

July, 9 2015

Mr. Ralph Lambert
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

**WORK PLAN
OFFSITE INTERIM REMEDIAL ACTION PLAN (IRAP)
SILVEIRA RANCH WATER SUPPLY WELL
MARINWOOD PLAZA SHOPPING CENTER
CASE #21S0053
SAN RAFAEL, CA 94903**

Dear Mr. Lambert:

1.0 INTRODUCTION

GEOLOGICA Inc. (GEOLOGICA) is pleased to submit this Offsite Interim Remedial Action Work Plan (IRAP) presenting the results of the evaluation conducted by GEOLOGICA for a water supply well located on the Silveira Ranch property in San Rafael, California (the “property”). The site location is shown on **Figure 1**. This work was conducted to address the requirements of the Regional Board Directive Letter (“Directive Letter”), dated June 2, 2015 and entitled “*Requirement to Submit Offsite Interim Remedial Action Workplan, Marinwood Plaza, 187 Marinwood Avenue, San Rafael, Marin County*”.

2.0 BACKGROUND

The June 2, 2015 Directive Letter noted that the former Prosperity Cleaners dry cleaning business, located at 187 Marinwood Avenue in the Marinwood Plaza Shopping Center, was the source of a tetrachloroethene (PCE) release. Offsite groundwater sampling completed by GEOLOGICA in May 2015 indicated the presence of PCE in groundwater at a concentration of 10 micrograms per liter ($\mu\text{g/L}$) at boring location C-32, located approximately 100 feet north of an

actively-used water supply well located on the south side of Miller Creek on the Silveira Ranch property. The Directive Letter noted that the PCE concentration at this grab sampling location is twice the PCE drinking water standard of 5 µg/L. The Directive Letter requires that Marinwood Plaza, LLC, submit an offsite IRAP, pursuant to Task 4B of the *Site Cleanup Requirements Order No. R2-2-14-0036* (“the Cleanup Order”). Cleanup Order Task 4B states that “(t)he Executive Officer will require (an offsite interim remedial action) work plan if contaminants in offsite groundwater pose a potential threat to, or impact, an offsite domestic or agricultural well.” The Directive Letter states that the Regional Board has concluded that the offsite groundwater sampling results constitute a potential threat to the offsite supply well.

The Directive Letter states that Marinwood Plaza, LLC must submit an acceptable work plan by July 17, 2015 to evaluate interim remedial action alternatives and recommend one or more alternatives for implementation. The work plan is required to consider at least the following alternatives: wellhead treatment or a replacement well. The work plan must also include an implementation schedule.

This letter constitutes a formal response to the requirement for submittal of an IRAP and includes in the follow sections: 1) preliminary evaluation of the characteristics of the water supply well, 2) evaluation of treatment and replacement options, 3) a recommended alternative, and, 4) an implementation schedule.

3.0 EXISTING WATER SUPPLY WELL EVALUATION

3.1 Well Description

The supply well, herein referred to as the “Silveira Creek Well,” is located approximately 50 feet south of Miller Creek in the western part of the Silveira Ranch property. The well was completed in 1976 to a depth of 26 feet (ft) below ground surface (bgs). The 8-5/8” diameter (dia.) steel casing has torch cut slots between depths of 11 and 26 feet. The well was completed with a surface seal comprised of Portland cement grout between ground surface and a depth of 10 ft bgs. A copy of the well log is provided in **Attachment A**.

The well is housed in an approximately 8 ft long by 6 ft wide roofed shed, which is open at either end. Signage posted in the shed indicates that the well is currently configured with a 1-1/2 horse power (h.p.), 3 phase, 230 volt Franklin submersible pump. The 1-1/4” dia. discharge pipe is connected to two approximately 80 gallon pressure tanks connected in parallel with a pressure sensitive switch set to turn the pump ON, when the line pressure drops below 40 pounds per square inch (p.s.i.), and OFF, when the line pressure rises to 70 psi. The pump discharge line splits on the west side of the shed to connect to two 2” dia. and one 1” dia. galvanized conveyance pipes that enter the ground approximately 2 feet west of the pump shed. A sample port with 1/4” discharge tubing is located immediately upstream of the pressure switch assembly and a second spigot sized for a standard garden hose is located downstream of the pressure tanks.

On July 1, 2015 a technician from Arolo Pump & Well (Arolo) of Petaluma, CA installed a 1” dia. Badger totalizing flow meter on the discharge line between the garden hose spigot and the three underground conveyance pipes.

3.2 Water Production Rate

After installing the flow meter, Arolo conducted a brief no-load flow test by disconnecting the discharge side of the flow meter from the conveyance pipe. In this configuration, the well produced 46.8 gallons of water in approximately 3 minutes for a discharge rate of approximately 15 gallons per minute (gpm). Arolo then reconnected the discharge line and used the garden hose spigot to discharge water to cycle the pressure sensitive switch to confirm that the pump and pressure sensor system were functioning normally. After completing these tests and examining the piping for leaks, GEOLOGICA collected a sample of produced water from the sample port upstream of the pressure switch. The pump discharge line appeared to be leak free. The pump did not cycle on while GEOLOGICA was present.

GEOLOGICA visited the site on July 2, 2015 to read the totalizing flow meter and verify system operation. At 3:27 p.m. on July 2, the flow meter reading was identical to the reading at approximately 11:30 a.m. on July 1, indicating that the pump had not operated between the morning of July 1 and afternoon of July 2, 2015. This may indicate that the above-ground water tanks in the pasture north of the creek contain enough water to sustain the cattle’s needs for at least a day or, alternatively, that the water to refill the tanks comes from another location on the property.

3.3 Water Quality

To evaluate chemical characteristics of the water produced from the well, on July 1, 2015, GEOLOGICA collected a water sample from a sample port immediately upstream of the pressure switch on the pump discharge line. The water sample was submitted under standard EPA chain of custody procedures to Test America Pleasanton, a California-certified analytical laboratory, for analysis for volatile organic compounds (VOCs) by EPA Method 8260, Total Organic Carbon by SM 5310C, Iron and Manganese by EPA Method 6010B, and Total Suspended Sediment (TSS) by SM 2540D.

The results of analysis of the water sample collected on July 1, 2015 are summarized in **Table 1** and discussed briefly below.

- VOCs – The VOCs methyl tert butyl ether (MTBE) and PCE were detected at concentrations of 0.5 ug/L and 0.58 ug/L, respectively, in the well water sample. The concentrations of MTBE and PCE reported in the well water sample are well below their respective Table A Environmental Screening Levels (ESLs) of 5 ug/L. MTBE and PCE have not previously been detected in samples collected from the well. As noted in **Section 2**, PCE has been detected in groundwater “grab” samples collected on the north

side of Miller Creek. MTBE is not a chemical that has been identified at the Marinwood Plaza site. MTBE is not a component of dry cleaning solvent or a dry cleaning solvent breakdown product.

- Total Organic Carbon – Total organic carbon was detected at a concentration of 1.1 milligrams per liter (mg/L) in the well water sample.
- Iron and Manganese – Iron and manganese were detected at concentrations of 0.95 and 1.7 mg/L, respectively, in the well water sample.
- Total Suspended Solids – TSS was detected at a concentration of 3.7 mg/L in the well water sample.

3.4 Treatment or Replacement Requirements

The Silveira Creek Well appears to be used intermittently, primarily to fill two approximately 300 gallon concrete water tanks from which cattle in the pasture on the north side of Miller Creek drink. As noted in **Section 3.1**, the well is connected to three conveyance pipes; therefore, it is possible that the well services other portions of the ranch or houses on the property. While the well is capable of delivering up to 15 gpm, its sustained average flow rate appears to be less than 5 gpm. Consequently, the evaluation of treatment alternatives and replacement of the well was focused on providing a sustained delivery rate of up to 5 gpm.

4.0 WATER SUPPLY ALTERNATIVE EVALUATION

As required by the Directive Letter, GEOLOGICA evaluated two alternatives: 1) treating water from the existing well or 2) replacing the well. Each alternative is discussed below.

4.1 Treatment of Existing Well

Treating of water from the existing well to remove VOCs potentially present as a result of VOC plume migration from the Marinwood Plaza dry cleaner site would involve installing a readily available activated carbon treatment system at the well head capable of treating up to 5 gpm on a continuous basis. The analytes detected in the July 1, 2015 water sample, including low concentrations of MTBE, PCE, iron, manganese, and total organic carbon, are readily removed by activated carbon filtration. GEOLOGICA obtained a quote from Arolo Pump & Well to install a carbon treatment system at the well head. **Figure 2** shows a process flow schematic for the system. The treatment system would comprise three main components all connected in series including: 1) a 20 micron sediment filter to remove suspended sediment; 2) a 4.5 cubic foot activated carbon filter to remove dissolved VOCs from groundwater at a flow rate of up to 5 gpm; and, 3) an ultraviolet lamp bacterial treatment unit. The ultraviolet bacterial treatment unit is needed to destroy any bacteria that may grow on the carbon filter media and is a standard component for small water systems.

According to Arolo Pump & Well, the components for the treatment system are readily available. Installation would take one to two days. Allowing for time to obtain an electrical permit, procuring parts, and actual installation, the time to installing the system is estimated to require approximately two to four weeks.

4.2 Replacement of Existing Well

The Silveira family has indicated that they do not want to abandon the well by the creek or draw water from a second existing well in the pasture further south of Miller Creek. Consequently, replacing the existing well would involve drilling a new well in the pasture south and east of the existing well. Power would need to be provided to the new well location and a new underground water conveyance pipe would need to be constructed from the new well location to the old well location to connect to the existing water distribution pipe network. GEOLOGICA did not obtain detailed quotes for drilling a new well or installing supporting electrical and plumbing equipment; insufficient data are currently available to locate a new well as the VOC plume limits have not been established at this time.

Replacing the existing well would require: obtaining drilling, electrical, and building permits for the new well, power, and conveyance system; drilling and construction of the well; and installing plumbing and electrical fixtures. Thus, installing a replacement well is expected to require approximately two to four months.

4.3 Alternatives Comparison

Using an activated carbon treatment system to remove VOCs potentially present in groundwater near the Silveira Creek Well is a standard treatment technology effective for the VOCs (PCE, TCE, and cis-DCE) identified in off-site groundwater. Installation would be relatively straight forward and would have minimal impact on ranch operations. The water supply well might be offline for several days while the system was being installed; if needed, additional water could be stored onsite prior to the work to provide water for the cattle, if needed. While cost is not a deciding factor in this evaluation, the cost for installing an activated carbon treatment system is likely to be less than \$10,000. Replacing the carbon media would involve periodically shutting the system down briefly, vacuuming the carbon media out of the treatment canister, and then pouring new carbon media into the treatment canister.

Constructing a new water supply well to replace the Silveira Creek Well is complicated by several factors. First, the Silveira family has expressed a preference for retaining the existing well. Second, due to permitting and infrastructure construction requirements, connecting a new well to the existing water distribution system could take several months. Third, drilling the well and trenching for new water and power lines would involve substantial disturbance to ranch operations. Finally, installing a new well would likely cost substantially more than treating water from the existing well.

4.4 Recommended Alternative

We recommend installing an activated carbon well head treatment system to treat water from the Silveira Creek Well as it is produced. The system could be installed relatively quickly with minimal disturbance to ranch operations.

5.0 IMPLEMENTATION SCHEDULE

While VOCs have not been detected in samples collected from the Silveira Creek Well at concentrations greater than typical drinking water standards, a groundwater VOC plume containing PCE at concentrations greater than the drinking water standard has been identified approximately 100 feet north of the well and a low concentration of PCE was detected in the water sample collected from the well in July 2015. Groundwater VOC plumes can shift or migrate in response to unpredictable environmental factors such as drought, changes in creek flow, or changes in groundwater use at the ranch. Consequently, while there is not an immediate need to install a treatment system, we recommend scheduling the work at the convenience of the Silveira ranch owners this summer. We anticipate that the work will take two to four weeks to schedule and complete.

6.0 OPERATIONS & MAINTENANCE (O&M)

We recommend collecting a water sample from a sample port downstream of the carbon treatment system on a quarterly basis to confirm treatment system effectiveness. The water sample should be analyzed for VOCs by EPA Method 8260. The UV lamp sleeve needs to be cleaned quarterly and the UV lamp replaced annually. The sediment filter should be inspected quarterly and replaced as needed. The presence of low concentrations of iron, manganese, and total organic carbon may cause the carbon filter to plug more rapidly than would occur otherwise. Consequently, the activated carbon filter should be checked and replaced when a noticeable impingement of flow through the filter is observed. These activities can be conducted by a qualified pump contractor with assistance from GEOLOGICA.

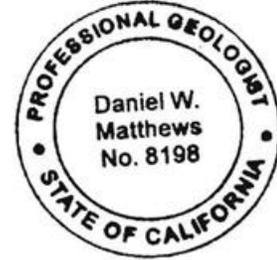
7.0 CONCLUSIONS AND RECOMMENDATIONS

As requested by the Regional Board, GEOLOGICA evaluated two alternatives to minimize the potential for ingestion or exposure to well water containing VOCs. These consisted of treating the water from the Silveira Creek Well at the well head using an activated carbon treatment system or replacing the well with a new well drilled for that purpose. Because it would be fastest to implement with little disruption of ranch operations, treating the water at the well head is the recommended option. We believe a treatment system could be installed and operational within two to four weeks of approval to proceed by the Regional Board and the property owner. Quarterly sampling and maintenance of the treatment system will be required to maintain optimal operation.

We would be happy to discuss this Workplan at your convenience. Should you have any questions, please don't hesitate to call Dan at (415) 279-2694 or Brian at (415) 722-3629.

Sincerely,

GEOLOGICA INC.



Handwritten signature of Daniel W. Matthews in black ink.

Daniel Matthews, P.G.
Associate Hydrogeologist

Handwritten signature of Brian F. Aubry in black ink.

Brian F. Aubry, P.G., C.E.G., C.Hg.
Principal

Attachments:

Table 1 July 1, 2015 Silveira Creek Well Sampling Results

Figure 1 Site Location Map

Figure 2 Proposed Well Head Equipment Layout

Attachment A Silveira Creek Well Log

Attachment B Laboratory Testing Report

Attachment C Treatment System Quote

TABLE

Table 1
Former Prosperity Cleaners / Marinwood Plaza
187 Marinwood Avenue, San Rafael, California

July 1, 2015 Silveira Creek Well Sampling Results

Method	Analytes	Units	Silveira Creek Well	Trip Blank
			Sample	TAL-SF-TB

Volatile Organic Compounds (VOCs)

8260B	Tetrachloroethene (PCE)	ug/L	0.58	<0.5
8260B	Trichloroethene (TCE)	ug/L	<0.5	<0.5
8260B	cis-1,2-Dichloroethene (cis-DCE)	ug/L	<0.5	<0.5
8260B	trans-1,2-Dichloroethene (trans-DCE)	ug/L	<0.5	<0.5
8260B	Vinyl chloride (VC)	ug/L	<0.5	<0.5
8260B	Methyl tert-butyl ether (MTBE)	ug/L	0.5	<0.5

Total Organic Carbon

SM 5310C	TOC Dup	mg/L	1.1	-
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Metals

6010B	Iron	mg/L	0.95	-
6010B	Manganese	mg/L	1.7	-

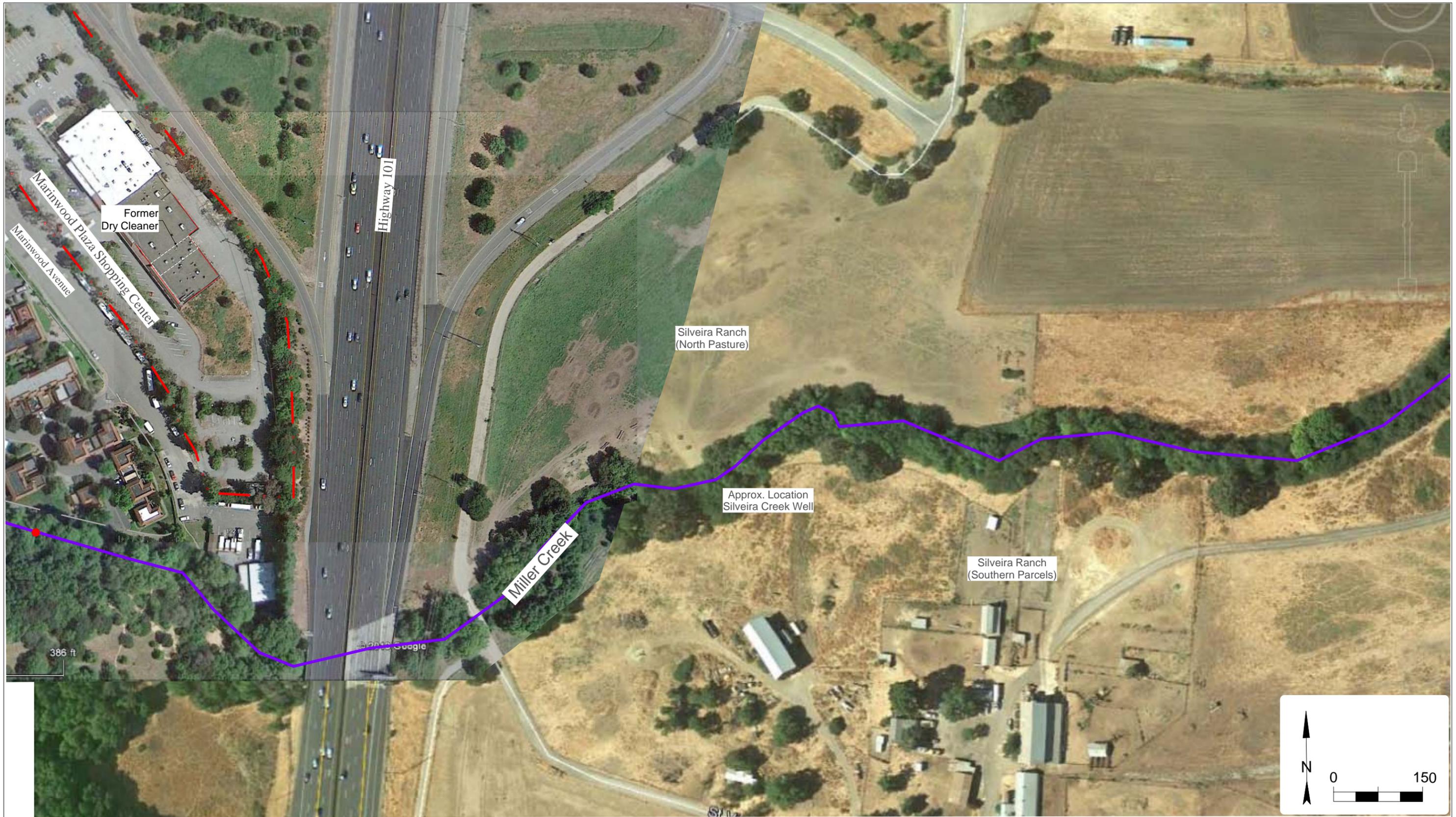
Total Suspended Solids

SM 2540D	Total Suspended Solids (TSS)	mg/L	3.7	-
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Notes:

- 1) Results for analytes detected in at least one sample listed, see laboratory testing report in Attachment B for complete listing.
- 2) **0.58** Detected concentration.
- 3) <0.5 = Not detected at the laboratory reporting limit cited.
- 4) - = Not analyzed for.

FIGURES



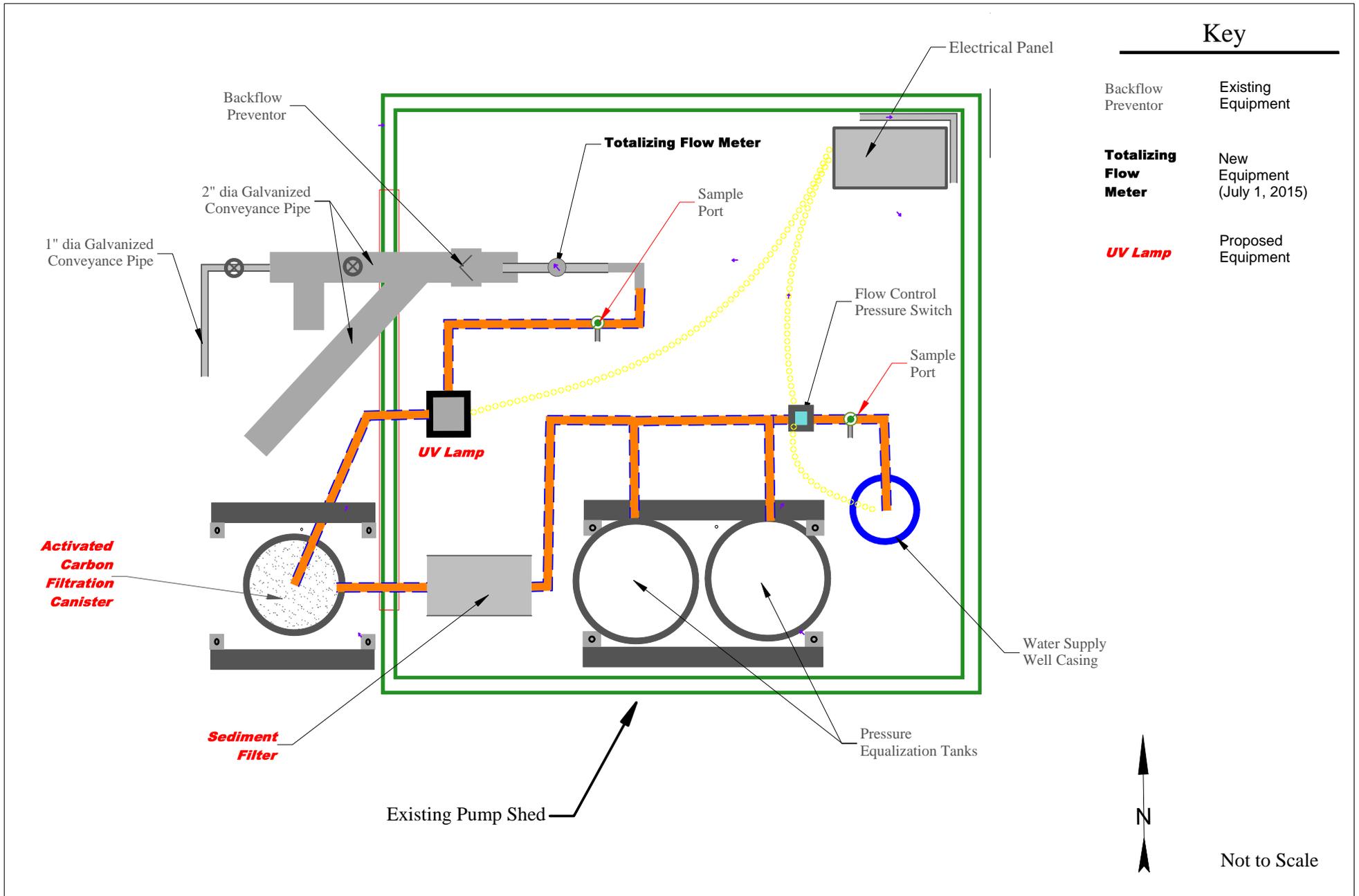
geologica

San Francisco, California

**Marinwood Plaza/
Former Prosperity Cleaners**
187 Marinwood Avenue
San Rafael, California

Figure 1

Site Location Map



geologica

San Francisco, California

**Marinwood Plaza/
Former Prosperity Cleaners**
187 Marinwood Avenue
San Rafael, California

Figure 2

**Proposed Well Head
Equipment Layout
Silveira Creek Well**

ATTACHMENT A

Silveira Creek Well Log

ORIGINAL
File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do Not Fill In

No 153267

State Well No. _____
Other Well No. 2N/6W-9

(1) OWNER:
Name Silveira Ranches
Address P.O. Box 209
San Rafael, Calif.

(11) WELL LOG:
Total depth 26 ft. Depth of completed well 26 ft.
Formation: Describe by color, character, size of material, and structure
ft. to _____ ft.

(2) LOCATION OF WELL:
County Marin Owner's number, if any _____
Township, Range, and Section Hwy. 101-near Miller Creek
Distance from cities, roads, railroads, etc. San Rafael

0 - 1 brown top soil
1 - 3 brown clay
3 - 10 brown dry gravel and clay
10 - 15 brown clay, embedded shale
15 - 20 brown gravel making water
20 - 26 hard brown sandstone

(3) TYPE OF WORK (check):
New Well Deepening Reconditioning Destroying
If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):
Domestic Industrial Municipal
Irrigation Test Well Other

(5) EQUIPMENT:
Rotary
Cable
Other bucket

(6) CASING INSTALLED:

STEEL: OTHER: _____
SINGLE DOUBLE

From ft.		To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
0	26	8 5/8	.156	30"	20	0	20
				20	20	20	26

If gravel packed _____

Size of shoe or well ring: _____ Size of gravel: pea
Describe joint: welded

(7) PERFORATIONS OR SCREEN:
Type of perforation or name of screen torch

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
11	26	1	5	3/16 x 8

(8) CONSTRUCTION:
Was a surface sanitary seal provided? Yes No To what depth 10' ft.
Were any strata sealed against pollution? Yes No If yes, note depth of strata _____
From _____ ft. to _____ ft.
From _____ ft. to _____ ft.
Method of sealing concrete on pack

Work started 8/27 19 76 , Completed 8/27/ 19 76
WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

(9) WATER LEVELS:
Depth at which water was first found, if known _____ ft.
Standing level before perforating, if known _____ ft.
Standing level after perforating and developing 12' ft.

NAME Weeks Drilling & Pump Co.
(Person, firm, or corporation) (Typed or printed)
Address 6100 Sebastopol Rd.
Sebastopol, Calif.

(10) WELL TESTS:
Was pump test made? Yes No If yes, by whom? weeks
eld: 60 gal./min. with 5 ft. drawdown after _____ hrs.
Temperature of water cool Was a chemical analysis made? Yes No
Was electric log made of well? Yes No If yes, attach copy _____

[SIGNED] Gerald G. Thompson
By Mary E. Thompson
License No. 177681 Dated _____

CONFIDENTIAL LOG
Water Code Sec. 13752

SKETCH LOCATION OF WELL ON REVERSE SIDE

CONFIDENTIAL LOG
Water Code Sec. 13752

ATTACHMENT B

Laboratory Testing Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-65790-1
Client Project/Site: Marinwood Cleaners
Revision: 1

For:
Geologica Inc
220 4th Street, suite 201
Oakland, California 94607

Attn: Mr. Dan Matthews



Authorized for release by:
7/10/2015 4:19:25 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

LINKS

Review your project
results through
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Visit us at:
www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Job ID: 720-65790-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-65790-1

Comments

This report was revised to correct the sample ID for sample SILVEIRA CREEK WELL (720-65790-1).

Receipt

The samples were received on 7/2/2015 1:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8° C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The Trip Blank was logged in with the date of 7/1/15. Trip blank date should be the date the "trip" started, which is 7/1/15. The 052015 date on the trip blank is used for our Lot number identification.

GC/MS VOA

Method(s) 8260B: The continuing calibration verification (CCV) associated with batch 720-184651 recovered above the upper control limit for 2,2-Dichloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: SILVEIRA CREEK WELL (720-65790-1) and TAL-SF-TB (720-65790-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

Method(s) SM 2540D: Insufficient sample volume was available to perform a sample duplicate (DUP) associated with analytical batch 720-184630.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Geologica Inc
 Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Client Sample ID: SILVEIRA CREEK WELL

Lab Sample ID: 720-65790-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.50		0.50		ug/L	1			8260B/CA_LUFT MS	Total/NA
Tetrachloroethene	0.58		0.50		ug/L	1			8260B/CA_LUFT MS	Total/NA
Iron	0.95		0.20		mg/L	1			6010B	Total/NA
Manganese	1.7		0.020		mg/L	1			6010B	Total/NA
TOC Dup	1.1		1.0		mg/L	1			SM 5310C	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil	Fac	D	Method	Prep Type
Total Suspended Solids	3.7		1.0		mg/L	1			SM 2540D	Total/NA

Client Sample ID: TAL-SF-TB

Lab Sample ID: 720-65790-2

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton



Client Sample Results

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Client Sample ID: SILVEIRA CREEK WELL

Lab Sample ID: 720-65790-1

Date Collected: 07/01/15 11:30

Matrix: Water

Date Received: 07/02/15 13:10

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.50		0.50		ug/L			07/06/15 22:35	1
Acetone	ND		50		ug/L			07/06/15 22:35	1
Benzene	ND		0.50		ug/L			07/06/15 22:35	1
Dichlorobromomethane	ND		0.50		ug/L			07/06/15 22:35	1
Bromobenzene	ND		1.0		ug/L			07/06/15 22:35	1
Chlorobromomethane	ND		1.0		ug/L			07/06/15 22:35	1
Bromoform	ND		1.0		ug/L			07/06/15 22:35	1
Bromomethane	ND		1.0		ug/L			07/06/15 22:35	1
2-Butanone (MEK)	ND		50		ug/L			07/06/15 22:35	1
n-Butylbenzene	ND		1.0		ug/L			07/06/15 22:35	1
sec-Butylbenzene	ND		1.0		ug/L			07/06/15 22:35	1
tert-Butylbenzene	ND		1.0		ug/L			07/06/15 22:35	1
Carbon disulfide	ND		5.0		ug/L			07/06/15 22:35	1
Carbon tetrachloride	ND		0.50		ug/L			07/06/15 22:35	1
Chlorobenzene	ND		0.50		ug/L			07/06/15 22:35	1
Chloroethane	ND		1.0		ug/L			07/06/15 22:35	1
Chloroform	ND		1.0		ug/L			07/06/15 22:35	1
Chloromethane	ND		1.0		ug/L			07/06/15 22:35	1
2-Chlorotoluene	ND		0.50		ug/L			07/06/15 22:35	1
4-Chlorotoluene	ND		0.50		ug/L			07/06/15 22:35	1
Chlorodibromomethane	ND		0.50		ug/L			07/06/15 22:35	1
1,2-Dichlorobenzene	ND		0.50		ug/L			07/06/15 22:35	1
1,3-Dichlorobenzene	ND		0.50		ug/L			07/06/15 22:35	1
1,4-Dichlorobenzene	ND		0.50		ug/L			07/06/15 22:35	1
1,3-Dichloropropane	ND		1.0		ug/L			07/06/15 22:35	1
1,1-Dichloropropene	ND		0.50		ug/L			07/06/15 22:35	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			07/06/15 22:35	1
Ethylene Dibromide	ND		0.50		ug/L			07/06/15 22:35	1
Dibromomethane	ND		0.50		ug/L			07/06/15 22:35	1
Dichlorodifluoromethane	ND		0.50		ug/L			07/06/15 22:35	1
1,1-Dichloroethane	ND		0.50		ug/L			07/06/15 22:35	1
1,2-Dichloroethane	ND		0.50		ug/L			07/06/15 22:35	1
1,1-Dichloroethene	ND		0.50		ug/L			07/06/15 22:35	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			07/06/15 22:35	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			07/06/15 22:35	1
1,2-Dichloropropane	ND		0.50		ug/L			07/06/15 22:35	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			07/06/15 22:35	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			07/06/15 22:35	1
Ethylbenzene	ND		0.50		ug/L			07/06/15 22:35	1
Hexachlorobutadiene	ND		1.0		ug/L			07/06/15 22:35	1
2-Hexanone	ND		50		ug/L			07/06/15 22:35	1
Isopropylbenzene	ND		0.50		ug/L			07/06/15 22:35	1
4-Isopropyltoluene	ND		1.0		ug/L			07/06/15 22:35	1
Methylene Chloride	ND		5.0		ug/L			07/06/15 22:35	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			07/06/15 22:35	1
Naphthalene	ND		1.0		ug/L			07/06/15 22:35	1
N-Propylbenzene	ND		1.0		ug/L			07/06/15 22:35	1
Styrene	ND		0.50		ug/L			07/06/15 22:35	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			07/06/15 22:35	1

TestAmerica Pleasanton

Client Sample Results

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Client Sample ID: SILVEIRA CREEK WELL

Lab Sample ID: 720-65790-1

Date Collected: 07/01/15 11:30

Matrix: Water

Date Received: 07/02/15 13:10

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/06/15 22:35	1
Tetrachloroethene	0.58		0.50		ug/L			07/06/15 22:35	1
Toluene	ND		0.50		ug/L			07/06/15 22:35	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/06/15 22:35	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/06/15 22:35	1
1,1,1-Trichloroethane	ND		0.50		ug/L			07/06/15 22:35	1
1,1,2-Trichloroethane	ND		0.50		ug/L			07/06/15 22:35	1
Trichloroethene	ND		0.50		ug/L			07/06/15 22:35	1
Trichlorofluoromethane	ND		1.0		ug/L			07/06/15 22:35	1
1,2,3-Trichloropropane	ND		0.50		ug/L			07/06/15 22:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			07/06/15 22:35	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			07/06/15 22:35	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			07/06/15 22:35	1
Vinyl acetate	ND		10		ug/L			07/06/15 22:35	1
Vinyl chloride	ND		0.50		ug/L			07/06/15 22:35	1
Xylenes, Total	ND		1.0		ug/L			07/06/15 22:35	1
2,2-Dichloropropane	ND		0.50		ug/L			07/06/15 22:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		67 - 130		07/06/15 22:35	1
1,2-Dichloroethane-d4 (Surr)	102		72 - 130		07/06/15 22:35	1
Toluene-d8 (Surr)	102		70 - 130		07/06/15 22:35	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.95		0.20		mg/L		07/07/15 14:20	07/08/15 12:12	1
Manganese	1.7		0.020		mg/L		07/07/15 14:20	07/07/15 23:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Dup	1.1		1.0		mg/L			07/06/15 18:39	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	3.7		1.0		mg/L			07/02/15 16:16	1

Client Sample Results

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Client Sample ID: TAL-SF-TB

Lab Sample ID: 720-65790-2

Date Collected: 07/01/15 11:30

Matrix: Water

Date Received: 07/02/15 13:10

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			07/06/15 21:11	1
Acetone	ND		50		ug/L			07/06/15 21:11	1
Benzene	ND		0.50		ug/L			07/06/15 21:11	1
Dichlorobromomethane	ND		0.50		ug/L			07/06/15 21:11	1
Bromobenzene	ND		1.0		ug/L			07/06/15 21:11	1
Chlorobromomethane	ND		1.0		ug/L			07/06/15 21:11	1
Bromoform	ND		1.0		ug/L			07/06/15 21:11	1
Bromomethane	ND		1.0		ug/L			07/06/15 21:11	1
2-Butanone (MEK)	ND		50		ug/L			07/06/15 21:11	1
n-Butylbenzene	ND		1.0		ug/L			07/06/15 21:11	1
sec-Butylbenzene	ND		1.0		ug/L			07/06/15 21:11	1
tert-Butylbenzene	ND		1.0		ug/L			07/06/15 21:11	1
Carbon disulfide	ND		5.0		ug/L			07/06/15 21:11	1
Carbon tetrachloride	ND		0.50		ug/L			07/06/15 21:11	1
Chlorobenzene	ND		0.50		ug/L			07/06/15 21:11	1
Chloroethane	ND		1.0		ug/L			07/06/15 21:11	1
Chloroform	ND		1.0		ug/L			07/06/15 21:11	1
Chloromethane	ND		1.0		ug/L			07/06/15 21:11	1
2-Chlorotoluene	ND		0.50		ug/L			07/06/15 21:11	1
4-Chlorotoluene	ND		0.50		ug/L			07/06/15 21:11	1
Chlorodibromomethane	ND		0.50		ug/L			07/06/15 21:11	1
1,2-Dichlorobenzene	ND		0.50		ug/L			07/06/15 21:11	1
1,3-Dichlorobenzene	ND		0.50		ug/L			07/06/15 21:11	1
1,4-Dichlorobenzene	ND		0.50		ug/L			07/06/15 21:11	1
1,3-Dichloropropane	ND		1.0		ug/L			07/06/15 21:11	1
1,1-Dichloropropene	ND		0.50		ug/L			07/06/15 21:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			07/06/15 21:11	1
Ethylene Dibromide	ND		0.50		ug/L			07/06/15 21:11	1
Dibromomethane	ND		0.50		ug/L			07/06/15 21:11	1
Dichlorodifluoromethane	ND		0.50		ug/L			07/06/15 21:11	1
1,1-Dichloroethane	ND		0.50		ug/L			07/06/15 21:11	1
1,2-Dichloroethane	ND		0.50		ug/L			07/06/15 21:11	1
1,1-Dichloroethene	ND		0.50		ug/L			07/06/15 21:11	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			07/06/15 21:11	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			07/06/15 21:11	1
1,2-Dichloropropane	ND		0.50		ug/L			07/06/15 21:11	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			07/06/15 21:11	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			07/06/15 21:11	1
Ethylbenzene	ND		0.50		ug/L			07/06/15 21:11	1
Hexachlorobutadiene	ND		1.0		ug/L			07/06/15 21:11	1
2-Hexanone	ND		50		ug/L			07/06/15 21:11	1
Isopropylbenzene	ND		0.50		ug/L			07/06/15 21:11	1
4-Isopropyltoluene	ND		1.0		ug/L			07/06/15 21:11	1
Methylene Chloride	ND		5.0		ug/L			07/06/15 21:11	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			07/06/15 21:11	1
Naphthalene	ND		1.0		ug/L			07/06/15 21:11	1
N-Propylbenzene	ND		1.0		ug/L			07/06/15 21:11	1
Styrene	ND		0.50		ug/L			07/06/15 21:11	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			07/06/15 21:11	1

TestAmerica Pleasanton

Client Sample Results

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Client Sample ID: TAL-SF-TB

Lab Sample ID: 720-65790-2

Date Collected: 07/01/15 11:30

Matrix: Water

Date Received: 07/02/15 13:10

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/06/15 21:11	1
Tetrachloroethene	ND		0.50		ug/L			07/06/15 21:11	1
Toluene	ND		0.50		ug/L			07/06/15 21:11	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/06/15 21:11	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/06/15 21:11	1
1,1,1-Trichloroethane	ND		0.50		ug/L			07/06/15 21:11	1
1,1,2-Trichloroethane	ND		0.50		ug/L			07/06/15 21:11	1
Trichloroethene	ND		0.50		ug/L			07/06/15 21:11	1
Trichlorofluoromethane	ND		1.0		ug/L			07/06/15 21:11	1
1,2,3-Trichloropropane	ND		0.50		ug/L			07/06/15 21:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			07/06/15 21:11	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			07/06/15 21:11	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			07/06/15 21:11	1
Vinyl acetate	ND		10		ug/L			07/06/15 21:11	1
Vinyl chloride	ND		0.50		ug/L			07/06/15 21:11	1
Xylenes, Total	ND		1.0		ug/L			07/06/15 21:11	1
2,2-Dichloropropane	ND		0.50		ug/L			07/06/15 21:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		67 - 130		07/06/15 21:11	1
1,2-Dichloroethane-d4 (Surr)	98		72 - 130		07/06/15 21:11	1
Toluene-d8 (Surr)	101		70 - 130		07/06/15 21:11	1

QC Sample Results

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-184651/5

Matrix: Water

Analysis Batch: 184651

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			07/06/15 17:26	1
Acetone	ND		50		ug/L			07/06/15 17:26	1
Benzene	ND		0.50		ug/L			07/06/15 17:26	1
Dichlorobromomethane	ND		0.50		ug/L			07/06/15 17:26	1
Bromobenzene	ND		1.0		ug/L			07/06/15 17:26	1
Chlorobromomethane	ND		1.0		ug/L			07/06/15 17:26	1
Bromoform	ND		1.0		ug/L			07/06/15 17:26	1
Bromomethane	ND		1.0		ug/L			07/06/15 17:26	1
2-Butanone (MEK)	ND		50		ug/L			07/06/15 17:26	1
n-Butylbenzene	ND		1.0		ug/L			07/06/15 17:26	1
sec-Butylbenzene	ND		1.0		ug/L			07/06/15 17:26	1
tert-Butylbenzene	ND		1.0		ug/L			07/06/15 17:26	1
Carbon disulfide	ND		5.0		ug/L			07/06/15 17:26	1
Carbon tetrachloride	ND		0.50		ug/L			07/06/15 17:26	1
Chlorobenzene	ND		0.50		ug/L			07/06/15 17:26	1
Chloroethane	ND		1.0		ug/L			07/06/15 17:26	1
Chloroform	ND		1.0		ug/L			07/06/15 17:26	1
Chloromethane	ND		1.0		ug/L			07/06/15 17:26	1
2-Chlorotoluene	ND		0.50		ug/L			07/06/15 17:26	1
4-Chlorotoluene	ND		0.50		ug/L			07/06/15 17:26	1
Chlorodibromomethane	ND		0.50		ug/L			07/06/15 17:26	1
1,2-Dichlorobenzene	ND		0.50		ug/L			07/06/15 17:26	1
1,3-Dichlorobenzene	ND		0.50		ug/L			07/06/15 17:26	1
1,4-Dichlorobenzene	ND		0.50		ug/L			07/06/15 17:26	1
1,3-Dichloropropane	ND		1.0		ug/L			07/06/15 17:26	1
1,1-Dichloropropene	ND		0.50		ug/L			07/06/15 17:26	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			07/06/15 17:26	1
Ethylene Dibromide	ND		0.50		ug/L			07/06/15 17:26	1
Dibromomethane	ND		0.50		ug/L			07/06/15 17:26	1
Dichlorodifluoromethane	ND		0.50		ug/L			07/06/15 17:26	1
1,1-Dichloroethane	ND		0.50		ug/L			07/06/15 17:26	1
1,2-Dichloroethane	ND		0.50		ug/L			07/06/15 17:26	1
1,1-Dichloroethene	ND		0.50		ug/L			07/06/15 17:26	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			07/06/15 17:26	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			07/06/15 17:26	1
1,2-Dichloropropane	ND		0.50		ug/L			07/06/15 17:26	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			07/06/15 17:26	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			07/06/15 17:26	1
Ethylbenzene	ND		0.50		ug/L			07/06/15 17:26	1
Hexachlorobutadiene	ND		1.0		ug/L			07/06/15 17:26	1
2-Hexanone	ND		50		ug/L			07/06/15 17:26	1
Isopropylbenzene	ND		0.50		ug/L			07/06/15 17:26	1
4-Isopropyltoluene	ND		1.0		ug/L			07/06/15 17:26	1
Methylene Chloride	ND		5.0		ug/L			07/06/15 17:26	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			07/06/15 17:26	1
Naphthalene	ND		1.0		ug/L			07/06/15 17:26	1
N-Propylbenzene	ND		1.0		ug/L			07/06/15 17:26	1
Styrene	ND		0.50		ug/L			07/06/15 17:26	1

TestAmerica Pleasanton

QC Sample Results

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-184651/5
Matrix: Water
Analysis Batch: 184651

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			07/06/15 17:26	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/06/15 17:26	1
Tetrachloroethene	ND		0.50		ug/L			07/06/15 17:26	1
Toluene	ND		0.50		ug/L			07/06/15 17:26	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/06/15 17:26	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/06/15 17:26	1
1,1,1-Trichloroethane	ND		0.50		ug/L			07/06/15 17:26	1
1,1,2-Trichloroethane	ND		0.50		ug/L			07/06/15 17:26	1
Trichloroethene	ND		0.50		ug/L			07/06/15 17:26	1
Trichlorofluoromethane	ND		1.0		ug/L			07/06/15 17:26	1
1,2,3-Trichloropropane	ND		0.50		ug/L			07/06/15 17:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			07/06/15 17:26	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			07/06/15 17:26	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			07/06/15 17:26	1
Vinyl acetate	ND		10		ug/L			07/06/15 17:26	1
Vinyl chloride	ND		0.50		ug/L			07/06/15 17:26	1
Xylenes, Total	ND		1.0		ug/L			07/06/15 17:26	1
2,2-Dichloropropane	ND		0.50		ug/L			07/06/15 17:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		67 - 130		07/06/15 17:26	1
1,2-Dichloroethane-d4 (Surr)	99		72 - 130		07/06/15 17:26	1
Toluene-d8 (Surr)	101		70 - 130		07/06/15 17:26	1

Lab Sample ID: LCS 720-184651/6
Matrix: Water
Analysis Batch: 184651

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	25.9		ug/L		104	62 - 130
Acetone	125	117		ug/L		94	26 - 180
Benzene	25.0	25.7		ug/L		103	79 - 130
Dichlorobromomethane	25.0	27.2		ug/L		109	70 - 130
Bromobenzene	25.0	25.8		ug/L		103	70 - 130
Chlorobromomethane	25.0	26.9		ug/L		108	70 - 130
Bromoform	25.0	30.8		ug/L		123	68 - 136
Bromomethane	25.0	26.1		ug/L		104	43 - 151
2-Butanone (MEK)	125	123		ug/L		98	54 - 130
n-Butylbenzene	25.0	24.6		ug/L		99	70 - 142
sec-Butylbenzene	25.0	24.8		ug/L		99	70 - 134
tert-Butylbenzene	25.0	24.9		ug/L		100	70 - 135
Carbon disulfide	25.0	24.9		ug/L		100	58 - 130
Carbon tetrachloride	25.0	29.6		ug/L		118	70 - 146
Chlorobenzene	25.0	25.7		ug/L		103	70 - 130
Chloroethane	25.0	25.0		ug/L		100	62 - 138
Chloroform	25.0	25.5		ug/L		102	70 - 130
Chloromethane	25.0	21.3		ug/L		85	52 - 175
2-Chlorotoluene	25.0	24.5		ug/L		98	70 - 130

TestAmerica Pleasanton

QC Sample Results

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-184651/6

Matrix: Water

Analysis Batch: 184651

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chlorotoluene	25.0	24.6		ug/L		98	70 - 130
Chlorodibromomethane	25.0	30.2		ug/L		121	70 - 145
1,2-Dichlorobenzene	25.0	25.8		ug/L		103	70 - 130
1,3-Dichlorobenzene	25.0	25.4		ug/L		101	70 - 130
1,4-Dichlorobenzene	25.0	25.0		ug/L		100	70 - 130
1,3-Dichloropropane	25.0	25.7		ug/L		103	70 - 130
1,1-Dichloropropene	25.0	27.5		ug/L		110	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	25.5		ug/L		102	70 - 136
Ethylene Dibromide	25.0	26.9		ug/L		108	70 - 130
Dibromomethane	25.0	26.9		ug/L		108	70 - 130
Dichlorodifluoromethane	25.0	20.3		ug/L		81	34 - 132
1,1-Dichloroethane	25.0	25.4		ug/L		102	70 - 130
1,2-Dichloroethane	25.0	24.7		ug/L		99	61 - 132
1,1-Dichloroethene	25.0	22.3		ug/L		89	64 - 128
cis-1,2-Dichloroethene	25.0	24.9		ug/L		99	70 - 130
trans-1,2-Dichloroethene	25.0	24.7		ug/L		99	68 - 130
1,2-Dichloropropane	25.0	26.3		ug/L		105	70 - 130
cis-1,3-Dichloropropene	25.0	27.4		ug/L		110	70 - 130
trans-1,3-Dichloropropene	25.0	29.3		ug/L		117	70 - 140
Ethylbenzene	25.0	25.0		ug/L		100	80 - 120
Hexachlorobutadiene	25.0	27.3		ug/L		109	70 - 130
2-Hexanone	125	115		ug/L		92	60 - 164
Isopropylbenzene	25.0	25.3		ug/L		101	70 - 130
4-Isopropyltoluene	25.0	24.9		ug/L		100	70 - 130
Methylene Chloride	25.0	24.8		ug/L		99	70 - 147
4-Methyl-2-pentanone (MIBK)	125	117		ug/L		94	58 - 130
Naphthalene	25.0	23.5		ug/L		94	70 - 130
N-Propylbenzene	25.0	24.6		ug/L		99	70 - 130
Styrene	25.0	23.9		ug/L		96	70 - 130
1,1,1,2-Tetrachloroethane	25.0	28.0		ug/L		112	70 - 130
1,1,1,2,2-Tetrachloroethane	25.0	24.9		ug/L		100	70 - 130
Tetrachloroethene	25.0	27.9		ug/L		112	70 - 130
Toluene	25.0	25.0		ug/L		100	78 - 120
1,2,3-Trichlorobenzene	25.0	25.8		ug/L		103	70 - 130
1,2,4-Trichlorobenzene	25.0	26.7		ug/L		107	70 - 130
1,1,1-Trichloroethane	25.0	26.2		ug/L		105	70 - 130
1,1,2-Trichloroethane	25.0	26.8		ug/L		107	70 - 130
Trichloroethene	25.0	27.4		ug/L		109	70 - 130
Trichlorofluoromethane	25.0	25.4		ug/L		101	66 - 132
1,2,3-Trichloropropane	25.0	26.2		ug/L		105	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.1		ug/L		105	42 - 162
1,2,4-Trimethylbenzene	25.0	24.6		ug/L		98	70 - 132
1,3,5-Trimethylbenzene	25.0	24.9		ug/L		100	70 - 130
Vinyl acetate	25.0	24.4		ug/L		98	43 - 163
Vinyl chloride	25.0	22.6		ug/L		90	54 - 135
m-Xylene & p-Xylene	25.0	25.0		ug/L		100	70 - 142
o-Xylene	25.0	25.1		ug/L		100	70 - 130

TestAmerica Pleasanton

QC Sample Results

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-184651/6

Matrix: Water

Analysis Batch: 184651

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	25.0	32.7		ug/L		131	70 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	97		72 - 130
Toluene-d8 (Surr)	101		70 - 130

Lab Sample ID: LCSD 720-184651/7

Matrix: Water

Analysis Batch: 184651

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	25.0	26.7		ug/L		107	62 - 130	3	20
Acetone	125	128		ug/L		103	26 - 180	9	30
Benzene	25.0	25.8		ug/L		103	79 - 130	0	20
Dichlorobromomethane	25.0	27.3		ug/L		109	70 - 130	1	20
Bromobenzene	25.0	26.1		ug/L		104	70 - 130	1	20
Chlorobromomethane	25.0	27.4		ug/L		109	70 - 130	2	20
Bromoform	25.0	31.8		ug/L		127	68 - 136	3	20
Bromomethane	25.0	25.8		ug/L		103	43 - 151	1	20
2-Butanone (MEK)	125	131		ug/L		104	54 - 130	6	20
n-Butylbenzene	25.0	24.2		ug/L		97	70 - 142	2	20
sec-Butylbenzene	25.0	24.7		ug/L		99	70 - 134	0	20
tert-Butylbenzene	25.0	24.8		ug/L		99	70 - 135	1	20
Carbon disulfide	25.0	24.8		ug/L		99	58 - 130	0	20
Carbon tetrachloride	25.0	29.8		ug/L		119	70 - 146	1	20
Chlorobenzene	25.0	25.6		ug/L		102	70 - 130	0	20
Chloroethane	25.0	24.6		ug/L		98	62 - 138	2	20
Chloroform	25.0	25.8		ug/L		103	70 - 130	1	20
Chloromethane	25.0	20.5		ug/L		82	52 - 175	4	20
2-Chlorotoluene	25.0	24.4		ug/L		98	70 - 130	0	20
4-Chlorotoluene	25.0	24.3		ug/L		97	70 - 130	1	20
Chlorodibromomethane	25.0	30.9		ug/L		124	70 - 145	2	20
1,2-Dichlorobenzene	25.0	25.8		ug/L		103	70 - 130	0	20
1,3-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130	0	20
1,4-Dichlorobenzene	25.0	24.6		ug/L		98	70 - 130	2	20
1,3-Dichloropropane	25.0	26.4		ug/L		106	70 - 130	3	20
1,1-Dichloropropene	25.0	27.4		ug/L		110	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	25.0	26.2		ug/L		105	70 - 136	3	20
Ethylene Dibromide	25.0	27.9		ug/L		111	70 - 130	3	20
Dibromomethane	25.0	27.7		ug/L		111	70 - 130	3	20
Dichlorodifluoromethane	25.0	19.9		ug/L		80	34 - 132	2	20
1,1-Dichloroethane	25.0	25.5		ug/L		102	70 - 130	0	20
1,2-Dichloroethane	25.0	25.1		ug/L		100	61 - 132	2	20
1,1-Dichloroethene	25.0	22.2		ug/L		89	64 - 128	0	20
cis-1,2-Dichloroethene	25.0	25.0		ug/L		100	70 - 130	1	20
trans-1,2-Dichloroethene	25.0	24.8		ug/L		99	68 - 130	0	20
1,2-Dichloropropane	25.0	26.4		ug/L		106	70 - 130	0	20

TestAmerica Pleasanton

QC Sample Results

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-184651/7
Matrix: Water
Analysis Batch: 184651

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	25.0	27.8		ug/L		111	70 - 130	1	20
trans-1,3-Dichloropropene	25.0	29.8		ug/L		119	70 - 140	2	20
Ethylbenzene	25.0	24.8		ug/L		99	80 - 120	1	20
Hexachlorobutadiene	25.0	26.8		ug/L		107	70 - 130	2	20
2-Hexanone	125	125		ug/L		100	60 - 164	9	20
Isopropylbenzene	25.0	25.2		ug/L		101	70 - 130	0	20
4-Isopropyltoluene	25.0	24.7		ug/L		99	70 - 130	1	20
Methylene Chloride	25.0	24.7		ug/L		99	70 - 147	0	20
4-Methyl-2-pentanone (MIBK)	125	125		ug/L		100	58 - 130	7	20
Naphthalene	25.0	24.4		ug/L		97	70 - 130	4	20
N-Propylbenzene	25.0	24.4		ug/L		98	70 - 130	1	20
Styrene	25.0	23.6		ug/L		94	70 - 130	1	20
1,1,1,2-Tetrachloroethane	25.0	28.2		ug/L		113	70 - 130	1	20
1,1,2,2-Tetrachloroethane	25.0	25.8		ug/L		103	70 - 130	3	20
Tetrachloroethene	25.0	28.3		ug/L		113	70 - 130	1	20
Toluene	25.0	24.8		ug/L		99	78 - 120	1	20
1,2,3-Trichlorobenzene	25.0	25.7		ug/L		103	70 - 130	1	20
1,2,4-Trichlorobenzene	25.0	26.4		ug/L		106	70 - 130	1	20
1,1,1-Trichloroethane	25.0	26.5		ug/L		106	70 - 130	1	20
1,1,2-Trichloroethane	25.0	27.4		ug/L		110	70 - 130	2	20
Trichloroethene	25.0	27.6		ug/L		111	70 - 130	1	20
Trichlorofluoromethane	25.0	25.1		ug/L		101	66 - 132	1	20
1,2,3-Trichloropropane	25.0	27.4		ug/L		110	70 - 130	4	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.1		ug/L		104	42 - 162	0	20
1,2,4-Trimethylbenzene	25.0	24.5		ug/L		98	70 - 132	1	20
1,3,5-Trimethylbenzene	25.0	24.6		ug/L		99	70 - 130	1	20
Vinyl acetate	25.0	24.5		ug/L		98	43 - 163	0	20
Vinyl chloride	25.0	22.1		ug/L		88	54 - 135	2	20
m-Xylene & p-Xylene	25.0	24.7		ug/L		99	70 - 142	1	20
o-Xylene	25.0	24.7		ug/L		99	70 - 130	2	20
2,2-Dichloropropane	25.0	31.4		ug/L		126	70 - 140	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	97		72 - 130
Toluene-d8 (Surr)	103		70 - 130

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-184715/1-A
Matrix: Water
Analysis Batch: 184788

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 184715

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		0.020		mg/L		07/07/15 08:05	07/07/15 22:19	1

TestAmerica Pleasanton

QC Sample Results

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-184715/1-A
Matrix: Water
Analysis Batch: 184811

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 184715

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.20		mg/L		07/07/15 08:05	07/08/15 11:11	1

Lab Sample ID: LCS 720-184715/2-A
Matrix: Water
Analysis Batch: 184788

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 184715

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	1.00	0.967		mg/L		97	80 - 120

Lab Sample ID: LCS 720-184715/2-A
Matrix: Water
Analysis Batch: 184811

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 184715

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.2		mg/L		102	80 - 120

Lab Sample ID: LCSD 720-184715/3-A
Matrix: Water
Analysis Batch: 184788

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 184715

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	1.00	0.947		mg/L		95	80 - 120	2	20

Lab Sample ID: LCSD 720-184715/3-A
Matrix: Water
Analysis Batch: 184811

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 184715

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	10.0	9.96		mg/L		100	80 - 120	3	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 720-184630/3
Matrix: Water
Analysis Batch: 184630

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0		mg/L			07/02/15 16:16	1

Lab Sample ID: LCS 720-184630/1
Matrix: Water
Analysis Batch: 184630

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	500	423		mg/L		85	69 - 117

TestAmerica Pleasanton

QC Sample Results

Client: Geologica Inc
 Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCSD 720-184630/2
 Matrix: Water
 Analysis Batch: 184630

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Suspended Solids	500	406		mg/L		81	69 - 117	4	20

Method: SM 5310C - TOC

Lab Sample ID: MB 500-294608/4
 Matrix: Water
 Analysis Batch: 294608

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Dup	ND		1.0		mg/L			07/06/15 18:07	1

Lab Sample ID: LCS 500-294608/5
 Matrix: Water
 Analysis Batch: 294608

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	10.0	10.4		mg/L		104	80 - 120
TOC Result 2	10.0	10.6		mg/L		106	80 - 120
TOC Dup	10.0	10.5		mg/L		105	80 - 120

QC Association Summary

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

GC/MS VOA

Analysis Batch: 184651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-65790-1	SILVEIRA CREEK WELL	Total/NA	Water	8260B/CA_LUFT MS	
720-65790-2	TAL-SF-TB	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-184651/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-184651/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-184651/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Metals

Prep Batch: 184715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-65790-1	SILVEIRA CREEK WELL	Total/NA	Water	3010A	
LCS 720-184715/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 720-184715/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 720-184715/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 184788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-65790-1	SILVEIRA CREEK WELL	Total/NA	Water	6010B	184715
LCS 720-184715/2-A	Lab Control Sample	Total/NA	Water	6010B	184715
LCSD 720-184715/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	184715
MB 720-184715/1-A	Method Blank	Total/NA	Water	6010B	184715

Analysis Batch: 184811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-65790-1	SILVEIRA CREEK WELL	Total/NA	Water	6010B	184715
LCS 720-184715/2-A	Lab Control Sample	Total/NA	Water	6010B	184715
LCSD 720-184715/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	184715
MB 720-184715/1-A	Method Blank	Total/NA	Water	6010B	184715

General Chemistry

Analysis Batch: 184630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-65790-1	SILVEIRA CREEK WELL	Total/NA	Water	SM 2540D	
LCS 720-184630/1	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 720-184630/2	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
MB 720-184630/3	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 294608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-65790-1	SILVEIRA CREEK WELL	Total/NA	Water	SM 5310C	
LCS 500-294608/5	Lab Control Sample	Total/NA	Water	SM 5310C	
MB 500-294608/4	Method Blank	Total/NA	Water	SM 5310C	

TestAmerica Pleasanton

Lab Chronicle

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Client Sample ID: SILVEIRA CREEK WELL

Lab Sample ID: 720-65790-1

Date Collected: 07/01/15 11:30

Matrix: Water

Date Received: 07/02/15 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	184651	07/06/15 22:35	PRD	TAL PLS
Total/NA	Prep	3010A			184715	07/07/15 14:20	ECT	TAL PLS
Total/NA	Analysis	6010B		1	184788	07/07/15 23:36	SLK	TAL PLS
Total/NA	Prep	3010A			184715	07/07/15 14:20	ECT	TAL PLS
Total/NA	Analysis	6010B		1	184811	07/08/15 12:12	EFH	TAL PLS
Total/NA	Analysis	SM 2540D		1	184630	07/02/15 16:16	EYT	TAL PLS
Total/NA	Analysis	SM 5310C		1	294608	07/06/15 18:39	ELR	TAL CHI

Client Sample ID: TAL-SF-TB

Lab Sample ID: 720-65790-2

Date Collected: 07/01/15 11:30

Matrix: Water

Date Received: 07/02/15 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	184651	07/06/15 21:11	PRD	TAL PLS

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Certification Summary

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-16

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Chicago

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40461	04-30-16
California	State Program	9	2903	04-30-16
Georgia	State Program	4	N/A	04-30-16
Georgia	State Program	4	939	04-30-16
Hawaii	State Program	9	N/A	04-30-16
Illinois	NELAP	5	100201	04-30-16
Indiana	State Program	5	C-IL-02	04-30-16
Iowa	State Program	7	82	05-01-16
Kansas	NELAP	7	E-10161	08-31-15 *
Kentucky (UST)	State Program	4	66	04-30-16
Kentucky (WW)	State Program	4	KY90023	12-31-15
Massachusetts	State Program	1	M-IL035	06-30-16
Mississippi	State Program	4	N/A	04-30-16
New York	NELAP	2	IL00035	04-01-16
North Carolina (WW/SW)	State Program	4	291	12-31-15 *
North Dakota	State Program	8	R-194	04-30-16
Oklahoma	State Program	6	8908	08-31-15 *
South Carolina	State Program	4	77001	04-30-16
USDA	Federal		P330-15-00038	02-11-18
Wisconsin	State Program	5	999580010	08-31-15 *
Wyoming	State Program	8	8TMS-Q	05-31-15 *

* Certification renewal pending - certification considered valid.

Method Summary

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

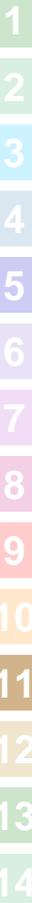
Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL PLS
SM 5310C	TOC	SM	TAL CHI

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200
TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



Sample Summary

Client: Geologica Inc
Project/Site: Marinwood Cleaners

TestAmerica Job ID: 720-65790-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-65790-1	SILVEIRA CREEK WELL	Water	07/01/15 11:30	07/02/15 13:10
720-65790-2	TAL-SF-TB	Water	07/01/15 11:30	07/02/15 13:10

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Login Sample Receipt Checklist

Client: Geologica Inc

Job Number: 720-65790-1

Login Number: 65790

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Gonzales, Justinn

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	SEE NCM
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Geologica Inc

Job Number: 720-65790-1

Login Number: 65790
List Number: 2
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago
List Creation: 07/03/15 10:32 AM

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ATTACHMENT C

Treatment System Quote

Arolo Company, Inc.

Pump & Well

424 Payran Street, Suite A, Petaluma, CA 94952
(707) 762-4028, FAX (707) 765-1601

License Number 242168

DATE: 7-7-15

ESTIMATE #3672

ESTIMATE SUBMITTED TO:

Geologica Inc.
220 Fourth St Ste 201
Oakland, CA 94607

Proposed Treatment site:

Silveria Ranches
4579 Redwood Hwy
San Rafael, CA

WE HEREBY SUBMIT SPECIFICATIONS AND ESTIMATES FOR:

The installation of a treatment system for the reduction of VOC contaminants. The system begins with a 20" 20 micron cartridge sediment filter. The second step in the filtration process is a 4.5 cu ft Activated carbon filter capable of reducing VOC contaminants at a florate of 5GPM. This system has been designed so that additional activated carbon filters can be added to increase the flow rate up to a maximum of 15 GPM. The final stage of treatment is the installation of an ultraviolet. The ultraviolet light system will ensure that the water is microbiologically safe at a flow rate up to 15GPM.

Complete with the following:

- 1 BB 20 micron sediment filter with filter wrench & mounting bracket
- 1 14" X 65" 4.5 cu ft Activated carbon filter
- 1 Trojan UV Max E4 model

APPROXIMATE PRICE TO FURNISH MATERIAL, TAX, FREIGHT AND LABOR COMPLETE IN ACCORDANCE WITH THE ABOVE SPECIFICATIONS FOR THE SUM OF:

Four thousand nine hundred eighty seven dollars and thirty one cents

\$4987.31

The above price is based on the information and or specifications we have at the time of this proposal. Your signature indicates acceptance of this proposal as such.

Signature _____ Date _____

NOTE: THIS ESTIMATE MAY BE WITHDRAWN BY US IF NOT ACCEPTED WITHIN TWENTY (20) DAYS DUE TO PRICE INCREASES IN MATERIAL.

Optional:

Additional activated carbon filters can be added to the system for an additional charge. Each filter will add an additional 5 GPM of flow rate to the system. A maximum of two Activated carbon filters can be added to obtain a total flow rate of up to 15 GPM. Each additional filter will be charged at a rate of \$2612.17

geologica

www.geologicagroup.com

220 Fourth Street, Suite 201
Oakland, California 94607
Phone: (415) 597-7888
Fax: (888) 858-1382
E-mail: info@geologicagroup.com