CITY OF SAUSALITO

Jonathan Leone, Mayor
Adam Politzer, City Manager

July 15, 2009

Jo Ann Cola
US Environmental Protection Agency, Region 9
75 Hawthorne Street (WTR-7)
San Francisco, CA 94105

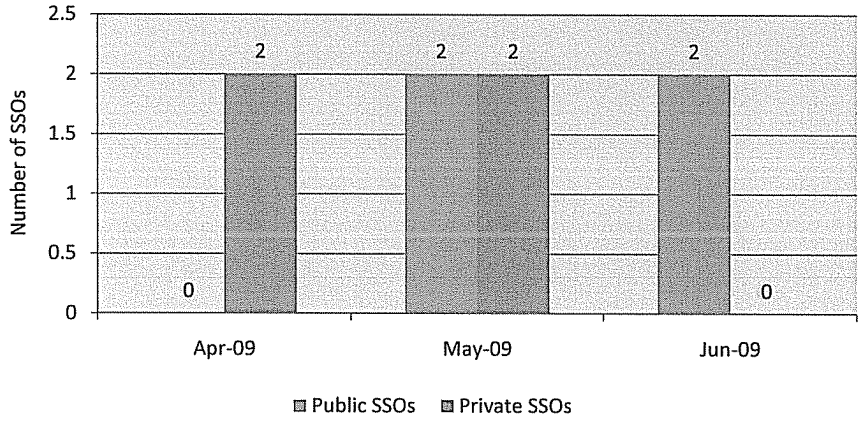
Michael Chee
San Francisco Bay Region
California Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

SUBJECT: **CITY OF SAUSALITO QUARTERLY SEWAGE SPILL REPORT**
April 1, 2009 THROUGH June 30, 2009
USEPA Amended Order for Compliance
Docket No CWA-309(a)-08-031 dated November 24, 2008

Dear Ms. Cola and Mr. Chee:

Section IX of USEPA Region IX Findings of Violation and Amended Order for Compliance (Docket No CWA-309(a)-08-031) dated November 24, 2008 (the "2008 Amended Order") requires the City of Sausalito, Sausalito-Marin City Sanitary District and Tamalpais Community Services District to submit (on the 15th of January, April, July, and October), a tabulation of all sewage spills that occurred during the previous calendar quarter. This is the Report for the City of Sausalito for the calendar quarter beginning April 1, 2009 and ending June 30, 2009. Pursuant to Discharge Requirements for Sanitary Sewer Systems Order No. 2006-0003-DWQ (the "2006 Order"), the City reported to the Regional Water Quality Control Board, San Francisco Bay Region on sanitary sewer overflows ("SSOs") for calendar 2008 in March, 2009. For purposes of this Report, the City refers to sewage spills as SSOs.

Graphic Summary of Number and Chronology of SSOs – April 1, 2009 – June 30, 2009



6E
7-21-09
1

Jo Ann Cola
US Environmental Protection Agency, Region IX
Michael Chee
California Regional Water Quality Control Board, San Francisco Bay Region
July 15, 2009

Number and Volume of SSOs – April 1, 2009 – June 30, 2009

Table 1. Number of SSOs

Size of SSO (gallons)	Public SSO's	Public %	Private SSO's	Private %	Total SSO's	% of Total
Greater than or equal to 1,000	1	25%[1]	2	75%[1]	3	38%[2]
From 100 to 999	1	50%[3]	1	50%[3]	2	25%[4]
From 10 to 99	1	14%[5]	2	29%[5]	3	38%[6]
Less than 10 [can include in line above]	0	0	0	0	0	0%
[Public portion of lateral (if applicable)]	NA	NA	NA	NA	NA	NA
Total	**3**		**5**		**8**	**100%**

Notes:

(1) Percentages calculated by responsibility and size category, i. e., 25 % of the number of SSOs 1,000 gallons or greater were public, and 75 % private
(2) Percentages calculated by size category, i.e., the number of SSOs of 1,000 gallons were 38 % of the total number of SSOs during the reporting period.
(3) Percentages calculated by responsibility and size category, i.e., 50% of the number of SSOs of 100-999 gallons were public, and 50% private.
(4) Percentages calculated by size category, i.e., the number of SSOs of 100-999 gallons were 25% of the total number of SSOs during the reporting period.
(5) Percentages calculated by responsibility and size category, i. e., 14% of the number of SSOs from 10 to 99 gallons were public, and 29% were private
(6) Percentages calculated by size category, i.e., the number of SSOs from 10 to 99 gallons were 38% of the total number of SSOs during the reporting period.

The volume of SSO contained and returned to the sewer system, as well as the volume reaching waters of the State is shown in Table 2.

Table 2. Volume of SSOs (see Notes following page)

	Public SSO Volume (gallons)	Public %	Private SSO Volume (gallons)	Private %
Total volume contained and returned to sewer system for treatment	60	15%[1]	100	0.02%[1]
Total volume reaching waters of the State	1,000[2]	100%[2]	0	0%[2]
Total volume not contained but not reaching waters of the State (everything else)	350	85%[3]	4,830	98%[3]
Total	**1,410**	**100%**	**4,930**	**100%**

6E
2

Notes: (1) Percentages calculated by responsibility and volume, i.e., 15% of the volume of public SSOs not reaching waters of the State contained and returned to the sewer system for treatment, and 0.02% of that volume private.
(2) Percentages calculated by responsibility and volume, i.e., 100 % of the volume of SSOs that reached the waters of the State were public. Note that the volume of sewage from the Bee/Dunphy incident has not been estimated but for reporting purposes is assumed to have been more than 1,000 gallons.
(3) Percentages calculated by responsibility and volume, i.e., 85% of volume of pubic SSO's not contained but not reaching waters of the State, and 98% of the volume private

Cause of SSOs – April 1, 2009 – June 30, 2009

Excepting the Bee/Dunphy incident, the predominant cause of SSOs during the period of this report was blockages resulting from roots and debris. One instance of infrastructure (private line) failure occurred. The distribution of SSOs by cause is shown in Table 3 below.

Table 3. Causes of SSOs

Cause of SSO	Public SSO	Public %	Private SSO	Private %
Blockage:				
Roots	2	67%[1]	2	50%[1]
Grease			1	25%[1]
Cleaning Rags (hand towels, Swiffer® Cleaning Pads)				
Debris	1	33%[1]		
Debris from Laterals				
Vandalism				
Animal Carcass				
Construction Debris				
Multiple Causes				
Break in Line			1	25%[1]
Subtotal for Blockage	3	75%[2]	4	100%[2]
Infrastructure Failure	1	25%		
Inflow & Infiltration				
Electrical Power Failure				
Flow Capacity Deficiency				
Natural Disaster				
Bypass				
Cause Unknown				
Total	**4**	**100%**	**4**	**100%**

Notes: (1) Percentages calculated by responsibility and cause, i.e., 67% of the number of public blockage SSOs were caused by roots and 33% were caused by debris in sanitary sewer mains, and 50% of the private were caused by roots, 25% by grease, and 25% by lateral breaks.
(2) Percentages calculated by responsibility and cause category, i.e., 75% of the number of public SSOs were caused by blockages, and 100% of the number of private was caused by blockages.

6E
3

Location of SSOs – April 1, 2009 – June 30, 2009

Most overflows during the reporting period occurred in steep to mixed terrains. The locations, dates and other pertinent information regarding the SSOs that occurred during the reporting period are included in Table 4 and graphically summarized on the attached Figure 1.

Table 4. Locations of SSOs -- April 1, 2009 – June 30, 2009

Key Number (see Figure 1 attached)	Date	Destination	Public (SS) or Private (PVT)
1	Map No S1 Eden Roc Apartment Complex Building "A" + St Stanford Way	From Cleanout to Stanford Way Catch Basin 25' to unpaved area City crews contained	PVT COMM LAT
2	Map No S7 36 and 38 Bulkley Avenue PVT COMM LAT + St Bridgeway	Unpaved Area west of 38 Bulkley. City crews responded and made temporary repairs to most problematic portion	PVT COMM LAT
3	Map No S9 416 Richardson Street + St 4th St	Gutter did not travel far enough to enter storm drain system. City Crews Contained	PVT COMM LAT
4	Map No S1 MH 440101 - 430115 No. 3000 Bridgeway + St Coloma St	Private Storm Drain Did not enter waters of State	SS
5	Map No S1 619 Coloma Street + St Bridgeway	Unpaved Surface on south side of residence	PVT COMM LAT
6	Map No S9 MH 100105 - 100103 No. 635 Main Street + St Lower Crescent	Dirt Side Yard, and in Basement	SS
7	Map No. S9 MH 100302- MH 100301 4 Sausalito Blvd + St 2nd St	Paved Roadway City crews contained	SS
Bee/Dunphy	MH 220106 Bee at Caledonia	Richardson's Bay via Stormdrain	SS

SSO Mitigation Efforts by the City of Sausalito -- April 1, 2009 – June 30, 2009

When an SSO occurs; the particular information regarding when, where and why the SSO occurred are reported in compliance with the 2006 Order and logged into the City's ICOMMM, Inc. sewer system management software ("ICOM3™") as a report and carefully evaluated to determine an appropriate course of action. The goal is to prevent future spills at the same or similar locations from the same causes. The ICOM3™ report includes an assessment as to how often and which method of cleaning will

be most effective or identification of a site for priority repair by the City or the responsible private entity.

Overflows occurred from the publicly-owned collection system at four (4) locations during the reporting period as summarized above and on the attached Figure 1. The locations, causes and corrective actions are as follows:

- 3000 Bridgeway, Sausalito: Blockage in sanitary sewer caused by poorly configured manhole channel (at a junction comprised of a converted SMCSD pump station wet well to gravity flow manhole). Debris build-up at outfall portion of manhole structure 440101 City of Sausalito SS Map S1. The blockage was rodded and cleared. The City of Sausalito has increased the scheduled maintenance frequency for system item 440101 – 430115 SS Map S1 to 6 months.
- 635 Main Street, Sausalito: Blockage in public main caused by roots. Blockage caused SSO at recently installed lateral with a Contra Costa Valve. City cleared blockage and had affected areas sanitized by professional cleanup service provider the same evening. Line has been spot repaired since this event and an old vertical lamp hole has been replaced with a conventional manhole. The City of Sausalito has increased the maintenance frequency for system item 100105 – 100104 SS Map S9 to 6 months.
- 4 Sausalito Boulevard, Sausalito: Blockage in public main caused by a combination of roots and brick becoming stuck in the sanitary sewer at a vertical lamp hole. Crews were able to restore flow with approximately 10 gallons of sewage exiting the sanitary sewer onto pavement. City crews set up containment and Vactor™ at nearest drainage area while rodder crew worked to clear blockage and restore flow. Ensuing CCTV work by City crews revealed the problem and an immediate spot repair was performed. The vertical lamp hole has been eliminated and replaced with 6" C900 pipe. The City of Sausalito has increased the maintenance frequency for system item 100302 – 100301 SS Map S9 to 6 months.
- At the location labeled Bee/Dunphy on the attached Figure 1, on May 28, 2009 the City discovered evidence of a hydraulic connection between the lower (inactive) portion of the manhole at the intersection of Bee and Caledonia Streets and the discharge of a stormdrain outfall to Richardson's Bay. A repair, completed May 30, 2009, eliminated that hydraulic connection. This matter was reported as an SSO and given State Office of Emergency Services control number 09-3977. This matter is the subject of a report which will follow under separate cover.

Additionally repairs during the reporting period were made at 5 other "hot spots" identified on the basis of problems identified during maintenance and 1 private problem. Those consist of:

- 3 spot repairs to the sanitary sewer
- 1 new manhole installation
- 1 immediate spot repair by City crews to a private lateral; as a means to protect the public right of way and waters of the State

Four (4) private SSO's occurred during the reporting period and were mitigated. The locations, causes and corrective actions are as follows:

6E
5

- Eden Roc Apartment Complex Eden Roc Way, Sausalito: Line was snaked to relieve a grease blockage. The City of Sausalito notified the property management firm that quicker response time is needed in the future
- 36-38 Bulkley Avenue, Sausalito: (Sewer lateral within a steep geologically active hillside) Sewage flowing from a defective joint and overflowing from a break upstream due to ground movement. City crews made temporary repairs to the lower lateral. Property owner made temporary repairs to upper lateral. City of Sausalito has notified the owner to televise and submit sewer video inspection to the City of Sausalito Sewer System Coordinator (SSC) for further evaluation before recommending permanent repairs/replacement.
- 416 Richardson St, Sausalito: Blockage in private lateral caused by roots – rodded and cleared. City provided immediate response and protected/contained local storm drainage system with sand bags and Vactor™.
- 619 Coloma, Sausalito: Blockage in a private common lateral caused by structural defect with root intrusion. Blockage cleared. City working with private lateral owners to ensure that repairs are made.

These corrective measures were performed in cooperation with other local and regional agencies.

For the quarter ended June 30, 2009, five (5) private laterals have been repaired or replaced as a result of the City's existing private lateral program. As indicated above, the City promptly identifies the cause and prioritizes either for repair, replacement or increased maintenance frequency when any blockage or SSO involves the public system. Further, a potentially significant number of the private sewer laterals in the City of Sausalito are known to be old and may be in need of repairs. Since 1991[1], the City of Sausalito has had a program requiring the inspection and repair of private sewer laterals upon sale or major remodel of habitable structures. In Sausalito, laterals are privately-owned from the structure to the final termination point (including the *wye*) at the City Sanitary Sewer main line. Actions that trigger the mandatory inspection are either home (or building) sale or major remodel work (including, but not limited to, an improvement value of $50,000 or more). As the need for repairs is identified on the basis of those inspections, performance of maintenance or repair is required by the City as a condition of certificate of occupancy or recordation of transfer of deed. The City's criteria for requiring such maintenance or repair is expressed in the Ordinance and Council Administrative Interpretation (*ibid.*) to eliminate infiltration of pollutants into the groundwater, or surface water including Richardson's Bay. This has been a very successful program. The City is in the process of developing improvements to the existing private lateral program to expedite identification and repair of private facilities to prevent discharge of pollutants to waters of the State.

Other Information

The City contracted with West Yost Associates to prepare plans, specifications and estimate for Priority 1, Sanitary Sewer and Pump station repairs. Plans are at 35% stage and anticipated to be completed and under construction in the 4th Quarter 2009.

[1] Copies of the Sausalito Municipal Code are publically accessible at http://www.ci.sausalito.ca.us/Index.aspx?page=121, as is a copy of the City's promulgated administrative interpretation of the relevant code section at http://www.ci.sausalito.ca.us/Modules/ShowDocument.aspx?documentid=265.

6E
6

Jo Ann Cola
US Environmental Protection Agency, Region IX
Michael Chee
California Regional Water Quality Control Board, San Francisco Bay Region
July 15, 2009

The City continues to meet regularly with staff and Board members of Sausalito-Marin City Sanitary District and Tamalpais Community Services District on coordination opportunities, capital project planning. Our agencies met twice in the reporting period. Points of discussion include Sewer Lateral Grant Program, Compliance Order response Planning and Plan implementation, Wet-Weather flow management, Sharing of Equipment, SSO Response and Response Training.

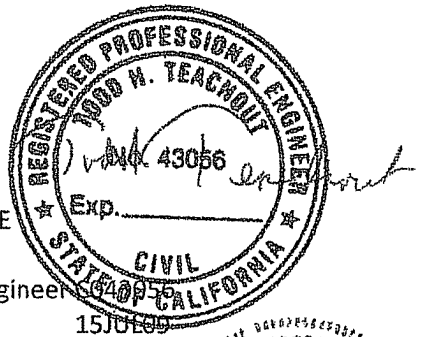
The City retained David Patzer, DKF Solutions Group to revise its SSO Response Manual. City Crews participated in an initial 2 hours of training on the revised procedures March 18th.

During the 2nd quarter of 2009, the City of Sausalito contracted with PSC Industrial Outsourcing Group for off haul needs of class II solid debris collected by the City during maintenance of its sewer system. A key component of the contract between PSC and the City is an 8 yard Certified Solids Containment Bin (Closed Top) rental provided for on-going debris containment enabling the City to properly store and dispose at appropriately-permitted sanitary landfill(s).

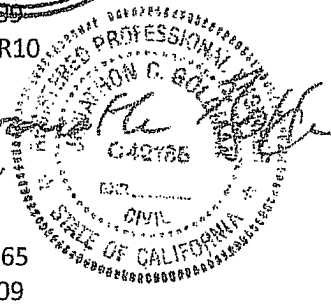
Certification

I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,
City of Sausalito



Todd Teachout, PE
City Engineer
California Civil Engineer C43056
Sealed 15JUL09
Expires 31MAR10



Jonathon Goldman, PE
Director of Public Works
California Civil Engineer C042165
Sealed 15JUL09
Expires 31MAR11

Attachment

6E
7

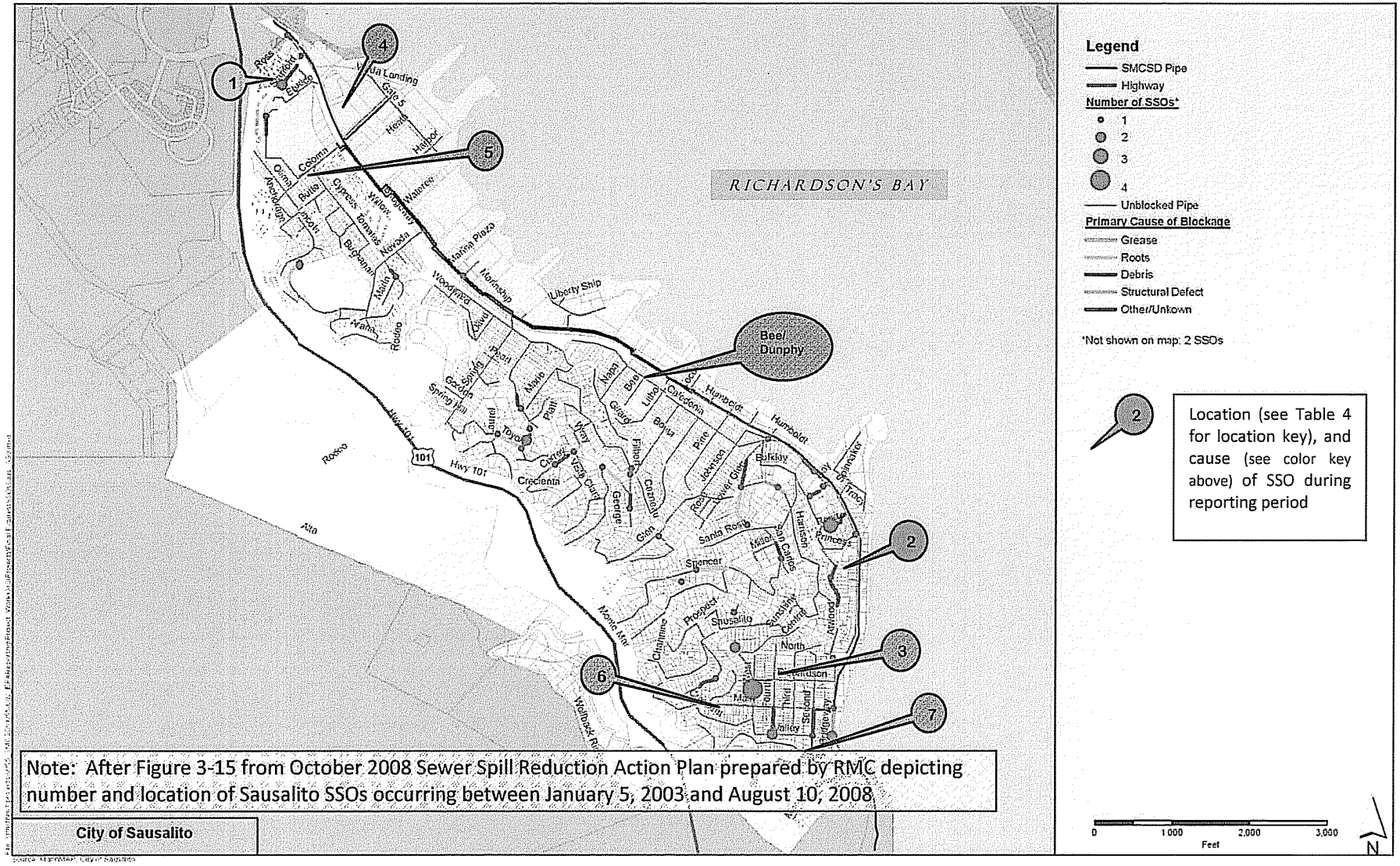
cc: Bob Simmons – SMCSD
Jon Elam – TCSD
Adam Politzer – City Manager
Mary Wagner – City Attorney

Northern California Riverwatch
6741 Sebastopol Avenue, Suite 140
Sebastopol, CA 95472

Jerry Bernhaut, Esquire
P.O. Box 5469
Santa Rosa, CA 95402-5469
File – EPA Order Compliance 2009

Attachment to City of Sausalito's Report to
Jo Ann Cola
US Environmental Protection Agency, Region IX
Michael Chee
California Regional Water Quality Control Board, San Francisco Bay Region
Dated July 15, 2008

Figure 1 – Locations of SSOs – April 1 to June 30, 2009 with Historic Data Since 2003



Note: After Figure 3-15 from October 2008 Sewer Spill Reduction Action Plan prepared by RMC depicting number and location of Sausalito SSOs occurring between January 5, 2003 and August 10, 2008

CITY OF SAUSALITO
Jonathan Leone, Mayor
Adam Politzer, City Manager

July 15, 2009

Myriam L. Zech
Water Resources Control Engineer
State Water Resources Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

RE: RESPONSE TO REQUEST FOR INFORMATION
CROSS-CONNECTION BETWEEN SANITARY SEWER AT BEE AND CALEDONIA AND DUNPHY PARK STORM DRAIN OUTFALL
SAUSALITO, MARIN COUNTY, CALIFORNIA

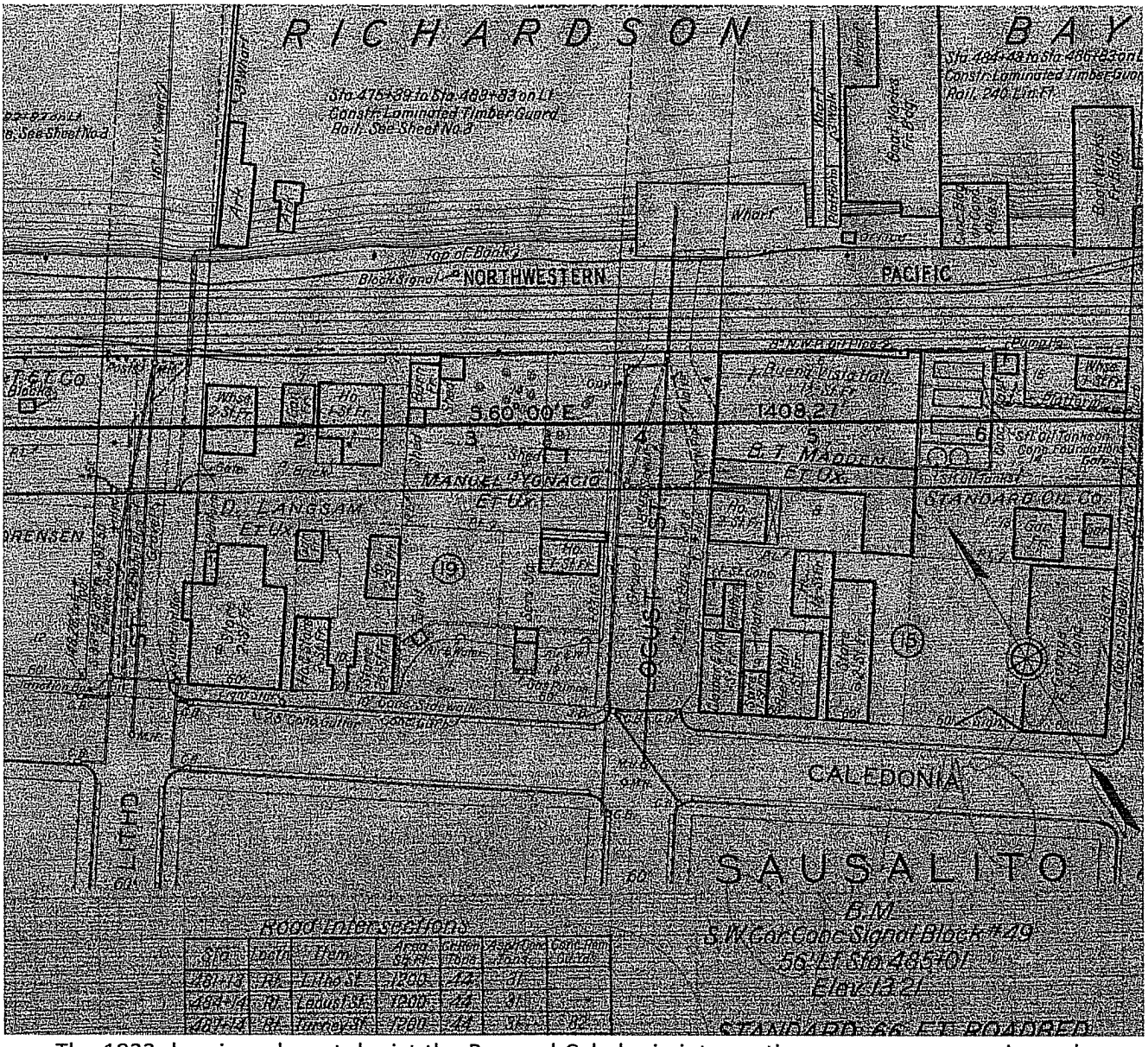
Dear Ms. Zech:

Thank you for your email of July 6, 2009. In your email, you requested information regarding an incident that was reported to the State Office of Emergency Services on May 28, 2009 and given control number 09-3977. As a result of an investigation of liquid bubbling up from the shoreline at the end of Locust on May 27, 2009, (which Marin County Public Health Laboratory confirmed was not sewage), we discovered a potential sewer/storm drain cross connection between the intersection of Bee and Caledonia and the northernmost of two stormdrain outfalls at Dunphy Park (see attached map). In your email, you made the following statements and asked the following specific questions:

> "We are trying to understand the circumstances surrounding the discovery of a cross-connection at the bottom of the manhole between Bee and Caledonia. The cross-connection was discovered in May 2009 and resulted in SSOs into Richardson Bay from the stormdrain from the outfall in Dunphy Park.
>
> The manhole at Bee and Caledonia serviced an older system which routed sewage to the Bay. When the current system, which routes sewage to the Sausalito Marin City Sanitation District, was completed, the older system was plugged by the City of Sausalito.
>
> Please explain:
> 1) when was the manhole originally plugged;
> 2) how was the manhole originally plugged (i.e., what materials did you use, and was the plug intended to be permanent);
> 3) why the plug failed, and when;'
> 4) what repairs you did as a result of your investigation;
> 5) estimated volumes of SSO released, if feasible."

6E
11

On the basis of drawings on file here in City Hall, as of 1932 there were combined sanitary sewer and storm sewer lines and outfalls as shown on the excerpt from a drawing produced by the California State Highway Department dated October 17, 1932.



The 1932 drawings do not depict the Bee and Caledonia intersection, so we are assuming only that a combined system at that location was feasible as of that time period.

Again based on drawings in the files here in City Hall, in the late 1940's the "Southern Marin Sanitation District," considered a force main and interceptors along with treatment plant

6E
12

locations, and then in the early 1950's Sausalito-Marin City Sanitary District approved plans for an Intercepting Sewer and Force Main project. Although the plans in this office do not include the specific sanitary sewer manhole at Bee and Caledonia, the materials of manhole construction at Bee and Caledonia (brick and terra cotta pipe in the lower portion of the manhole) are consistent with those specified in the March 1952 plans. Those plans specify that sewers to be intercepted with a manhole be plugged and sealed without further details. Based on the information available, it is not clear when or by whom the subject abandoned portions of the drainage system found in the bottom portion of the sanitary sewer manhole at Bee and Caledonia were plugged. It is assumed that the plug was intended to be permanent although it is not clear why the lower portion of the manhole was not filled with concrete at that time.

Since the City became aware of the problem, the City has:

(1) Exposed the bottom of the manhole both interior and exterior, (in the interior photo below only the active, suspended portion of the manhole is visible).

LEE
13

(2) Determined, using dye testing and video inspection, that the lower portion of the manhole was inactive with respect to the sanitary sewer system and severed and sealed both the exterior and interior of the manhole using Portland cement concrete on May 29, 2009.

(3) Verified that no dye introduced into the sanitary sewer is visibly detectable at the previously affected storm drain outfall.

(4) Collaborated with the Sausalito-Marin City Sanitary District to verify the same for its facilities in the vicinity of the incident.

(5) Continued to collect grab water samples for sewage screening analysis by the Marin County Public Health Laboratory and maintained posted warnings based on regular communication with Marin County Environmental Health Services Department Chief, Rebecca Ng (graphic summary of results attached).

(6) Collected grab samples from the Dunphy N outfall, the Locust Street south site, and Richardson's Bay for low-level CAM 17 metals analysis (results attached).

LCE 14

(6) Continued to pursue an investigation regarding the source of elevated sewage indicator in samples collected upstream of the Bee and Caledonia location from the City's storm drain system,

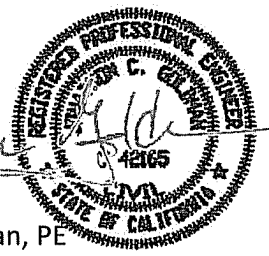
(7) Continued to pursue an investigation of similarly located sanitary sewer manholes along Caledonia to verify that no other leakage or apparent plug failures are evident.

With respect an estimate of the volume of sewage released, the City has no reasonable basis for estimating the volume inasmuch as we have no basis for estimating the flow rate or duration. For reporting purposes we have assumed that the release due to the Bee/Caledonia manhole issue was more than 1,000 gallons.

I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

You can reach me via electronic mail at jgoldman@ci.sausalito.ca.us, or you are welcome to call at 415-289-4176.

Sincerely,
City of Sausalito



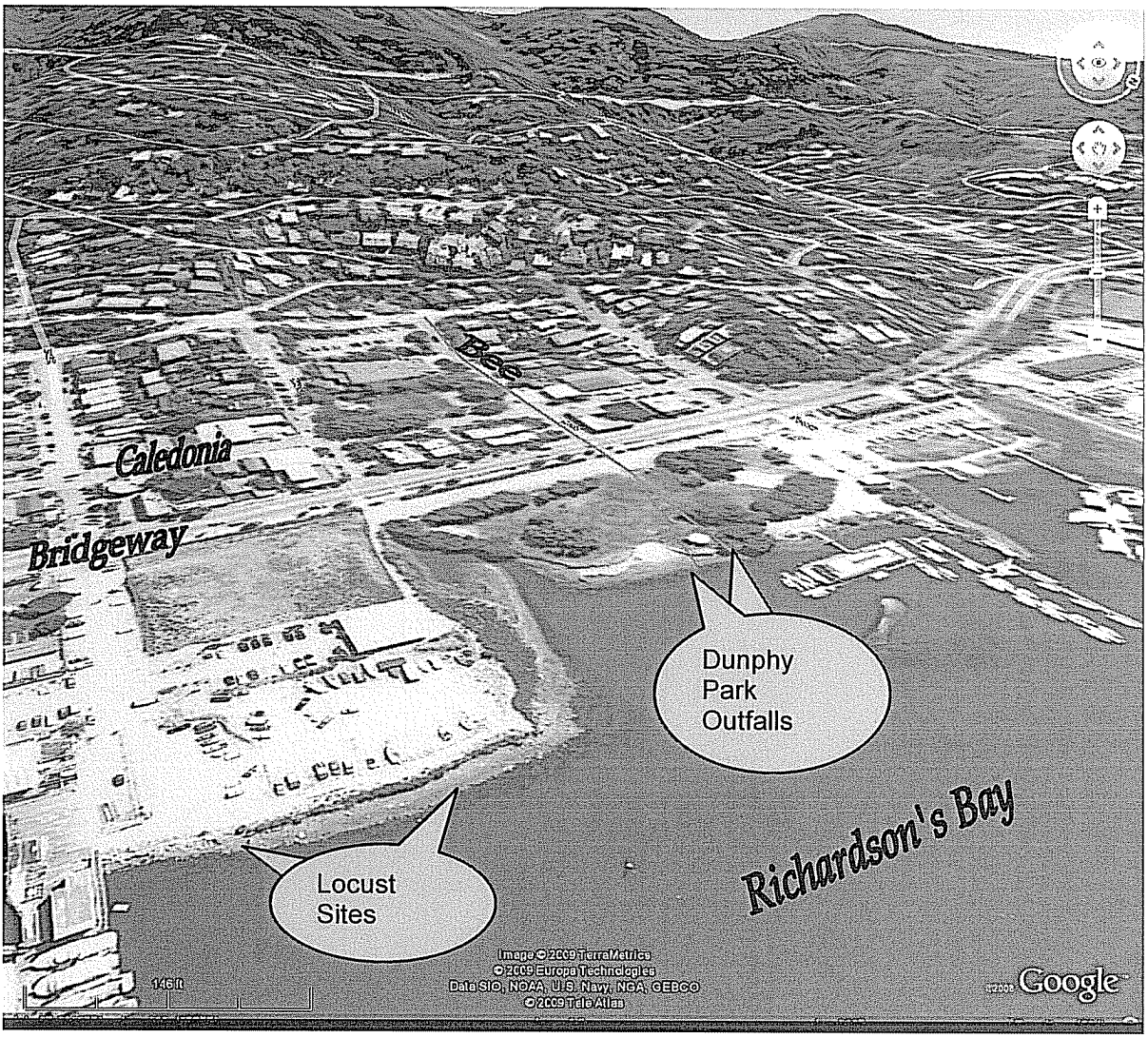
Jonathon Goldman, PE
Director of Public Works
California Civil Engineer C042165
Sealed 15JUL09
Expires 31MAR11

Attachments: (1) Oblique Aerial Photograph
(2) Graphic Summary of Sewage Screening Results
(3) Low-level CAM17 Metals analytical results

LOE
15

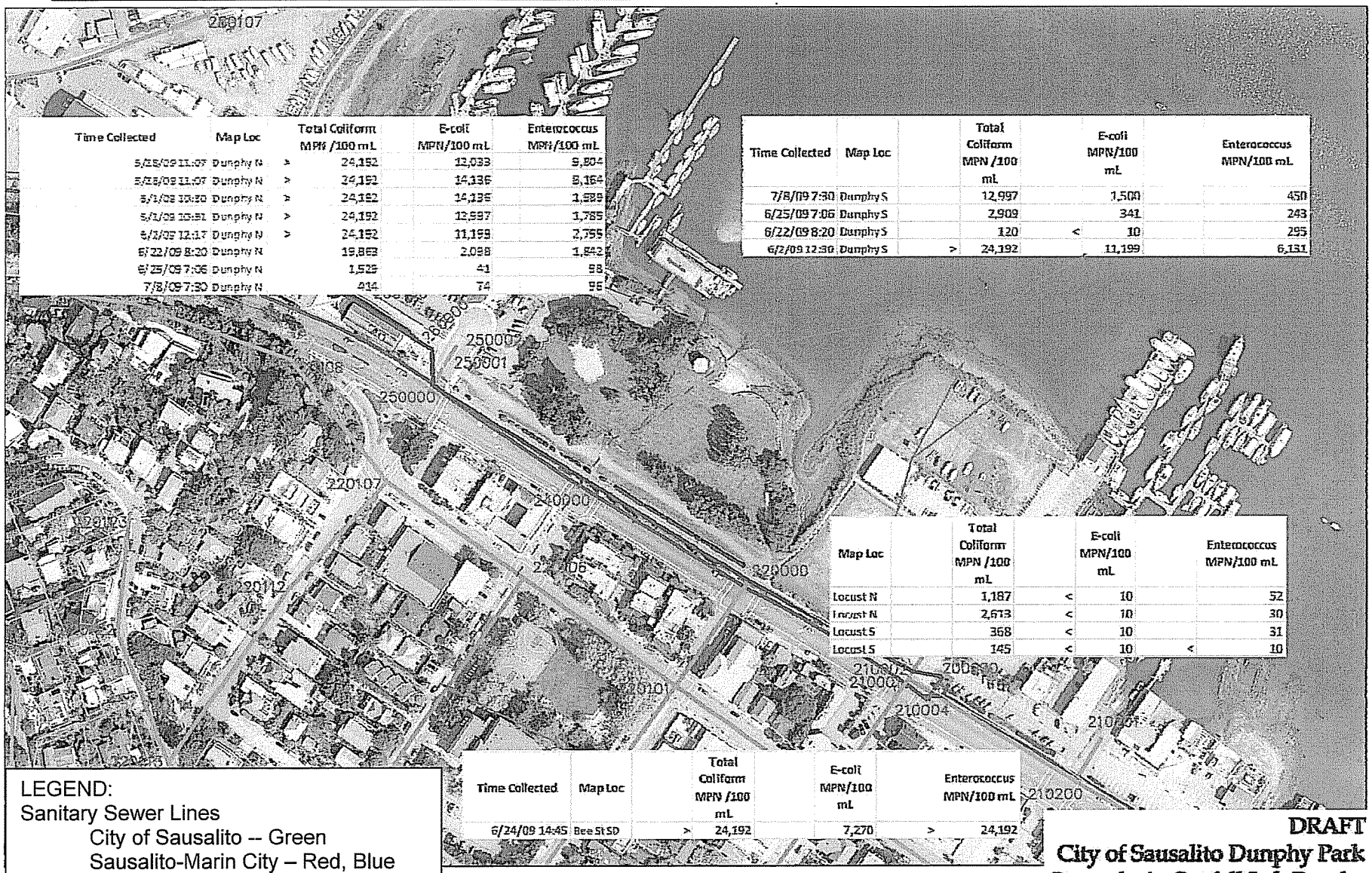
cc: Lila Tang – Chief, NPDES Wastewater Division
JoAnn Cola – EPA Clean Water Act Compliance Office
Bob Simmons – Sausalito-Marin City Sanitary District
Adam Politzer – City Manager
Mary Wagner, Esq. – City Attorney
Todd Teachout – City Engineer
Pat Guasco – Sewer System Coordinator
File: Regional Board Order Compliance - 2009

6E
16



View to W from Richardson's Bay showing approximate stormdrain alignment

6E
17



Time Collected	Map Loc		Total Coliform MPN /100 mL	E-coli MPN/100 mL	Enterococcus MPN/100 mL
5/28/09 11:07	Dunphy N	>	24,192	12,033	9,804
5/28/09 11:07	Dunphy N	>	24,192	14,136	8,164
5/1/09 10:30	Dunphy N	>	24,192	14,136	1,589
5/1/09 10:31	Dunphy N	>	24,192	12,997	1,785
6/2/09 12:17	Dunphy N	>	24,192	11,199	2,755
6/22/09 8:20	Dunphy N		19,863	2,098	1,842
6/25/09 7:06	Dunphy N		1,529	41	58
7/8/09 7:30	Dunphy N		914	74	96

Time Collected	Map Loc		Total Coliform MPN /100 mL		E-coli MPN/100 mL	Enterococcus MPN/100 mL
7/8/09 7:30	Dunphy S		12,997		1,500	450
6/25/09 7:06	Dunphy S		2,909		341	243
6/22/09 8:20	Dunphy S		120	<	10	295
6/2/09 12:30	Dunphy S	>	24,192		11,199	6,131

Map Loc		Total Coliform MPN /100 mL		E-coli MPN/100 mL		Enterococcus MPN/100 mL
Locust N		1,187	<	10		52
Locust N		2,613	<	10		30
Locust S		368	<	10		31
Locust S		145	<	10	<	10

Time Collected	Map Loc		Total Coliform MPN /100 mL		E-coli MPN/100 mL		Enterococcus MPN/100 mL
6/24/09 14:45	Bee St SD	>	24,192		7,270	>	24,192

Attachment No. 3 Low-Level CAM 17 Metals Analytical Results
July 15, 2009
14 Pages

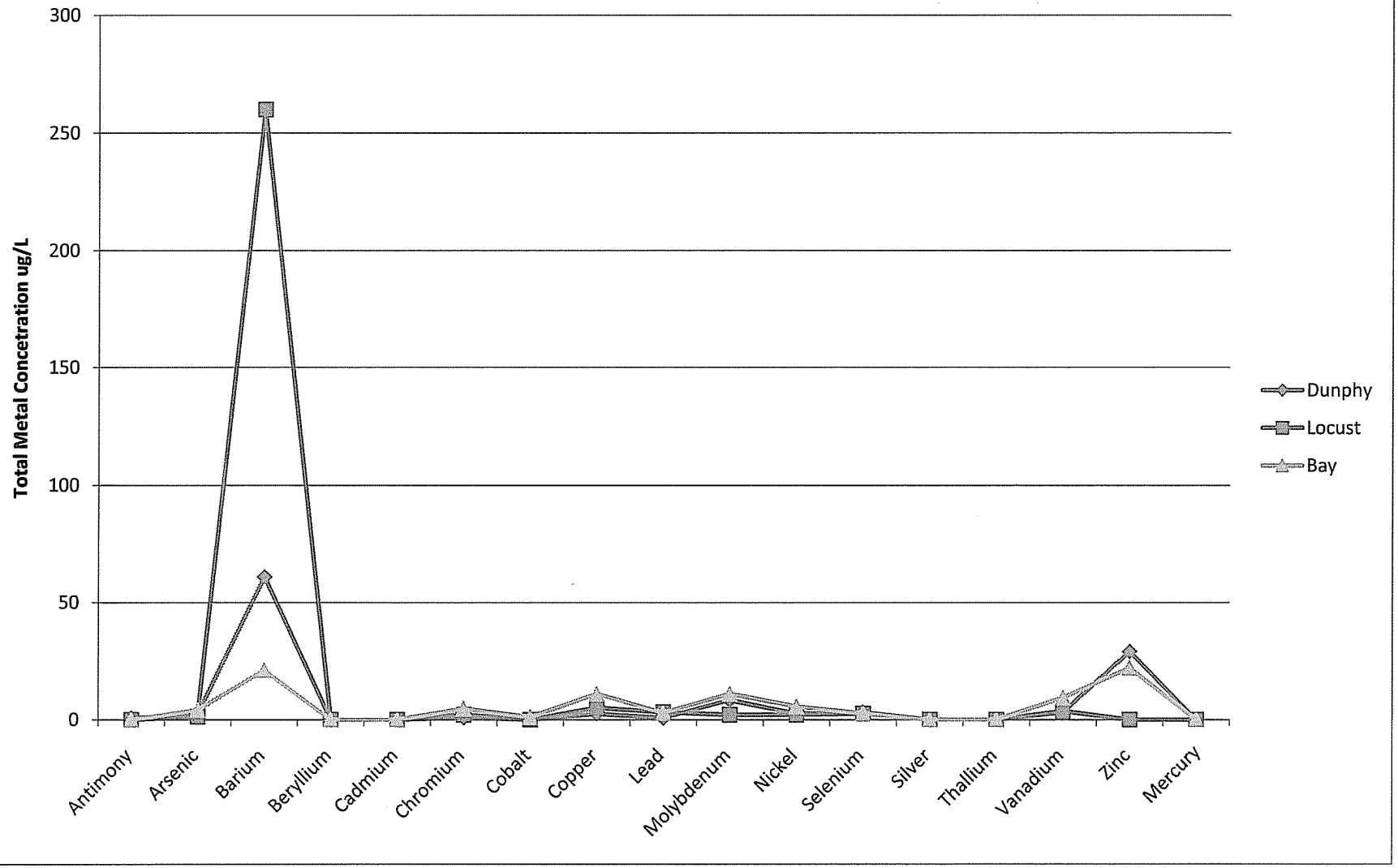
Summary of Analytical Results
Total CAM 17 Metals from Grab Water Samples Collected at 08:30 22 June 2009 from the Dunphy Park SD Outfall (North), Locust Street Seep and Richardson's Bay
City of Sausalito

Metal	Sample	Result (ug/L)		Metal	Sample	Result (ug/L)		Metal	Sample	Result (ug/L)
Antimony	Dunphy	0.62		Antimony	Locust Seep	< 0.5		Antimony	Locust Bay	< 0.5
Arsenic	Dunphy	2.2		Arsenic	Locust Seep	1.4		Arsenic	Locust Bay	4.2
Barium	Dunphy	61		Barium	Locust Seep	260		Barium	Locust Bay	21
Beryllium	Dunphy	< 0.5		Beryllium	Locust Seep	< 0.5		Beryllium	Locust Bay	< 0.5
Cadmium	Dunphy	< 0.5		Cadmium	Locust Seep	< 0.5		Cadmium	Locust Bay	< 0.5
Chromium	Dunphy	0.89		Chromium	Locust Seep	2.1		Chromium	Locust Bay	4.7
Cobalt	Dunphy	< 0.5		Cobalt	Locust Seep	< 0.5		Cobalt	Locust Bay	1.1
Copper	Dunphy	2.5		Copper	Locust Seep	5		Copper	Locust Bay	11
Lead	Dunphy	0.7		Lead	Locust Seep	3.1		Lead	Locust Bay	2.9
Molybdenum	Dunphy	8.3		Molybdenum	Locust Seep	2		Molybdenum	Locust Bay	11
Nickel	Dunphy	2.5		Nickel	Locust Seep	2.1		Nickel	Locust Bay	5.6
Selenium	Dunphy	3		Selenium	Locust Seep	2.6		Selenium	Locust Bay	2.6
Silver	Dunphy	< 0.5		Silver	Locust Seep	< 0.5		Silver	Locust Bay	< 0.5
Thallium	Dunphy	< 0.5		Thallium	Locust Seep	< 0.5		Thallium	Locust Bay	< 0.5
Vanadium	Dunphy	3.1		Vanadium	Locust Seep	3.6		Vanadium	Locust Bay	9.3
Zinc	Dunphy	29		Zinc	Locust Seep	< 10		Zinc	Locust Bay	22
Mercury	Dunphy	<0.05		Mercury	Locust Seep	<0.05		Mercury	Locust Bay	<0.05

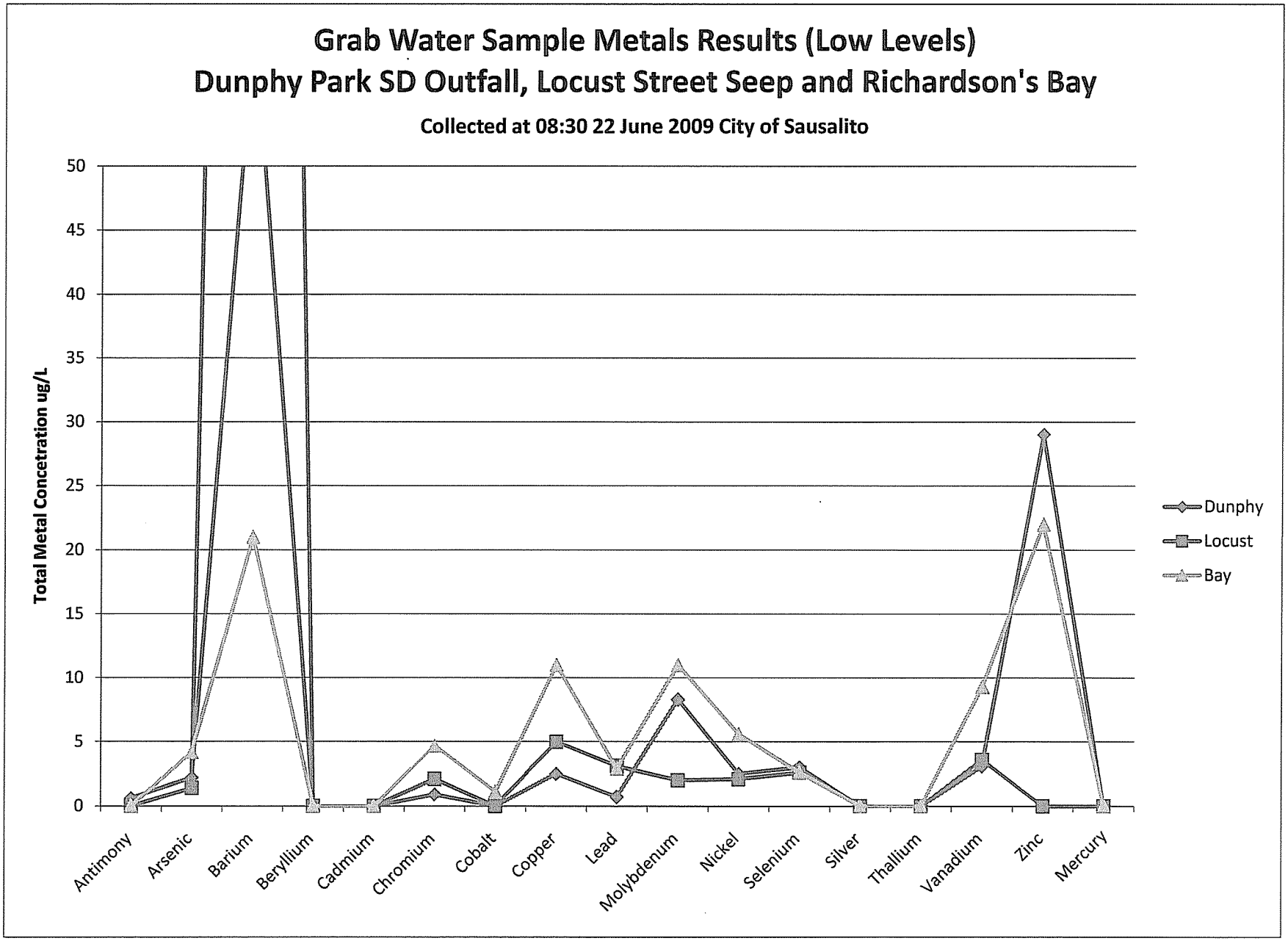
See Laboratory Report following pages

Grab Water Sample Metals Results
Dunphy Park SD Outfall, Locust Street Seep and Richardson's Bay

Collected at 08:30 22 June 2009 City of Sausalito



02 of 20


Grab Water Sample Metals Results (Low Levels)
Dunphy Park SD Outfall, Locust Street Seep and Richardson's Bay
Collected at 08:30 22 June 2009 City of Sausalito
Total Metal Concetration ug/L
50
45
40
35
30
25
20
15
10
5
0
Antimony
Arsenic
Barium
Beryllium
Cadmium
Chromium
Cobalt
Copper
Lead
Molybdenum
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Mercury
Dunphy
Locust
Bay

Thursday, July 09, 2009

JC Goldman
City of Sausalito
420 Litho Street
Sausalito, CA 94965

RE: Lab Order: J060874
Project ID: LOCUST/ DUNPHY

Collected By: JC Goldman
PO/Contract #:

Dear JC Goldman:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, June 22, 2009. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Enclosures

Project Manager: Mike Hamilton

Lab Director: Christine Horn

1885 North Kelly Road ◦ Napa, California 94558
(707) 258-4000 ◦ Fax: (707) 226-1001 ◦ e-mail: info@caltestlabs.com

6E
22

SAMPLE SUMMARY

Lab Order: J060874

Project ID: LOCUST/ DUNPHY

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J060874001	DUNPHY	Water	6/22/2009 08:30	6/22/2009 15:49
J060874002	LOCUST S'	Water	6/22/2009 08:40	6/22/2009 15:49
J060874003	LOCUST B'	Water	6/22/2009 08:40	6/22/2009 15:49

1885 North Kelly Road ◦ Napa, California 94558
(707) 258-4000 ◦ Fax: (707) 226-1001 ◦ e-mail: info@caltestlabs.com

06
23

NARRATIVE

Lab Order: J060874

Project ID: LOCUST/ DUNPHY

General Qualifiers and Notes

Caltest authorizes this report to be reproduced only in its entirety. Results are specific to the sample(s) as submitted and only to the parameter(s) reported.

Caltest certifies that all test results for wastewater and hazardous waste analyses meet all applicable NELAC requirements; all microbiology and drinking water testing meet applicable ELAP requirements, unless stated otherwise.

All analyses performed by EPA Methods or Standard Methods (SM) 18th Ed. except where noted.

Caltest collects samples in compliance with 40 CFR, EPA Methods, Cal. Title 22, and Standard Methods.

Dilution Factors (DF) reported greater than '1' have been used to adjust the result, Reporting Limit (RL), and Method Detection Limit (MDL).

All Solid, sludge, and/or biosolids data is reported in Wet Weight, unless otherwise specified.

Laboratory filtration for dissolved metals (excluding mercury) and/or pH analysis was not performed within the 15 minute holding time as specified by 40CFR 136.3 table II.

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

ND - Non Detect - indicates analytical result has not been detected.

RL - Reporting Limit is the quantitation limit at which the laboratory is able to detect an analyte. An analyte not detected at or above the RL is reported as ND unless otherwise noted or qualified. For analyses pertaining to the State Implementation Plan of the California Toxics Rule, the Caltest Reporting Limit (RL) is equivalent to the Minimum Level (ML). A standard is always run at or below the ML. Where Reporting Limits are elevated due to dilution, the ML calibration criteria has been met.

J - reflects estimated analytical result value detected below the Reporting Limit (RL) and above the Method Detection Limit (MDL). The 'J' flag is equivalent to the DNQ Estimated Concentration flag.

E - indicates an estimated analytical result value.

B - indicates the analyte has been detected in the blank associated with the sample.

NC - means not able to be calculated for RPD or Spike Recoveries.

SS - compound is a Surrogate Spike used per laboratory quality assurance manual.

NOTE: This document represents a complete Analytical Report for the samples referenced herein and should be retained as a permanent record thereof.

Qualifiers and Compound Notes

1 Sample diluted prior to analysis in an effort to reduce matrix interferences resulting in (a) higher reporting limit(s).

1885 North Kelly Road ◦ Napa, California 94558
(707) 258-4000 ◦ Fax: (707) 226-1001 ◦ e-mail: info@caltestlabs.com

6E
24

ANALYTICAL RESULTS

Lab Order: J060874

Project ID LOCUST/ DUNPHY

Lab ID: J060874001 Date Collected: 6/22/2009 08:30 Matrix: Water

Sample ID: DUNPHY Date Received: 6/22/2009 15:49

Parameters	Result	Units	R. L.	DF	Prepared	Batch	Analyzed	Batch	Qual
Mercury Analysis by FIMS, Low Level	**Prep Method:**		EPA 245.1		**Prep by:** UK				
	Analytical Method:		EPA 245.1, Low Level				**Analyzed by:** LM		
Mercury	ND	ug/L	0.050	1	07/06/09 00:00	MPR 7750	07/06/09 14:38	MHG 2815	
Metals by ICPMS Collision Mode, Total	**Prep Method:**		EPA 200.8		**Prep by:** UK				
	Analytical Method:		EPA 200.8				**Analyzed by:** ECV		
Antimony	0.62	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:50	MMS 4974	1
Arsenic	2.2	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:50	MMS 4974	
Barium	61	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:50	MMS 4974	
Beryllium	ND	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:50	MMS 4974	
Cadmium	ND	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:50	MMS 4974	
Chromium	0.89	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:50	MMS 4974	
Cobalt	ND	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:50	MMS 4974	
Copper	2.5	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:50	MMS 4974	
Lead	0.70	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:50	MMS 4974	
Molybdenum	8.3	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:50	MMS 4974	
Nickel	2.5	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:50	MMS 4974	
Selenium	3.0	ug/L	2.5	5	07/02/09 00:00	MPR 7747	07/07/09 17:50	MMS 4974	
Silver	ND	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:50	MMS 4974	
Thallium	ND	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:50	MMS 4974	
Vanadium	3.1	ug/L	2.5	5	07/02/09 00:00	MPR 7747	07/07/09 17:50	MMS 4974	
Zinc	29	ug/L	10	5	07/02/09 00:00	MPR 7747	07/07/09 17:50	MMS 4974	

Lab ID: J060874002 Date Collected: 6/22/2009 08:40 Matrix: Water

Sample ID: LOCUST S' Date Received: 6/22/2009 15:49

Parameters	Result	Units	R. L.	DF	Prepared	Batch	Analyzed	Batch	Qual
Mercury Analysis by FIMS, Low Level	**Prep Method:**		EPA 245.1		**Prep by:** UK				
	Analytical Method:		EPA 245.1, Low Level				**Analyzed by:** LM		
Mercury	ND	ug/L	0.050	1	07/06/09 00:00	MPR 7750	07/06/09 14:44	MHG 2815	
Metals by ICPMS Collision Mode, Total	**Prep Method:**		EPA 200.8		**Prep by:** UK				
	Analytical Method:		EPA 200.8				**Analyzed by:** ECV		
Antimony	ND	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:55	MMS 4974	1
Arsenic	1.4	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:55	MMS 4974	
Barium	260	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:55	MMS 4974	
Beryllium	ND	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:55	MMS 4974	
Cadmium	ND	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:55	MMS 4974	

1885 North Kelly Road ◦ Napa, California 94558
(707) 258-4000 ◦ Fax: (707) 226-1001 ◦ e-mail: info@caltestlabs.com

6E
25

ANALYTICAL RESULTS

Lab Order: J060874

Project ID LOCUST/ DUNPHY

Lab ID: J060874002 Date Collected: 6/22/2009 08:40 Matrix: Water

Sample ID: LOCUST S' Date Received: 6/22/2009 15:49

Parameters	Result	Units	R. L.	DF	Prepared	Batch	Analyzed	Batch	Qual
Chromium	2.1	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:55	MMS 4974	
Cobalt	ND	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:55	MMS 4974	
Copper	5.0	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:55	MMS 4974	
Lead	3.1	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:55	MMS 4974	
Molybdenum	2.0	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:55	MMS 4974	
Nickel	2.1	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:55	MMS 4974	
Selenium	2.6	ug/L	2.5	5	07/02/09 00:00	MPR 7747	07/07/09 17:55	MMS 4974	
Silver	ND	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:55	MMS 4974	
Thallium	ND	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/07/09 17:55	MMS 4974	
Vanadium	3.6	ug/L	2.5	5	07/02/09 00:00	MPR 7747	07/07/09 17:55	MMS 4974	
Zinc	ND	ug/L	10	5	07/02/09 00:00	MPR 7747	07/07/09 17:55	MMS 4974	

Lab ID: J060874003 Date Collected: 6/22/2009 08:40 Matrix: Water

Sample ID: LOCUST B' Date Received: 6/22/2009 15:49

Parameters	Result	Units	R. L.	DF	Prepared	Batch	Analyzed	Batch	Qual
Mercury Analysis by FIMS, Low Level	**Prep Method:**		EPA 245.1		**Prep by:** UK				
	Analytical Method:		EPA 245.1, Low Level				**Analyzed by:** LM		
Mercury	ND	ug/L	0.050	1	07/06/09 00:00	MPR 7750	07/06/09 14:46	MHG 2815	
Metals by ICPMS Collision Mode, Total	**Prep Method:**		EPA 200.8		**Prep by:** UK				
	Analytical Method:		EPA 200.8				**Analyzed by:** ECV		
Antimony	ND	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/08/09 13:37	MMS 4974	1
Arsenic	4.2	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/08/09 13:37	MMS 4974	
Barium	21	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/08/09 13:37	MMS 4974	
Beryllium	ND	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/08/09 13:37	MMS 4974	
Cadmium	ND	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/08/09 13:37	MMS 4974	
Chromium	4.7	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/08/09 13:37	MMS 4974	
Cobalt	1.1	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/08/09 13:37	MMS 4974	
Copper	11	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/08/09 13:37	MMS 4974	
Lead	2.9	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/08/09 13:37	MMS 4974	
Molybdenum	11	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/08/09 13:37	MMS 4974	
Nickel	5.6	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/08/09 13:37	MMS 4974	
Selenium	2.6	ug/L	2.5	5	07/02/09 00:00	MPR 7747	07/08/09 13:37	MMS 4974	
Silver	ND	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/08/09 13:37	MMS 4974	
Thallium	ND	ug/L	0.50	5	07/02/09 00:00	MPR 7747	07/08/09 13:37	MMS 4974	
Vanadium	9.3	ug/L	2.5	5	07/02/09 00:00	MPR 7747	07/08/09 13:37	MMS 4974	
Zinc	22	ug/L	10	5	07/02/09 00:00	MPR 7747	07/08/09 13:37	MMS 4974	

1885 North Kelly Road ◦ Napa, California 94558
(707) 258-4000 ◦ Fax: (707) 226-1001 ◦ e-mail: info@caltestlabs.com

66
26

QUALITY CONTROL DATA

Lab Order: J060874

Project ID: LOCUST/ DUNPHY

Analysis Description:	Metals by ICPMS Collision Mode, Total	**QC Batch:**	MPR/7747
Analysis Method:	EPA 200.8	**QC Batch Method:**	EPA 200.8

METHOD BLANK: 281644

Parameter	Blank Result	Reporting Limit	Units	Qualifiers
Antimony	ND	0.50	ug/L	
Arsenic	ND	0.50	ug/L	
Barium	ND	0.10	ug/L	
Beryllium	ND	0.10	ug/L	
Cadmium	ND	0.10	ug/L	
Chromium	ND	0.50	ug/L	
Cobalt	ND	0.50	ug/L	
Copper	ND	0.50	ug/L	
Lead	ND	0.25	ug/L	
Molybdenum	ND	0.25	ug/L	
Nickel	ND	0.50	ug/L	
Silver	ND	0.10	ug/L	
Thallium	ND	0.10	ug/L	
Vanadium	ND	2.0	ug/L	
Zinc	ND	10	ug/L	

METHOD BLANK: 281644

Parameter	Blank Result	Reporting Limit	Units	Qualifiers
Selenium	ND	1.0	ug/L	

LABORATORY CONTROL SAMPLE: 281645

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	20	20	102	85-115	
Arsenic	ug/L	20	20	102	85-115	
Barium	ug/L	20	21	104	85-115	
Beryllium	ug/L	20	21	103	85-115	
Cadmium	ug/L	20	20	101	85-115	
Chromium	ug/L	20	20	98	85-115	
Cobalt	ug/L	20	20	98	85-115	
Copper	ug/L	20	20	98	85-115	
Lead	ug/L	20	21	105	85-115	
Molybdenum	ug/L	20	20	100	85-115	
Nickel	ug/L	20	20	99	85-115	
Selenium	ug/L	20	21	104	85-115	
Silver	ug/L	20	20	99	85-115	
Thallium	ug/L	20	20	99	85-115	

1885 North Kelly Road ◦ Napa, California 94558
(707) 258-4000 ◦ Fax: (707) 226-1001 ◦ e-mail: info@caltestlabs.com

LE 27

QUALITY CONTROL DATA

Lab Order: J060874

Project ID: LOCUST/ DUNPHY

Analysis Description: Metals by ICPMS Collision Mode, Total **QC Batch:** MPR/7747

Analysis Method: EPA 200.8 **QC Batch Method:** EPA 200.8

LABORATORY CONTROL SAMPLE: 281645

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vanadium	ug/L	20	19	95	85-115	
Zinc	ug/L	20	21	107	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 281646 281647

Parameter	Units	J070049001 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Antimony	ug/L	0	20	20	20	101	102	85-115	1.5	20	
Arsenic	ug/L	0.82	20	21	21	102	102	85-115	0.3	20	
Barium	ug/L	16	20	37	39	104	116	85-115	6.3	20	3
Beryllium	ug/L	0	20	19	20	97	101	85-115	4.2	20	
Cadmium	ug/L	0	20	20	20	100	102	85-115	1.6	20	
Chromium	ug/L	1	20	21	22	102	106	85-115	3.6	20	
Cobalt	ug/L	0.42	20	20	20	100	100	85-115	0.5	20	
Copper	ug/L	2.1	20	22	22	97	101	85-115	2.9	20	
Lead	ug/L	0.35	20	20	21	100	103	85-115	3.8	20	
Molybdenum	ug/L	0.16	20	20	21	99	102	85-115	3.1	20	
Nickel	ug/L	1.9	20	22	23	100	104	85-115	4	20	
Selenium	ug/L	0.29	20	21	21	104	104	85-115	0.1	20	
Silver	ug/L	0	20	19	20	97	98	85-115	1.5	20	
Thallium	ug/L	0	20	19	20	96	100	85-115	3.4	20	
Vanadium	ug/L	2.7	20	23	23	99	103	85-115	3	20	
Zinc	ug/L	3.1	20	23	24	102	105	85-115	2.4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 281648 281649

Parameter	Units	J070121002 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Antimony	ug/L	0.46	20	20	20	98	100	85-115	1.9	20	
Arsenic	ug/L	0.58	20	21	21	102	104	85-115	1.8	20	
Barium	ug/L	80	20	98	100	88	98	85-115	2	20	
Beryllium	ug/L	0	20	21	21	107	107	85-115	0.2	20	
Cadmium	ug/L	0.01	20	18	18	92	92	85-115	0.5	20	
Chromium	ug/L	0.33	20	21	21	104	104	85-115	0.2	20	
Cobalt	ug/L	0.34	20	20	20	100	100	85-115	0.3	20	
Copper	ug/L	1.2	20	20	20	94	95	85-115	1.6	20	
Lead	ug/L	0	20	18	18	89	89	85-115	0	20	
Molybdenum	ug/L	5.9	20	27	27	106	107	85-115	0.7	20	
Nickel	ug/L	2.3	20	21	22	95	97	85-115	1.1	20	

1885 North Kelly Road ◦ Napa, California 94558
(707) 258-4000 ◦ Fax: (707) 226-1001 ◦ e-mail: info@caltestlabs.com

LCE 28

QUALITY CONTROL DATA

Lab Order: J060874

Project ID: LOCUST/ DUNPHY

Analysis Description: Metals by ICPMS Collision Mode, Total **QC Batch:** MPR/7747

Analysis Method: EPA 200.8 **QC Batch Method:** EPA 200.8

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 281648 281649

Parameter	Units	J070121002 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Selenium	ug/L	2.8	20	23	22	100	98	85-115	1.2	20	
Silver	ug/L	0	20	18	18	89	89	85-115	0.4	20	
Thallium	ug/L	0	20	17	17	84	84	85-115	0.2	20	4
Vanadium	ug/L	0.7	20	22	22	105	105	85-115	0.3	20	

Analysis Description: Mercury Analysis by FIMS **QC Batch:** MPR/7750

Analysis Method: EPA 245.1, Low Level **QC Batch Method:** EPA 245.1

METHOD BLANK: 281880

Parameter	Blank Result	Reporting Limit	Units	Qualifiers
Mercury	ND	0.050	ug/L	

LABORATORY CONTROL SAMPLE: 281881

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	1	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 281882 281883

Parameter	Units	J060874001 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Mercury	ug/L	0.009	1	0.86	.85	85	85	80-120	1.1	20	

1885 North Kelly Road ◦ Napa, California 94558
(707) 258-4000 ◦ Fax: (707) 226-1001 ◦ e-mail: info@caltestlabs.com

LOC 29

QUALITY CONTROL DATA QUALIFIERS

Lab Order: J060874

Project ID: LOCUST/ DUNPHY

QUALITY CONTROL PARAMETER QUALIFIERS

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

NS - means not spiked and will not have recoveries reported for Analyte Spike Amounts

NC - means not able to be calculated for RPD or Spike Recoveries.

QC Codes Keys: These descriptors are used to help identify the specific QC samples and clarify the report.

MB - Method Blank

Method Blanks are reported to the same Method Detection Limits (MDLs) or Reporting Limits (RLs) as the analytical samples in the corresponding QC batch.

LCS/LCSD - Laboratory Control Spike / Laboratory Control Spike Duplicate

DUP - Duplicate of Original Sample Matrix

MS/MSD - Matrix Spike / Matrix Spike Duplicate

RPD - Relative Percent Difference

%Recovery - Spike Recovery stated as a percentage

2	Analyte(s) reported as 'ND' means not detected at or above the listed Method Detection Limits (MDL).
3	High Matrix Spike recovery(ies) due to possible matrix interferences in the QC sample. QC batch accepted based on LCS and RPD results.
4	Low Matrix Spike recovery(ies) due to possible matrix interferences in the QC sample. QC batch accepted based on LCS and RPD results.

1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax: (707) 226-1001 • e-mail: info@caltestlabs.com

60
30

Caltest ANALYTICAL LABORATORY

ENVIRONMENTAL ANALYSES

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab Order: J060874

Project ID: LOCUST/ DUNPHY

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
J060874001	**DUNPHY**	EPA 245.1	MPR/7750	EPA 245.1, Low Level	MHG/2815
J060874002	**LOCUST S'**	EPA 245.1	MPR/7750	EPA 245.1, Low Level	MHG/2815
J060874003	**LOCUST B'**	EPA 245.1	MPR/7750	EPA 245.1, Low Level	MHG/2815
J060874001	**DUNPHY**	EPA 200.8	MPR/7747	EPA 200.8	MMS/4974
J060874002	**LOCUST S'**	EPA 200.8	MPR/7747	EPA 200.8	MMS/4974
J060874003	**LOCUST B'**	EPA 200.8	MPR/7747	EPA 200.8	MMS/4974

66
31

1885 North Kelly Road ◦ Napa, California 94558
(707) 258-4000 ◦ Fax: (707) 226-1001 ◦ e-mail: info@caltestlabs.com

Caltest ANALYTICAL LABORATORY

1885 N. KELLY ROAD • NAPA, CA 94558 • (707) 258-4000 • Fax (707) 226-1001 • www.caltestlabs.com

SAMPLE CHAIN OF CUSTODY

PAGE 1 OF 1

LAB ORDER #: 060874

PROJECT # / PROJECT NAME: LOCUST / DUNPHY

P.O. #:

CLIENT: CITY OF SAUSALITO

REPORT ATTN: JC GOLDMAN

ADDRESS: 420 LITHO ST CITY: SAUSALITO STATE: CA ZIP: 94965-1933

BILLING ADDRESS:

PHONE #: 415 289-4176 FAX PHONE: 415-339-2256 SAMPLER (PRINT & SIGN NAME): JC GOLDMAN

ANALYSES REQUESTED: DISSOLVED CAM17 METALS SEE ATTACHED WITH DLS

TURN-AROUND TIME: ☒ STANDARD ☐ RUSH

DUE DATE:

CALTEST #	DATE SAMPLED	TIME SAMPLED	MATRIX	CONTAINER AMOUNT/TYPE	PRESERVATIVE	SAMPLE IDENTIFICATION SITE	CLIENT LAB #	COMP. or GRAB		REMARKS
	22 JUN	08:30	W	500ML	NONE	ED DUNPHY N		G	X	
	"	08:40	"	"	"	LOCUST S'		"	"	
	↓	↓	↓	↓	↓	LOCUST B		↓	↓	

By submittal of sample(s), client agrees to abide by the Terms and Conditions set forth on the reverse of this document.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	RELINQUISHED BY	DATE/TIME	RECEIVED BY
	22 JUN 11:23			6/22/09 1444	
	6-22-09 1549				6-22-09 1546

FOR LAB USE ONLY:

Samples: WC____ MICRO____ BIO____ MET____ SV____ VOA____ TEMP: 5.0°C SEALED: Y X N INTACT: Y X N

BD: BIO____ WC____ MET____

CC: AA____ SV____ VOA____

SIL: HP____ PT____ QT____ VOA____

W/HNO_3____ H_2SO_4____ NaOH____

PIL: HNO_3____ H_2SO_4____ NaOH____ HCL____

COMMENTS

MATRIX: W = Aqueous Nondrinking Water, Digested Metals; ML = Low R.L.s, Aqueous Nondrinking Water, Digested Metals; DW = Drinking Water; SL = Soil, Sludge, Solid; FP = Free Product

CONTAINER TYPES: AL = Amber Liter; AHL = 500 ml Amber; PT = Pint (Plastic); QT=Quart (Plastic); HG = Half Gallon (Plastic); SJ = Soil Jar; B4 = 4 oz. BACT; BT = Brass Tube; VOA = 40 mL VOA; OTC = Other Type Container

R____ PR____ M____ F____

REV. 10/07

PINK - CLIENT COPY AS RECEIPT

YELLOW - CLIENT COPY TO ACCOMPANY FINAL REPORT

WHITE - LABORATORY

32