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By Alameda County Environmental Health 12:44 pm, Jan 12, 2016

December 28, 2015

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

Parl D. Mu.

ENVIRONMENTAL CONSULTING, INC.

Dwight Hoenig, President

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.
December 28, 2015

Phone: **510-881-8811** 3511 MESA DRIVE Cell: **925-580-9649**

HAYWARD, CA 9452



REMOVAL ACTION COMPLETION REPORT: 1315 Court Street, Alameda, California

1.0 Introduction:

This report documents the specific tasks and 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 handheld 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 9th, 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

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(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:

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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.



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- 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 of two additional confirmation samples from 1317 Court Street at the request of ACDEH. (Note: Additional samples collected on December 11, 2015.)

4.0 Discussion:

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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 (ug/m³). It was also noted that at the completion of excavation activities, the indicated mercury vapor concentrations were at 0.00 ug/m³, 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 ug/m³)

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. (Note: At the request of the ACDEH Project Manager, two additional side-wall confirmation samples were collected from the 1317 Court St. property on December 11th, 2015.) The confirmation soil samples were collected in clean laboratory supplied sampling jars and labeled with location, time and date of sampling before transport to the laboratory accompanied by a signed Chainof- 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 are shown graphically on the attached Figure #2. The Certified Analytical results for all I results for total mercury, as reported for the ten confirmation soil samples. (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:

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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 footing adjacent to the mercury contaminated clay pot located on the 1317 Court Street property, which allowed the mercury to migrate onto the 1315 Court Street property.

The contaminated soil and debris were transported in a Department of Transportation 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 indicates that the soil clean-up goal specified by the ACDEH in the workplan approval was attained for this project.

Based on the completed removal actions and the confirmation soil data presented in this report, we recommend and are requesting the issuance of 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.

Phone: 510-881-8811

Steve Elliot P.G.

American Integrated Services Inc.

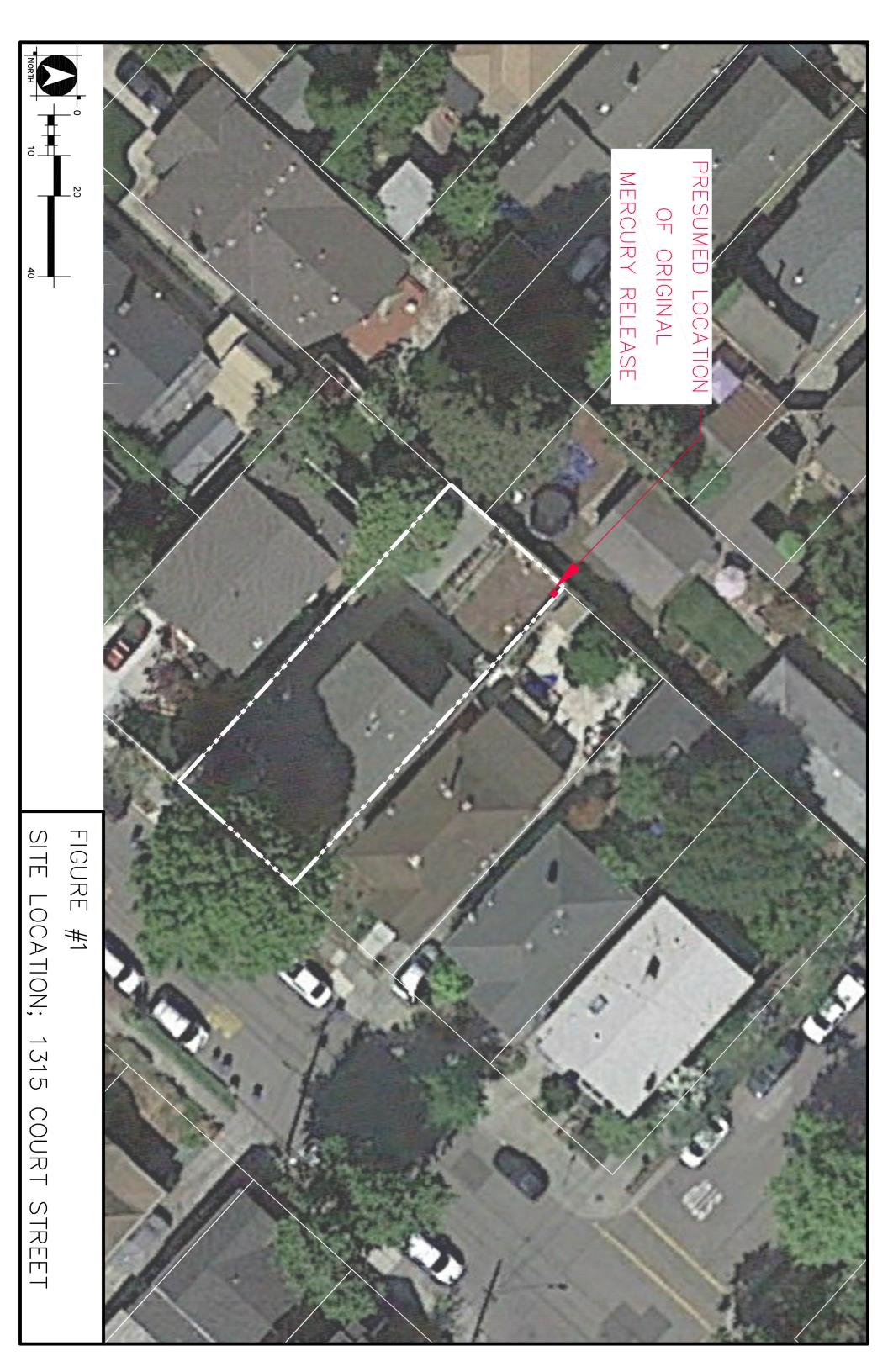
STEPHEN L. ELLIOTT 9060

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FIGURES

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2908 JACKSON STREET -30" 9F-SIDE-ORIGINAL SPILL--9G-N LOCATION 9G-SIDE 18" -9G-S 14" STORAGE 1315 COURT SHED: STREET -8A 7G-1317 SIDE 18" COURT STREET -24" -7.5 FOOT (APPROXIMATE) SECTION OF SAMPLE ID **RESULT** WALL REMOVED 6G 0.31 7F 0.32 7G-SIDE 0.23 88 0.45 9D 1.1 9F-SIDE 2.4 9G 6.6 9G-SIDE 0.25 9G-N 0.29 0.21 9G-S ALL RESULTS IN MG/KG FIGURE #2 1315 COURT STREET, ALAMEDA CA WALL REMOVAL AND SOIL **EXCAVATION**



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Dwight Hoenig, President

PROJECT PHOTOS

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



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



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



Proiect No.	Descriptio n	Broken clay pot with liquid Mercury present inside	Photo #4		
TM 12.01.15	Name	1315 & 1317 Court St. Alameda Ca.	Photo Date December 1, 2015		



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



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



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



Proiect No.	Description	Removal area showing excavation profile, remaining wall and concrete footing					
TM 12.01.15	Name	1315 & 1317 Court St. Alameda CA.	Photo Date December 1, 2015				



CERTIFIED ANALYTICAL RESULTS

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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. Project : STANDARD 3511 La Mesa Drive Location : P. Measer Hayward, CA 94542

Level : II

Sample ID	<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.

Date: 12/08/2015

Signature:

Mike Dahlquist Project Manager mike.dahlquist@ctberk.com

CA ELAP# 2896, NELAP# 4044-001



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.

CHAIN OF CUSTODY

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	Need Results	RECEIPT	1/4/1	1/2015	-	/ 2/ / DATE	1/15 T	IME:/6	105	7	at.	No	m	phy	127 DATE	7 1. ::	S TIME:	16.	15
	12/9	Cold	Lugs	TIL II		DATE	:Т	IME:		W	(AM)	Wir.	#	₩	DATE	:	TIME:		
	5	On Ice				DATE	: т	IME:							DATE		TIME:		-

COOLER RECEIPT CHECKLIST



Login # 272055 Date Received 1/1/15 Client Project P. Measer Project P. Measer	Number of coolers <u> </u>
	Plannershy &
Date Opened 17/1 By (print) (sign) Date Logged in By (print) (sign)	J. J.
Did cooler come with a shipping slip (airbill, etc) Shipping info	
2A. Were custody seals present? YES (circle) on cooler Name	_ Date
2B. Were custody seals intact upon arrival? 3. Were custody papers dry and intact when received? 4. Were custody papers filled out properly (ink, signed, etc)? 5. Is the project identifiable from custody papers? (If so fill out top 6. Indicate the packing in cooler: (if other, describe)	ÆŠ NO
☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ Cloth material ☐ Cardboard ☐ Styrofoam 7. Temperature documentation: * Notify PM if temperature exceptions in the properties of the pro	☐ None ☐ Paper towels ceeds 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 pro	cess had begun
8. Were Method 5035 sampling containers present?	YES 10
9. Did all bottles arrive unbroken/unopened?	VES NO
10 Are there any missing / outre gameles?	
,	VES NO
11. Are samples in the appropriate containers for indicated tests?	YES NO
11. Are samples in the appropriate containers for indicated tests?	YES NO YES NO YES NO
11. Are samples in the appropriate containers for indicated tests?	YES NO YES NO YES NO YES NO
 11. Are samples in the appropriate containers for indicated tests? 12. Are sample labels present, in good condition and complete? 13. Do the sample labels agree with custody papers? 14. Was sufficient amount of sample sent for tests requested? 	YES NO YES NO YES NO YES NO
 11. Are samples in the appropriate containers for indicated tests? 12. Are sample labels present, in good condition and complete? 13. Do the sample labels agree with custody papers? 14. Was sufficient amount of sample sent for tests requested? 	YES NO YES NO YES NO YES NO
11. Are samples in the appropriate containers for indicated tests? 12. Are sample labels present, in good condition and complete? 13. Do the sample labels agree with custody papers? 14. Was sufficient amount of sample sent for tests requested? 15. Are the samples appropriately preserved? 16. Did you check preservatives for all bottles for each sample?	YES NO NA YES NO NA
11. Are samples in the appropriate containers for indicated tests? 12. Are sample labels present, in good condition and complete? 13. Do the sample labels agree with custody papers? 14. Was sufficient amount of sample sent for tests requested? 15. Are the samples appropriately preserved? 16. Did you check preservatives for all bottles for each sample? 17. Did you document your preservative check? (pH strip lot#	YES NO NA YES NO NA
11. Are samples in the appropriate containers for indicated tests? 12. Are sample labels present, in good condition and complete? 13. Do the sample labels agree with custody papers? 14. Was sufficient amount of sample sent for tests requested? 15. Are the samples appropriately preserved? 16. Did you check preservatives for all bottles for each sample? 17. Did you document your preservative check? (pH strip lot# 18. Did you change the hold time in LIMS for unpreserved VOAs?	YES NO N/A YES NO N/A YES NO N/A YES NO N/A
11. Are samples in the appropriate containers for indicated tests? 12. Are sample labels present, in good condition and complete? 13. Do the sample labels agree with custody papers? 14. Was sufficient amount of sample sent for tests requested? 15. Are the samples appropriately preserved? 16. Did you check preservatives for all bottles for each sample? 17. Did you document your preservative check? (pH strip lot# 18. Did you change the hold time in LIMS for unpreserved VOAs? 19. Did you change the hold time in LIMS for preserved terracores? 20. Are bubbles > 6mm absent in VOA samples?	YES NO N/A
11. Are samples in the appropriate containers for indicated tests? 12. Are sample labels present, in good condition and complete? 13. Do the sample labels agree with custody papers? 14. Was sufficient amount of sample sent for tests requested? 15. Are the samples appropriately preserved? 16. Did you check preservatives for all bottles for each sample? 17. Did you document your preservative check? (pH strip lot# 18. Did you change the hold time in LIMS for unpreserved VOAs? 19. Did you change the hold time in LIMS for preserved terracores? 20. Are bubbles > 6mm absent in VOA samples? 21. Was the client contacted concerning this sample delivery?	YES NO YES NO YES NO YES NO YES NO YES NO N/A
11. Are samples in the appropriate containers for indicated tests? 12. Are sample labels present, in good condition and complete? 13. Do the sample labels agree with custody papers? 14. Was sufficient amount of sample sent for tests requested? 15. Are the samples appropriately preserved? 16. Did you check preservatives for all bottles for each sample? 17. Did you document your preservative check? (pH strip lot#	YES NO YES NO YES NO YES NO YES NO YES NO N/A
11. Are samples in the appropriate containers for indicated tests? 12. Are sample labels present, in good condition and complete? 13. Do the sample labels agree with custody papers? 14. Was sufficient amount of sample sent for tests requested? 15. Are the samples appropriately preserved? 16. Did you check preservatives for all bottles for each sample? 17. Did you document your preservative check? (pH strip lot#	YES NO YES NO YES NO YES NO YES NO YES NO NA
11. Are samples in the appropriate containers for indicated tests? 12. Are sample labels present, in good condition and complete? 13. Do the sample labels agree with custody papers? 14. Was sufficient amount of sample sent for tests requested? 15. Are the samples appropriately preserved? 16. Did you check preservatives for all bottles for each sample? 17. Did you document your preservative check? (pH strip lot# 18. Did you change the hold time in LIMS for unpreserved VOAs? 19. Did you change the hold time in LIMS for preserved terracores? 20. Are bubbles > 6mm absent in VOA samples? 21. Was the client contacted concerning this sample delivery? If YES, Who was called? By COMMENTS	YES NO Date:
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11. Are samples in the appropriate containers for indicated tests? 12. Are sample labels present, in good condition and complete? 13. Do the sample labels agree with custody papers? 14. Was sufficient amount of sample sent for tests requested? 15. Are the samples appropriately preserved? 16. Did you check preservatives for all bottles for each sample? 17. Did you document your preservative check? (pH strip lot# 18. Did you change the hold time in LIMS for unpreserved VOAs? 19. Did you change the hold time in LIMS for preserved terracores? 20. Are bubbles > 6mm absent in VOA samples? 21. Was the client contacted concerning this sample delivery? If YES, Who was called? By COMMENTS	YES NO Date:



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 7471	A 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	Met	thod	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	mq/Kq	As Recd	10.00	EPA 7471 <i>P</i>	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		IDF	Method	Prep Method
Mercury	0.32		0.015	mg/Kg	As Recd	1.000	EPA 7471	METHOD

7.0 Page 1 of 2



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

7.0 Page 2 of 2



	Mercury	by Cold Vapor A	A
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

Page 1 of 1



Batch QC Report

	Mercury by Cold Vapor AA									
Lab #:	272055	Location:	P. Measer							
Client:	Turner Maclane Inc.	Prep:	METHOD							
Project#:	STANDARD	Analysis:	EPA 7471A							
Analyte:	Mercury	Diln Fac:	1.000							
Field ID:	ZZZZZZZZZ	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





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
 Lab ID

 9-G-N
 272370-001

 9-G-S
 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.

Date: 12/15/2015

Signature:

Mike Dahlquist
Project Manager
mike.dahlquist@ctberk.com

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



Login # 277370 Date Received 12/11/15 Number of coolers 0	
Client Tyrres Maylane Project P. Meases	
Date Opened 12/11 By (print) 31 (sign)	
Date Logged in By (print) (sign)	
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 Name Date	1 O
2B. Were custody seals intact upon arrival? 3. Were custody papers dry and intact when received? 4. Were custody papers filled out properly (ink, signed, etc)? 5. Is the project identifiable from custody papers? (If so fill out top of form) 6. Indicate the packing in cooler: (if other, describe)	17A
☐ 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? If YES, what time were they transferred to freezer? 9. Did all bottles arrive unbroken/unopened? 10. Are there any missing / extra samples? 11. Are samples in the appropriate containers for indicated tests? 12. Are sample labels present, in good condition and complete? 13. Do the sample labels agree with custody papers? 14. Was sufficient amount of sample sent for tests requested? 15. Are the samples appropriately preserved? 16. Did you check preservatives for all bottles for each sample? 17. Did you document your preservative check? (pH strip lot#) YES NO MISSING STATES NO MISSING STAT	
19. Did you change the hold time in LIMS for unpreserved VOAs?YES NO MARK NO NOT A STATE OF THE HOLD THE	R A A
If YES, Who was called?ByDate:	

CHAIN OF CUSTODY

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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

Page 1 of 1 7.0



	Mercury	by Cold Vapor A	A.	
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

Page 1 of 1

2.0



Batch QC Report

	Mercury	by Cold Vapor A	.A
Lab #:	272370	Location:	P. Measer
Client:	Turner Maclane Inc.	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	230357
Field ID:	ZZZZZZZZZ	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



WASTE MANIFEST

Phone: **510-881-8811** 3511 MESA DRIVE Cell: **925-580-9649** HAYWARD, CA 9452

Ple	ase print or type. (Form desi	igned for use on elite (12-pitch) typewriter.)						Approved. OME	3 No. 2050-00					
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	1 1	(425) 596-8234	ı											
П	Generator's Phone: 6. Transporter 1 Company Nar		<u> </u>			U.S. EPA ID Number								
AMERICAN INTEGRATED SERVICES INC. CARDOD148:														
П	7. Transporter 2 Company Nan			., .		U.S. EPA ID		7-220						
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	I	9) 319 7688				CAT	10004	46117	16117					
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