, 2015



<b>Project No.</b> TM 12.01.15	<b>Description</b>	Excavation at the location of Vapor Sample 8-A	<b>Photo #7</b>
	<b>Name</b>	1315 Court St. Alameda Ca.	<b>Photo Date</b> December 1, 2015



<b>Project No.</b> TM 12.01.15	<b>Description</b>	Removal area showing excavation profile, remaining wall and concrete footing	<b>Photo #8</b>
	<b>Name</b>	1315 & 1317 Court St. Alameda CA.	<b>Photo Date</b> December 1, 2015

**CERTIFIED ANALYTICAL RESULTS**



Curtis & Tompkins, Ltd.

Analytical Laboratories, Since 1878



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 272055  
ANALYTICAL REPORT**

Turner Maclane Inc.  
3511 La Mesa Drive  
Hayward, CA 94542

Project : STANDARD  
Location : P. Measer  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
7-G-SIDE	272055-001
9-G-SIDE	272055-002
9-F-SIDE	272055-003
6-G	272055-004
9-D	272055-005
8-A	272055-006
7-F	272055-007
9-G	272055-008
VACUUM #1	272055-009

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Mike Dahlquist  
Project Manager  
mike.dahlquist@ctberk.com

Date: 12/08/2015

### CASE NARRATIVE

Laboratory number: 272055  
Client: Turner Maclane Inc.  
Location: P. Measer  
Request Date: 12/01/15  
Samples Received: 12/01/15

This data package contains sample and QC results for nine soil samples, requested for the above referenced project on 12/01/15. The samples were received cold and intact.

**Metals (EPA 7471A):**

No analytical problems were encountered.



COOLER RECEIPT CHECKLIST



Login # 272055 Date Received 12/1/15 Number of coolers 0
Client P. Measer Project P. Measer

Date Opened 12/1 By (print) CJN (sign) [Signature]
Date Logged in [Arrow] By (print) [Arrow] (sign) [Arrow]

1. Did cooler come with a shipping slip (airbill, etc) YES NO
Shipping info

2A. Were custody seals present? ... YES (circle) on cooler on samples X NO
How many Name Date

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe)

- Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: X Wet Blue/Gel None Temp(°C)

Temperature blank(s) included? Thermometer# IR Gun#

X Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO

If YES, what time were they transferred to freezer?

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are there any missing / extra samples? YES NO

11. Are samples in the appropriate containers for indicated tests? YES NO

12. Are sample labels present, in good condition and complete? YES NO

13. Do the sample labels agree with custody papers? YES NO

14. Was sufficient amount of sample sent for tests requested? YES NO

15. Are the samples appropriately preserved? YES NO N/A

16. Did you check preservatives for all bottles for each sample? YES NO N/A

17. Did you document your preservative check? (pH strip lot# ) YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? YES NO N/A

21. Was the client contacted concerning this sample delivery? YES NO

If YES, Who was called? By Date:

COMMENTS

Blank lines for handwritten comments.

## Detections Summary for 272055

Results for any subcontracted analyses are not included in this summary.

 Client : Turner Maclane Inc.  
 Project : STANDARD  
 Location : P. Measer

Client Sample ID : 7-G-SIDE                      Laboratory Sample ID :                      272055-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Mercury	0.23		0.017	mg/Kg	As Recd	1.000	EPA 7471A	METHOD

Client Sample ID : 9-G-SIDE                      Laboratory Sample ID :                      272055-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Mercury	0.25		0.016	mg/Kg	As Recd	1.000	EPA 7471A	METHOD

Client Sample ID : 9-F-SIDE                      Laboratory Sample ID :                      272055-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Mercury	2.4		0.18	mg/Kg	As Recd	10.00	EPA 7471A	METHOD

Client Sample ID : 6-G                              Laboratory Sample ID :                      272055-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Mercury	0.31		0.016	mg/Kg	As Recd	1.000	EPA 7471A	METHOD

Client Sample ID : 9-D                              Laboratory Sample ID :                      272055-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Mercury	1.1		0.18	mg/Kg	As Recd	10.00	EPA 7471A	METHOD

Client Sample ID : 8-A                              Laboratory Sample ID :                      272055-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Mercury	0.45		0.018	mg/Kg	As Recd	1.000	EPA 7471A	METHOD

Client Sample ID : 7-F                              Laboratory Sample ID :                      272055-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Mercury	0.32		0.015	mg/Kg	As Recd	1.000	EPA 7471A	METHOD

Client Sample ID : 9-G

Laboratory Sample ID :

272055-008

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Mercury	6.6		0.16	mg/Kg	As Recd	10.00	EPA 7471A	METHOD

Client Sample ID : VACUUM #1

Laboratory Sample ID :

272055-009

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Mercury	1,600		160	mg/Kg	As Recd	10000	EPA 7471A	METHOD

Mercury by Cold Vapor AA			
Lab #:	272055	Location:	P. Measer
Client:	Turner Maclane Inc.	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	229992
Matrix:	Soil	Sampled:	12/01/15
Units:	mg/Kg	Received:	12/01/15
Basis:	as received	Prepared:	12/02/15

Field ID	Type	Lab ID	Result	RL	Diln Fac	Analyzed
7-G-SIDE	SAMPLE	272055-001	0.23	0.017	1.000	12/02/15
9-G-SIDE	SAMPLE	272055-002	0.25	0.016	1.000	12/02/15
9-F-SIDE	SAMPLE	272055-003	2.4	0.18	10.00	12/02/15
6-G	SAMPLE	272055-004	0.31	0.016	1.000	12/02/15
9-D	SAMPLE	272055-005	1.1	0.18	10.00	12/02/15
8-A	SAMPLE	272055-006	0.45	0.018	1.000	12/03/15
7-F	SAMPLE	272055-007	0.32	0.015	1.000	12/03/15
9-G	SAMPLE	272055-008	6.6	0.16	10.00	12/03/15
VACUUM #1	SAMPLE	272055-009	1,600	160	10,000	12/03/15
	BLANK	QC815071	ND	0.017	1.000	12/02/15

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

<b>Mercury by Cold Vapor AA</b>			
Lab #:	272055	Location:	P. Measer
Client:	Turner Maclane Inc.	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	229992
MSS Lab ID:	271977-001	Sampled:	11/25/15
Matrix:	Soil	Received:	11/25/15
Units:	mg/Kg	Prepared:	12/02/15
Basis:	as received	Analyzed:	12/02/15

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC815072		0.2083	0.2213	106	80-120		
BSD	QC815073		0.2083	0.2286	110	80-120	3	20
MS	QC815074	0.06972	0.2155	0.3178	115	69-142		
MSD	QC815075		0.2083	0.3154	118	69-142	2	36

RPD= Relative Percent Difference



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Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 272370  
ANALYTICAL REPORT

Turner Maclane Inc.  
3511 La Mesa Drive  
Hayward, CA 94542

Project : STANDARD  
Location : P. Measer  
Level : II

Sample ID

9-G-N

9-G-S

Lab ID

272370-001

272370-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Mike Dahlquist  
Project Manager  
mike.dahlquist@ctberk.com

Date: 12/15/2015

CA ELAP# 2896, NELAP# 4044-001

### CASE NARRATIVE

Laboratory number: 272370  
Client: Turner Maclane Inc.  
Location: P. Measer  
Request Date: 12/11/15  
Samples Received: 12/11/15

This data package contains sample and QC results for two soil samples, requested for the above referenced project on 12/11/15. The samples were received cold and intact.

**Metals (EPA 7471A):**

No analytical problems were encountered.



COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 272370 Date Received 12/11/15 Number of coolers 0
Client Turner Maudane Project P. Measer

Date Opened 12/11 By (print) BL (sign) [Signature]
Date Logged in [Signature] By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) YES NO
Shipping info

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many Name Date

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe)

- Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: Wet, Blue/Gel, None, Temp(°C)

Temperature blank(s) included? Thermometer# IR Gun#

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
If YES, what time were they transferred to freezer?

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are there any missing / extra samples? YES NO

11. Are samples in the appropriate containers for indicated tests? YES NO

12. Are sample labels present, in good condition and complete? YES NO

13. Do the sample labels agree with custody papers? YES NO

14. Was sufficient amount of sample sent for tests requested? YES NO

15. Are the samples appropriately preserved? YES NO N/A

16. Did you check preservatives for all bottles for each sample? YES NO N/A

17. Did you document your preservative check? (pH strip lot# ) YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? YES NO N/A

21. Was the client contacted concerning this sample delivery? YES NO

If YES, Who was called? By Date:

COMMENTS

Blank lines for handwritten comments.

Detections Summary for 272370

Results for any subcontracted analyses are not included in this summary.

Client : Turner Maclane Inc.  
 Project : STANDARD  
 Location : P. Measer

Client Sample ID : 9-G-N                      Laboratory Sample ID :                      272370-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Mercury	0.29		0.016	mg/Kg	As Recd	1.000	EPA 7471A	METHOD

Client Sample ID : 9-G-S                      Laboratory Sample ID :                      272370-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Mercury	0.21		0.017	mg/Kg	As Recd	1.000	EPA 7471A	METHOD

**Mercury by Cold Vapor AA**

Lab #:	272370	Location:	P. Measer
Client:	Turner Maclane Inc.	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	230357
Matrix:	Soil	Sampled:	12/11/15
Units:	mg/Kg	Received:	12/11/15
Basis:	as received	Prepared:	12/14/15
Diln Fac:	1.000	Analyzed:	12/14/15

Field ID	Type	Lab ID	Result	RL
9-G-N	SAMPLE	272370-001	0.29	0.016
9-G-S	SAMPLE	272370-002	0.21	0.017
	BLANK	QC816576	ND	0.017

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Mercury by Cold Vapor AA			
Lab #:	272370	Location:	P. Measer
Client:	Turner Maclane Inc.	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	230357
Field ID:	ZZZZZZZZZZ	Sampled:	12/04/15
MSS Lab ID:	272186-001	Received:	12/04/15
Units:	mg/Kg	Prepared:	12/14/15
Basis:	as received	Analyzed:	12/14/15
Diln Fac:	1.000		

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC816577	Soil		0.2083	0.2086	100	80-120		
BSD	QC816578	Soil		0.2083	0.2170	104	80-120	4	20
MS	QC816579	Miscell.	<0.005085	0.2273	0.2384	105	69-142		
MSD	QC816580	Miscell.		0.2193	0.2340	107	69-142	2	36

RPD= Relative Percent Difference



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Analytical Laboratories, Since 1878



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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 273887  
ANALYTICAL REPORT**

Turner Maclane Inc.  
3511 La Mesa Drive  
Hayward, CA 94542

Project : STANDARD  
Location : Meuser Residence  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
9-M	273887-001
9-N	273887-002
9-O	273887-003
9-P	273887-004
9-Q	273887-005

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:   
Mike Dahlquist  
Project Manager  
mike.dahlquist@ctberk.com

Date: 02/10/2016

CA ELAP# 2896, NELAP# 4044-001

### CASE NARRATIVE

Laboratory number: 273887  
Client: Turner Maclane Inc.  
Location: Meuser Residence  
Request Date: 02/05/16  
Samples Received: 02/05/16

This data package contains sample and QC results for five soil samples, requested for the above referenced project on 02/05/16. The samples were received cold and intact.

**Metals (EPA 7471A):**

No analytical problems were encountered.



COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 273887 Date Received 02/05/16 Number of coolers 1
Client Turner MacLane Env. Project Meuser Residence

Date Opened 02/05 By (print) SC (sign) [Signature]
Date Logged in [Arrow] By (print) [Arrow] (sign) [Arrow]

1. Did cooler come with a shipping slip (airbill, etc) YES NO
Shipping info

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many Name Date

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe)

- Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: Wet, Blue/Gel, None Temp(°C) 4.5

Temperature blank(s) included? Thermometer# IR Gun# B

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
If YES, what time were they transferred to freezer?

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are there any missing / extra samples? YES NO

11. Are samples in the appropriate containers for indicated tests? YES NO

12. Are sample labels present, in good condition and complete? YES NO

13. Do the sample labels agree with custody papers? YES NO

14. Was sufficient amount of sample sent for tests requested? YES NO

15. Are the samples appropriately preserved? YES NO N/A

16. Did you check preservatives for all bottles for each sample? YES NO N/A

17. Did you document your preservative check? (pH strip lot# ) YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? YES NO N/A

21. Was the client contacted concerning this sample delivery? YES NO
If YES, Who was called? By Date:

COMMENTS

Blank lines for handwritten comments.



**Mercury by Cold Vapor AA**

Lab #:	273887	Location:	Meuser Residence
Client:	Turner Maclane Inc.	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7471A
Analyte:	Mercury	Sampled:	02/05/16
Matrix:	Soil	Received:	02/05/16
Units:	mg/Kg	Prepared:	02/08/16
Basis:	as received	Analyzed:	02/09/16
Batch#:	231830		

Field ID	Type	Lab ID	Result	RL	Diln Fac
9-M	SAMPLE	273887-001	2.0	0.17	10.00
9-N	SAMPLE	273887-002	0.049	0.018	1.000
9-O	SAMPLE	273887-003	0.12	0.017	1.000
9-P	SAMPLE	273887-004	0.32	0.017	1.000
9-Q	SAMPLE	273887-005	5.7	0.18	10.00
	BLANK	QC822367	ND	0.017	1.000

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

<b>Mercury by Cold Vapor AA</b>			
Lab #:	273887	Location:	Meuser Residence
Client:	Turner Maclane Inc.	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	231830
MSS Lab ID:	273884-001	Sampled:	02/03/16
Matrix:	Soil	Received:	02/05/16
Units:	mg/Kg	Prepared:	02/08/16
Basis:	as received	Analyzed:	02/09/16

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC822368		0.1923	0.1877	98	80-120		
BSD	QC822369		0.2155	0.2090	97	80-120	1	20
MS	QC822370	0.03612	0.2049	0.2452	102	69-142		
MSD	QC822371		0.2155	0.2579	103	69-142	1	36

RPD= Relative Percent Difference

**WASTE MANIFEST**

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>CAC002P37773</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>800-822-565</b>	4. Manifest Tracking Number <b>008874745 JJK</b>	
5. Generator's Name and Mailing Address <b>MR. PAUL MEUSER 1315 COURT ST. ALAMEDA CA, 94501</b>			Generator's Site Address (if different than mailing address)			
Generator's Phone: <b>(415) 596-8234</b>						
6. Transporter 1 Company Name <b>AMERICAN INTEGRATED SERVICES INC.</b>			U.S. EPA ID Number <b>CAL000148338</b>			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address <b>WASTE MANAGEMENT - KETTLEMAN HILLS FACILITY 35251 OLD SKYLINE RD KETTLEMAN CITY, CA 93239</b>			U.S. EPA ID Number <b>CAT000646117</b>			
Facility's Phone: <b>(559) 309 7688</b>						
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
		No.	Type			
1.	<b>NON RCRA HAZARDOUS WASTE SOLID (SOIL W/ STLC MERCURY)</b>	<b>01</b>	<b>CM</b>	<b>5</b>	<b>Y</b>	<b>622</b>
2.						
3.						
4.						
14. Special Handling Instructions and Additional Information <b>WEAR PROTECTIVE EQUIPMENT WHILE HANDLING. WEIGHTS OR VOLUMES ARE APPROXIMATE. 24 HOUR EMERGENCY NUMBER (800) 822 9565 PROJECT # 75042 PROFILE # CAC09149</b>						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Offoror's Printed/Typed Name <b>Hector Aguirre Jr.</b>			Signature 		Month Day Year <b>12 01 15</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____						
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name <b>MARCO MARTINEZ</b>			Signature 		Month Day Year <b>12 01 15</b>	
Transporter 2 Printed/Typed Name			Signature		Month Day Year	
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
18b. Alternate Facility (or Generator) Manifest Reference Number: _____ U.S. EPA ID Number _____						
Facility's Phone: _____						
18c. Signature of Alternate Facility (or Generator) _____ Month Day Year _____						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1. <b>H132</b>		2.		3.		4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name <b>Ramona R. Cerveny</b>			Signature 		Month Day Year <b>12 01 15</b>	